Mantecoso cheese in Peru : organizing to conquer the national market

Astrid Gerz, François Boucher

ORIGIN-BASED PRODUCTS

Lessons for pro-poor market development

Petra van de Kop, Denis Sautier, and Astrid Gerz

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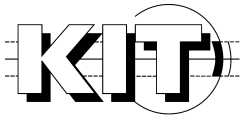

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Foreword

Worldwide, the choice of consumer products is increasing rapidly. One of the effects of economic liberalization is more international trade, so consumers are presented with new products and many more brands. How do they respond to this mushrooming number of products? If we can compare a modern supermarket with a dense tropical forest, how does a consumer find the right plant species that is safe and tasty? Do we need Neanderthal-like skills to fill our shopping carts with the right ingredients to feed our families?

Many consumers make their choices on the basis of the corporate identity of a product, which guarantees a certain quality or reflects a desired image. The Coca-Cola Company claims that all Coca-Cola sold around the world has the same quality and taste. A McDonald's hamburger sold at any time of the day to a customer in Beijing is supposed to be identical to one sold in Johannesburg – though I must admit I have never had the pleasure of checking whether this is actually true. Consumers do not know how each product is produced and which ingredients it includes, so they often rely on the corporation that produces or sells the product for their decision. Brands promise homogeneous products. They simplify choice. How much time would we spend in supermarkets if we were to study all information on the labels of each product we buy? Gathering enough to feed our families would take all day.

From a marketer's perspective, it is important to build a relationship with buyers, rather than merely to make a single sale. Ideally, that relationship should be based on a strong bond between the buyer and the brand. The principle is simple: the stronger the bond, the higher the sales. Corporations invest significant percentages of their production and retailing costs to strengthen their brands' identity through advertising. Continuous increases in costs require an ever-growing number of buyers. And because global brands work only if they guarantee homogenous quality, this process leads to the globalization of product chains, the standardization of quality across borders, and buyer behaviour that is best described as mimicry. Is the quality of a McDonald's burger really that superior that it can compete with local dishes anywhere in the world?

Origin-based labels are the opposite of global brands, though their existence is based on the same principle of helping consumers with their choice by guaranteeing a set of key predictable quality characteristics. But the process to establish trust with the buyers is different. Whereas the production process of

global brands is uniform across locations, origin-based labels can be produced only within a given geographical area. That particular area contributes something to the end product that is unique and makes a recognizable difference. The French concept of *terroir* best defines what is meant by area in this respect. A *terroir* is a historically developed interaction between (a) the product's biophysical properties that result from a specific geographical entity, and (b) the local community's practices and culture.

Origin-based labelling recognizes that the products of a *terroir* have additional value as compared to global brands. This value belongs to the community that developed those products over many, many years. Origin-based products are by definition sustainable and beneficial to a local community.

Yet, these products can be imitated by global brands, in the same way that *prêt-à-porter* clothes are mass applications of unique designs. It is this copycat behaviour that origin-based products have to be protected against. Besides a loss of quality properties – Danish feta cheese did not even get close in taste to the original Greek product – global brands do not benefit local communities in the same way as origin-based products do. It is worse than that: global brands deprive local communities of a sustainable source of income.

Fortunately, there are examples where the property has been given back to local communities. Feta cannot be produced any more outside Greece. Tequila is no longer made outside Mexico.

Registration of origin-based products is a cumbersome process, and is often constrained by multinational and political interests. Just recently, the Dutch Minister for Agriculture, Nature and Fisheries voted against a proposal by the European Commission for the registration of geographical indications.[1] The reason for his disapproval? German beer producers want to claim the name 'Bayerisches Bier' (Bavarian beer) and apply for a geographical indication. This will have repercussions for a Dutch beer producer which uses a name referring to the same origin.

This book is about the promise of origin-based products. The authors provide an overview of the historical background and identify critical issues related to the registration of origin-based products. Five case studies give insights into the opportunities and pitfalls related to this type of branding. Besides their feasibility in economic and practical terms, this book explores the question whether origin-based products contribute to a better distribution of benefits as compared to global brands. Are origin-based products an instrument to reduce poverty on the countryside?

One question that intrigues me is: is it a matter of taste? I must admit that I actually like that Dutch beer brand, though it is known by a name that reflects a totally different area from where it is actually produced. Do we, urban

[1] Volkskrant, 21 March 2006.

consumers, taste the difference between an origin-based product and a global brand? Do we just need more faith that the product is well produced and of satisfactory quality? Do we just need more guidance in the jungle of consumption? After all, food must be understood as a network: a network of people, territories, products, knowledge and cultures[2]. One way or another, I wish you good digestion of the valuable information offered in this book.

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[2] Slow 53, January 2006.

Preface

Regional products may reach local, national or international markets. Their identification is justified by the particularities of their geographic *milieu*, their quality and their fame. This identification is a tool for the national and international recognition of the heritage and food culture of nations. Even when their market is restricted, avoiding spoilage of prestigious names linked to the history and heritage of nations is a relevant objective and has become a stake in international negotiations.

On 20 March 2006, the European Council issued a new regulation[3] on the protection of geographical indications and designations of origin for agricultural products and foodstuffs.

From 3 April 2006, applications for registration of Protected Designations of Origin and Protected Geographical Indications by producers in third countries, and objections to applications by individuals in third countries, can be made directly to the Commission.

Third countries applicants must include the proof that the name in question is protected in its country of origin. The application should also include a description of the link between the product and the geographical environment or geographical origin, including the specific elements of the product description or production method describing the link.

This recent change in regulation may raise additional interest for sharing experience about the history, characteristics and potential of regional products in diversified contexts around the world. To provide such insights is precisely the purpose of this book.

The authors

[3] No. 510/2006, http://europa.eu.int/comm/agriculture/foodqual/quali1_en.htm.

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1 Origin-based marketing: A rural development tool?

Denis Sautier[4] *and Petra van de Kop*[5]

Over the past decades, more and more foods have been marketed, branded or labelled to show where they come from and how they are produced. This 'origin-based' marketing strengthens relations between producers and consumers, adds value to farm produce, and preserves local knowledge and culture (Sylvander et al., 2000).

While origin-based marketing has a long history, its importance, both from a demand and from a supply-side point of view, is increasing, partly as a reaction to globalization (Van Ittersum, 2004). Local producers need to be able to distinguish their product in the eyes of consumers from generic, sometimes cheaper competitors. The more global the market, the more important are the criteria used in this distinction. Non-price factors (such as perceived quality, image and taste) are gaining importance at the very moment that price competition is becoming tougher. This applies not only to exports, but also to locally marketed products, which must compete directly with imported products – increasingly the case in many developing countries.

Origin-based marketing has been supported through public policies in Europe – especially in France and Italy, where labels of origin for wines, cheese, spirits, olive oil and meat have contributed significantly to maintaining rural vitality. Unsurprisingly, most of the documentation on the mechanisms of origin-based marketing also comes from Europe.

In the developing world, however, consumers have less to spend, and they are less concerned about losing high-quality regional foods and the traditional country way of life. Here, the potential of using regional identity to maintain and develop markets for smallholder producers is not yet well understood.

Local products are overwhelmingly present in developing countries. In a rapidly urbanizing country, origin is a proxy, an indicator, for quality. References to origin convey trust to newly urbanized consumers. People from a particular region or ethnic group tend to look for foods they are familiar with back home. Then gradually, these local products begin to gain a name and

[4] *Centre de Coopération Internationale en Recherche Agronomique pour le Développement, Département Territoires, Environnement et Acteurs* (CIRAD-TERA), Montpellier, France.

[5] Koninklijk Instituut voor de Tropen (KIT)/Royal Tropical Institute, Amsterdam, Netherlands.

reputation for confidence and reliability among a wider group of traders and consumers. This recognition of specialty local foods is an important, though informal, market mechanism. Regional and local foods show that cultural and geographical proximity between producers, traders and consumers plays a role in the dynamics of economic development (Pecqueur and Zimmermann, 2003).

Many countries outside the European Union are interested in adding value to their typical agricultural and food products and in formally protecting their names from misuse and abuse on international markets. India, Pakistan, Sri Lanka, Thailand, Kenya, Jamaica and other developing countries have demanded better protection of their products, to prevent multinationals from patenting and owning intellectual property such as 'Basmati' rice, 'Ceylon' tea or 'Blue Mountain' coffee.

The marketing and labelling of regional products in developing countries relies on very different justifications and social-economic processes. However, it is unclear what potential exists for origin-based marketing and labelling, and what the opportunities might be for smallholders in the developing world. What are the benefits of regional identities in developing countries? Can official labelling make a difference, and can it provide a win-win solution for small producers and consumers? Under what conditions can origin-based labelling benefit smallholder producers?

Objectives of this book

This book explores whether, and how, regional identities can contribute to market development for smallholder producers in developing countries. It asks whether origin-based labelling provides a way for smallholder producers to develop new markets, increase their competitiveness and raise their income.

The book presents five case studies to illustrate the diversity of experiences with origin-based products in the developing world and in Europe. The case studies are based on collaborative research by CIRAD (the French Centre for International Cooperation in Agriculture Research and Development, www.cirad.fr) with different national research institutions. The cases provide initial lessons on the types of markets (local, national, international), levels of formality, legal protection, degree of horizontal organization (such as producers' organizations) and vertical coordination (within the supply chain). They also describe the specific characteristics of the products, which always derive from a particular combination of natural and human factors.

This book will be of special interest to policy makers and practitioners involved in pro-poor market development for smallholders in the developing world. The intended readership includes people interested in developing businesses and global, national and local markets for smallholder producers, promoting pro-poor entrepreneurship and including smallholders in globalizing food systems. We hope that this book will help readers understand the opportunities and

challenges of origin-based labelling for smallholder producers in the developing world.

Structure of the book

Chapter 2 describes various issues related to regional identity branding, mainly based on experiences in Europe. The final section of the chapter highlights some implications of Western experiences for smallholder farmers in developing countries. These will be further discussed in the case studies in chapters 3-7.

The five case studies in these chapters reflect the diversity of food products that provide opportunities for origin-based marketing. They cover a variety of markets – local, national and international – and different legal frameworks. With these cases we aim to establish a framework for analysis that can act as a basis for a strategy to use geographical indications in a way that includes smallholder producers in domestic and international markets.

The cases are organized in sequence according to the importance given to official recognition of the product's distinctive characteristics. They have been chosen on the basis of their significance within their national context, and of the availability of quality first-hand information. Each illustrates a lesson on linkages between regional products and market development (Table 1).

Table 1 Core elements of the case studies in Chapters 3-7

	Legal frame	Market	Lesson
Gari, Benin Chapter 3	Informal	Local, national	Sustainable but small-scale systems are based on social networks
Cajamarca cheese, Peru Chapter 4	Collective trademark	National	The use of local resources for the national market implies organization and exclusion processes
Rooibos tea, South Africa Chapter 5	Various trademarks	National, export	Name abuse on international market stimulates the recognition of a local common good
Coffee, Costa Rica Chapter 6	Geographical indication in discussion	Export, national	New strategies are implemented to secure a 'specialty' status on global markets
Comté cheese, France Chapter 7	Official geographical indication: protected denomination of origin	National, export	An official recognition coupled with a governance scheme produces impacts on rural development

Finally, Chapter 8 highlights the diversity of relations between food, place and markets, and the opportunities and challenges they represent for smallholders in the developing world. It points out policy and research directions needed to make use of regional identity as a pro-poor development tool.

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2 Regional identity: An overview

Petra van de Kop and Denis Sautier

This chapter provides an overview of the use of regional identity as a value-adding strategy in agricultural diversification. We refer to the products involved as 'regional products' or 'origin products'. They may (or may not) be identified by an official label or specific brand. Official recognition is not the determining factor: many regional products have survived for a long time through the undocumented practices of producers, merchants and consumers (Bérard and Marchenay, 2004). What is essential is that these products have their own identity and have specific characteristics, reputation and quality that make them distinct from other products.

History of regional identities

Regional product identities have a long history. In ancient Egypt, places of origin were used to identify products and to signal their quality. In the Middle Ages, European guilds gave their products certain names to assure consumers of consistent quality, assure market exclusivity and protect producers legally (INAO, 2005). The history of some well-known cheeses can be traced back to this period: Parmigiano Reggiano in Italy, Edam in the Netherlands, and Comté and Gruyère in France.

The process of establishing a regional reputation went parallel with the emergence of the concept of individual brands. In both cases, producers tried to enhance their products' value by associating consumers with a name: a single producer in the case of a brand, on a collective scale in the case of regional products.

Several regional products date from the 19th century, including Opperdoezer Ronde potatoes (Netherlands) and Washington apples (USA). While such regional indications remained important, their significance gradually shrank over time. National and international trade evolved, and technical grades and standards developed and became more important in trade.

During the 20th century, internationalization expanded rapidly. The urge for economies of scale meant that certain regions began to specialize in producing a few products. Firms marketed their products over an ever-wider area. Product specialization also occurred: instead of producing a broad product assortment, companies specialized in a few, standard, products. This mass production resulted in the loss of many unique, specific regional products.

In time, the globalization for business and markets increased further. The appearance of trade blocks (the European Union, North America Free Trade Association, Mercosur) and global trade agreements such as the General Agreement on Tariffs and Trade (GATT) and the World Trade Organization (WTO) accelerated this process. At the same time, companies started to introduce global brands, such as Coca-Cola.

Global brands are standard products that are marketed across the globe with the same brand name. It is sometimes said that these weaken cultural boundaries and make tastes and preferences converge. But paradoxically, the appearance of global brands also makes consumers aware of the loss of cultural identity. They may trigger a desire for variety and for maintaining local products. Many companies acknowledge these trends by switching from uniform mass-marketing to a more customized strategy (Van Ittersum, 2002).

These trends have stimulated the marketing of traditional regional products. They have also triggered the search for new regional products to sell. The revival of interest in regional specialties can be seen throughout the world. 'Darjeeling', 'Antigua', 'Parma', 'Gorgonzola', 'Bordeaux', 'Roquefort', 'Blue Mountain Coffee', 'Sea Island Cotton', 'Porto', 'Ceylon' and 'Havana' are well-known examples of geographical names that are associated throughout the world with specific products. Their reputation derives from the special qualities that products from those places possess (O'Connor and Company, 2005).

The image of the region is often used to market these products. However, image is just one dimension: the relation between food and place is more deeply rooted. It relies on historical precedence, and on collective production, processing, trading and consumption practices (INAO, 2005). As Bérard and Marchenay (2005) point out, origin products do not just 'come from' a region; they 'are' from a region. This means that they convey values and culture – i.e., identity. In general, these products have specific qualities based on human expertise and the natural environment where they are produced. The mix of these specific qualities and the regional image creates a unique identity for the product, so raising its value.

Defining regional products

In this book we define regional products as: 'local products based on a strong territorial identity and reputation, and/or typical products based on specific modes of production and whose quality, reputation or any other characteristics are attributable essentially to their geographical origin'.

Geographical origins, in this definition, can be situated in provinces, states, departments, countries, but also cross-border areas that are culturally, naturally or climatically homogeneous. This definition is similar to that of 'geographical indications' in the TRIPS Agreement and that of 'protected geographical indications' in EC Regulation 2081/92 (see below), but is different

from the legal approach because regulatory provisions or agreements do not necessarily protect the products concerned.

Legal protection of regional products

Because of the growing importance of regional products, in 1992 the European Commission introduced Regulation (EEC) No. 2081/92 enabling producers to legally protect regional agricultural and food specialties from counterfeit copycat products and name abuse.

Copycat or imitation products, on one hand, spoil the market: they can easily destroy loyalty, since unfavourable and inconsistent experiences with what purports to be the authentic product harm consumers' opinions of the real thing. 'Name abuse' (using the name on a different product), on the other hand, hampers reputation. As a result of both imitations and name abuse, consumers lose out because the product they have bought does not meet their expectations.

The European legislation draws on pre-existing regulations in southern European countries. It enables producers to protect a regional product name from misuse. No-one may use a combination of the region and product names (e.g., Parma ham) unless the product was, in fact, produced in that region in a way specified by a set of agreed rules. Protected regional products may carry a public certificate of origin, stating 'protected designation of origin' (PDO) or 'protected geographic indication' (PGI) (Sylvander et al., 2000).

A number of treaties administered by the World Intellectual Property Organization (WIPO) provide for the protection of geographical indications. These include the Paris Convention for the Protection of Industrial Property of 1883, and the Lisbon Agreement for the Protection of Appellations of Origin and Their International Registration (WIPO, 2005) (see Box 1).

In addition, Articles 22 to 24 of the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) deal with the international protection of geographical indications within the framework of the World Trade Organization (WTO, 2005). This agreement has since 1995 required WTO members to provide a minimum standard of legal protection to geographical indications. The deadline for this was extended up to 2006 for less-developed countries. This legal protection may appeal to very different judicial forms.

Protected Designations of Origin and Protected Geographical Indications are defined by the European Union, and in some other countries (e.g., Switzerland), on the basis of national law. Furthermore, several bilateral agreements recognize the protection of geographical names. These agreements are progressively losing their significance among EU members, but remain a useful tool with third countries, even though EC Regulation 2081/92 and other multilateral provisions (such as the TRIPS Agreement's envisaged multilateral register for wines and spirits) provide a higher and more comprehensive protection (Sylvander, 2004).

Box 1 Labelling origins

The first two definitions below are from the European Union (EEC, 1992); the third is regulated through the World Intellectual Property Organization; the fourth is from the World Trade Organization.

- **Protected designation of origin (PDO)**. This means 'the name of a region, a specific place or, in exceptional cases, a country, used to describe an agricultural product or a foodstuff originating in that region, place or country; the quality or characteristics of which are essentially or exclusively due to a particular geographic environment with its inherent natural and human factors; and the production, processing and preparation of which take place in the defined geographical area.'
- **Protected geographical indication (PGI)**. This means 'the name of a region, a specific place or, in exceptional cases, a country, used to describe an agricultural product or a foodstuff originating in that region, place or country; which possesses a specific quality reputation or other characteristics attributable to that geographic origin; and the production and/or processing and/or preparation of which take place in the defined geographical area'.
- **Appellation of origin**. This term is defined in the 1958 Lisbon Agreement as 'The geographical name of a country, region, or locality, which serves to designate a product originating therein, the quality and characteristics of which are due exclusively or essentially to the geographical environment, including natural and human factors'.
- **Geographical indications**. These are defined in the TRIPS agreement (Annex 1C, article 22(1)) as 'Indications, which identify a good as originating in the territory of a member [country], or a region or locality in that territory, where a given quality, reputation or other characteristic of the good is essentially attributable to its geographical origin'.

Geographical indications and trademarks

Geographic indications differ from trademarks. A trademark is a sign used by an enterprise to distinguish its goods and services from those of other enterprises. It gives its owner the right to exclude others from using the trademark. A geographical indication, on the other hand, tells consumers that a product is produced in a certain place and has certain characteristics that are due to that place of production (Table 2). All producers may use the geographical indication if the products share certain typical qualities, if they are made in the designated location, and if they according to procedures set out in the designated way (WIPO, 2005).

Why do people buy origin products?

Consumers are strong drivers of the change towards high quality and short supply chains. As people earn more, they consume a wider range of products: they are less concerned with quantity and more with quality (Malassis, 1996). And as the source of food becomes more distant both geographically and culturally, consumers tend to want guarantees that their food is genuine and safe. Livestock-disease scares, pesticide contamination and transgenic crops raise worries among consumers about what they eat.

Table 2 Comparison of Protected Geographical Indications and trademarks

Criteria	Protected Geographical Indication*	Trademarks
Owner of right	Ownership by state on behalf of all producers in area	One private producer unless explicitly registered otherwise
Applicant(s)	Professional group or association	One private producer
User(s)	Any producer in the area who respects the common production rules	One private producer
Registration	National ministry, then European Union	National trademark bureau
Administration and control	Shared by public and private bodies	Exclusively by the right holder
Duration	No limitation	10 years
Transferability	Cannot be sold or licensed	Can be sold or licensed

* According to EU Regulation 2081/92.

Source: from Addor and Grazioli, 2002.

Regional products that are guaranteed to come from a specific area (this is known as 'traceability') and are made in a particular way are one way to restore trust among consumers. But reassurance is not just a matter of health or hygiene. More fundamentally, it is linked to the unique relation between people and food: food is the only consumer good that consumers literally 'in-corporate' – they ingest it and it becomes part of their bodies. Food is life, and food is culture. This 'incorporation principle' (Fischler, 1990) explains why people are so sensitive to food scares. But also means that food can carry values and link producers with consumers – ties that simply do not exist with manufactured products such as shoes or soccer balls.

The case of origin-labelled products is well documented in Europe, where an international register of official geographical indication products enables some precise statistics. Two opinion polls conducted in 1996 and 1999 of over 16,000 European Union consumers show some interesting trends. In 1999, more than 20% of EU consumers said they bought geographical indication products 'often' (up from 11% in 1996). Only 8% do so 'never' (down from 11% in 1996). Some 60% bought them 'sometimes'. In 1999, the motivations for buying such products were primarily the guarantee of origin (37%), quality (35%), place and method of production (32%) and finally, tradition (16%). More than two-fifths (43%) of EU consumers (approximately some 159 million people) appear ready to pay an extra 10% for geographical indication products; 8% (about 30 million) would even pay 20% more (Berenguer, 2004).

In developing countries, there is evidence of consumer preferences for regional products, even though these are generally not labelled as such. A recent study showed urban consumers in Vietnam identify up to 265 'local specialty' food products that associate the place of production with the expectation of a higher quality (Tran, 2005). Market data on coffee in Costa Rica show that customers in supermarkets and small shops alike rank place of origin as the first criteria that

determines coffee quality (Galland, 2005). A review of local foods and the expertise of preparing it in West Africa shows the relevance of these foods for women's employment and income generation, as well as their broad spread in urban diets, including in restaurants and street food vendors (ALISA, 2003).

Why do producers sell origin products?

Rural producers and entrepreneurs need strong competitive skills and the ability to innovate to compete in a rapidly changing global food system. Competitiveness does not only mean intensifying farm production and increasing cost-effectiveness; it also involves considering non-price factors such as quality, reliability, organization and logistics.

Van der Ploeg and Roep (2003) describe three strategies that farmers use to survive: intensification, deepening and broadening their farming activities. Farmers' conventional reaction has been to intensify production, for example, by using more (or better quality) inputs, to specialize, and to take on processing or other activities in the supply chain. Small-scale farmers also look for work outside the farm.

However, increasingly farmers are also deepening and broadening their farming activities as a way to survive. 'Broadening' means producing new products and services: agro-tourism, nature and landscape conservation services, energy production and so on. 'Deepening' focuses on organizing the supply chain so that more added value stays on the farm and in rural areas. This can be done by producing specialty, high-quality, high-value products (such as organic produce), and by shortening the links between production and consumption. Origin-based marketing is an example of a deepening strategy.

To be more competitive, farmers (especially those in developing countries) need to produce for an identified market rather than trying to sell what they have already produced. This promises to be an important driver for the development of origin-based products.

Because of their profound regional basis, the production and marketing of products based on the region of origin is especially suited for small- and medium-sized enterprises, rather than for multinationals. Smaller enterprises are in a better position to use their local identity, and are more inclined to do so. A regional production base limits volume, making it unattractive for multinationals. Marketing a regionally based product is especially suited for items that are produced under particular natural conditions and using a unique set of skills.

Organizing production and marketing for origin products

Most origin products are produced by several small and medium enterprises (Barjolle et al, 2000; Barjolle and Sylvander, 2000; Raynaud and Sauvée, 2000). For these enterprises to successfully market their products based on their

regional identity, consumers must either have a strong sense of belonging to the region, or must identify with its reputation, image and culture.

Small and medium enterprises do not have to build regional food reputations from scratch. The Champagne area in France, for instance, was historically poor and depressed. Local wine growers struggled against the climatic limitations to create wine, eventually developing the expertise that gives the region today its worldwide fame and economic success (INAO, 2005). Regional reputations reflect historical and cultural elements. They involve many actors: rural producers, restaurateurs, service providers, consumers, training and research institutions, and local governments. Local producers may also create awareness for their products through activities such as agri-tourism and on-farm sales.

Marketing success depends strongly on the consistency with which the product is positioned in the marketing mix (product, place, promotion and price). The involvement of multiple enterprises does not necessarily help achieve this consistency. If different companies market products with different characteristics, through different channels, using different promotion strategies and at different prices, the product may not perform well in the marketplace. So marketing should be coordinated.

- First, to meet producers' and consumers' expectations of product quality, the key stages in production should be identified, and the relevant expertise agreed upon by the different producers. But this should not mean standardization. Indeed, some variability is expected, since it reflects local natural conditions and expertise (Casabianca, 2002). Guidelines focusing on critical points need to be developed, and a quality inspection system established.
- Second – and depending on the product – it may be worth considering whether some processes should be coordinated: fruit inspection and grading, for instance.
- Third, some promotion of product should be centrally organized and implemented. This will ensure consistency and will result in a more efficient, effective promotion strategy than if each individual company promotes its own output (Van Ittersum, 2002).

Distribution channels for origin-labelled products

Agri-food chains have become increasingly buyer-driven, with downstream processors and retailers determining the conditions of the chain based on their understanding of consumer demand and regulations. In the case of regional products, however, regional producers and their area of origin participate strongly in determining the product characteristics, resulting in more supply-driven chains. That means the choice of distribution channels and links to the target markets is important (Janzen and Vlieger, 1999; Wolf, 2004).

Regional products are particularly suited to marketing close to where they are produced. Local people and tourists are major consumers, and tourists like to

buy things to take home as gifts. Marketing locally means short (or even direct) links with consumers, and more value addition on farm. Short links ensure consumers are connected with the region and strengthen the product image. They also guarantee traceability, transparency and trust, so reduce the need for certification (Benkhala et al., 2004; Wolf, 2004). Examples of short distribution channels are on-farm sales (if the farm contributes to an attractive regional image), producers' markets, 'community-shared agriculture' (where the farmer grows food for a predetermined group of consumers), and mail or e-commerce. Direct links between producers and institutions such as hotels, restaurants, hospitals and schools also mean short links.

The Groene Hoed in the Netherlands is an example: producers from an area north of Amsterdam have formed a collective trade organization. They have increased their competitiveness and enhanced the sustainability of their operations through an integrated strategy of deepening and broadening their farming. They focus on shortening chains for high-quality products with local distribution systems and links to restaurants. They also offer a range of agri-tourism activities. The combination of regional products, local distribution and agri-tourism promotes the regional image among consumers and increases the size of the market for regional products and locally produced food (Groene Hoed, undated).

A number of more conventional market channels can be used to market regional products: they include specialty retail stores, supermarkets and wholesale markets (especially farmers' markets). All over Europe, supermarkets promote regional products. For example, Carrefour, a large French supermarket chain, promotes regional products in the 30 countries where is active. In the UK, Tesco sources many products from local producers. This firm carries an extensive range of regional products and has a clear commitment to improving its range in the future. In the Netherlands, regional retailers such as Deen and Jan Leenders offer more regional products than national chains (such as Albert Heijn). The supply of regional products to these retailers is generally organized by each store, not by the national distributor. But also nationally there is a tendency to sell more regional food in supermarkets (Wolf, 2004).

Specialty retailers and supermarkets have strict product requirements for the packaging and labelling of the regional items they sell; these specifications may cover technical, quality, welfare, volume and consistency issues. Cooperation among producers is required to fulfil these requirements and achieve economies of scale in these conventional market channels.

Implications for smallholder producers in the South

At the macro level, not all developing countries agree amongst themselves (neither do developed countries) regarding the importance of protecting geographical indications and the benefits they could derive from them. Those countries with a longstanding historical heritage and culinary traditions tend to

attach more importance to geographical indications and want to protect them effectively. Since most geographical indications concern agricultural products, this type of intellectual property protection should favour countries with a farming economy – which includes most developing countries. But for cultural and educational reasons, and because worldwide recognition of this intellectual property right is recent, this has not yet happened (Escudero, 2001).

Indigenous people and local farmers have over the years developed their own expertise for producing food. This knowledge has evolved outside the formal legal structure of the intellectual property protection system. Many of these products are produced using traditional methods; they have a given quality, reputation or other characteristic that is attributable to their geographical origin. So they might be protected by geographical indications. They might also use these specific characteristics as components of sustainable marketing strategies. The following chapters of this book discuss whether a regional identity can contribute to market development for these smallholder producers.

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3 *Gari* Missè in Benin: A local, premium-quality staple

Astrid Gerz and Stéphane Fournier[6]

Gari, a popular food in Nigeria, Benin, Togo and Ghana, is a dried semolina made from cassava, which may be more or less fermented. It is high in calories and low in protein, so it is used mainly as a source of energy. All groups of people, especially children, eat it. It is traditionally produced by rural women, and is one of their main sources of income.

It is often claimed that the low purchasing power of consumers in West Africa hampers the development of markets for differentiated products. The story of *gari* in southern Benin illustrates how quality and price are regulated locally. It shows that a quality local staple can fetch a premium price on local markets without any legal protection or public support, and investigates the sustainability of this premium.

The small-scale production and processing of *gari* in southern Benin is intertwined with local socio-cultural networks. This case study highlights *gari* Missè, a type of *gari* that is made in a specific way and is unique to a small area. Compared with other types of *gari*, it is a luxury product; it has high quality and enjoys a strong reputation. Production of *gari* Missè is efficient and viable because its producers are located close to each other in a specific area.

Product background

Geographical origin

Gari is produced all over Benin, but is particularly developed in the southern, wetter part of the country. Most is made in a traditional way, and results in 'ordinary' *gari*. However, *gari* is made in distinct ways in certain areas. This case describes two: the sub-prefecture of Savalou (Collines province, on the western side of the country, near Togo), and the Pobé and Adja-Ouere (Plateau province, in the east, bordering Nigeria) (Figure 1).

The largest ethnic group in sparsely populated Savalou area is the Fon (including Mahi and Ifé). This area produces two types of finely granulated *gari* known as *gari* Sohui and *gari* Missè.

[6] Research partnership CIRAD with Université d'Abomey-Calavi, Benin (Professor Mathurin Nago).

Figure 1 **Savalou and Pobé and Adja-Ouere in southern Benin**

The densely populated Pobé and Adja-Ouere area is dominated by Yoruba (including Nagots); it produces an extra-fine *gari* Sohui, known as a *gari* Missè substitute.

History and production process

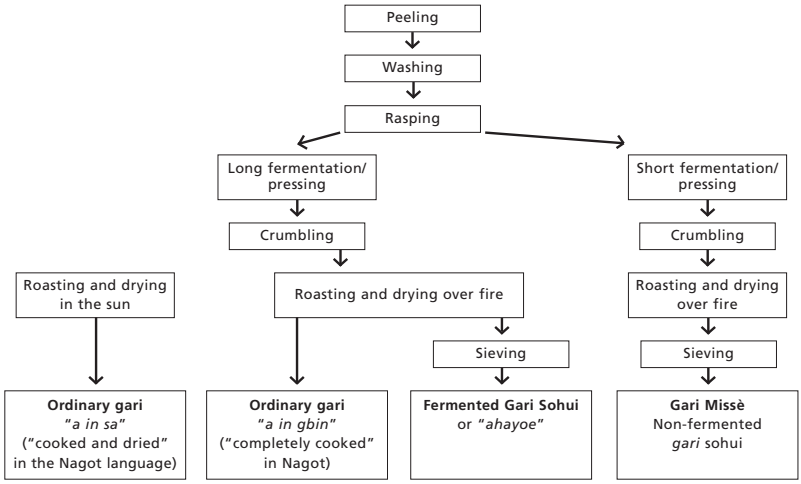
Cassava, a plant native to South America that produces fleshy, edible roots, was introduced to Benin and other countries in West Africa, in the 16th century. But it was only at the end of the 19th century, after the abolition of slavery, that the technique of processing the roots into *gari* was diffused in Benin by former slaves returning from Brazil, where they had produced a similar product called *farinha* (Nago, 1995). Most of these former slaves settled in the department of Mono, in southwest Benin. *Gari* production seems to have spread quickly all over the south of the country.

Gari is made from sweet cassava by peeling and washing the roots, rasping the flesh, then drying, fermenting/pressing and crumbling the resulting mash. This is then roasted and sieved. The quality of the final product depends largely on the processing methods, and less on the raw material. Various processing methods lead to different textures, tastes and colours of the final product (Figure 2). Especially important is the specific 'touch' at the roasting stage, called 'garification'.

Gari Missè production in Savalou

Very early on, certain parts of Benin (in particular the Savalou area) developed a special type of *gari* (Fournier, 2002). People in Savalou say they started making *gari* at the end of the 19th century, and that they immediately switched

Figure 2 Different ways of processing cassava into *gari*



Source: Fournier, 2002

from the usual practice of sun-drying the cassava to roasting it (Figure 2). Roasting and then sieving produced a drier, finer product – one for which Savalou is still famous.

In the 1930s, the King of Savalou and the French administrator decided to develop *gari* as a basic foodstuff for prisoners. They asked women from aristocratic families, who had been making *gari* for several decades, to train other women how to make *gari* for the prisoners. The aristocratic women reluctantly agreed to do the training: they feared they would lose monopoly over production, and that their product would lose its special reputation. So they tried to develop their own product further. After rasping the cassava roots, they put more effort into pressing them, speeding up the pressing and reducing the degree of fermentation. That produced a drier, less fermented *gari*, which came to be known as *gari* Missè[7], after the district of Savalou city where the women lived.

Since that time, the Savalou area has produced two distinct types of *gari* (Table 3):
- *Gari* Sohui, and
- *Gari* Missè, made only in the Missè district of Savalou city.

Gari production in Pobé/Adja-Ouere

Producers in some other localities have also adapted their processing methods, leading mainly to the production of a Sohui-type *gari* (Fournier, 2002). The Pobé

[7] 'Missè' means in the Mahis language: 'we separated', emphasizing a strong desire of these women to differentiate their products.

Table 3 Comparison of different types of *gari*

Type of gari	Characteristics	Quality	Modes of consumption
Ordinary *gari*	Medium-coarse, yellow semolina	Standard	Diluted in cold water, as paste made by stirring it in boiling water
Gari Sohui	Fine, white, dry, crispy semolina, fermented or not	Good	Most commonly, diluted in cold water
Gari Missè	Very fine, white, dry, crispy, non-fermented semolina	High	Sprinkled on beans and certain other dishes

and Adja-Ouere area, for example, has been known from the mid-20th century onwards for the production of ordinary *gari*. At the beginning of the 1990s, growing urbanization and liberalization (leading to increased access to international markets) raised the demand for finely granulated *gari*.

In Pobé and Adja-Ouere, and particularly in Ikpinlé (an important cassava-producing area), this rising demand encouraged a small group of women to launch the production of fine *gari*, also called *gari* Sohui. These women, mostly natives of areas where fine *gari* is produced, developed a new processing method and mechanized the process by investing in presses and rasping machines. Thanks to this, they were able to produce a finer, non-fermented *gari*, similar to the Missè type. Their production expanded rapidly. Sold 60% cheaper than the *gari* Missè, this *gari* met a keen demand, especially when exported to Gabon, Ivory Cost and Gabon. These women subsequently became specialized *gari* producers.

A number of small-scale processing enterprises, each with 10-20 workers and sizeable volumes of output, emerged over a few years. Between 1990 and 1995, this region became the most important area for fine *gari* production in Benin.

Since the mid-1990s, however, external demand for *gari* Sohui declined because importing countries (especially Gabon and Ivory Coast) developed their own national production. Internal demand grew, but not as quickly as the supply, due to the rising number of enterprises. This situation led to a serious crisis of overproduction and a slump in sales, forcing several producers to give up production. However, this crisis did not at all affect demand for *gari* Missè in Savalou (Fournier, 2002, Fournier and Cerdan, 2004).

Gari Missè and *gari* Sohui supply chains

Producers' level of organization and collaboration strategies

In Savalou the *gari* producers are women who are engaged in various types of business. Only 40% produce a single product; the remainder make several

different products to diversify their risk (Fournier, 2002). Precise data are not available, but the total number of *gari* producers must be very large, since *gari* is the most important local processed food (Fournier and Cerdan, 2004). About 100 women in Savalou produce *gari* Missè for sale. However, a much higher number make it for home consumption.

Both *gari* Missè and *gari* Sohui are produced by many small, family-owned units. The women try to reduce the commercial and technical risks involved through various forms of collaboration at different stages: by jointly buying the raw material, by having rotating work groups do the processing, and by selling the product jointly. This type of cooperation is based on existing social networks such as family, ethnic group, and origin from the same district. These ensure that the members trust and help one another. The groups share common norms and values, allowing them to function through a 'domestic' type of coordination: the rules remain largely implicit and are never formalized, but are respected by all producers (Fournier, 2002).

In **Pobé and Adja-Ouere**, *gari* production is also based on traditional, community- based, multi-functional networks. Professional networks emerged only recently when new processing methods were introduced and some women started specializing in making *gari*. The large production volumes meant that the traditional form of organization was insufficient, and *gari* producers started managing raw material supplies and sales themselves. In 1993 they created the Association of *Gari* Producers of Ikpinlé, but this business-focused network proved unsustainable and dissolved during the oversupply crisis in the mid-1990s. Increasing competition among producers strained relations between them, and the association stopped meeting. The producers returned to their traditional, community-based networks (Fournier and Moity-Maïzi, 2004).

At the same time, in both Pobé/Adja-Ouere and Savalou, public institutions and NGOs tried to promote a model of officially registered groups. They formed the women with the same specialization (such as *gari* production) into groups to facilitate joint production and to reach common professional and economic objectives. But this type of formalized organization has not convinced the *gari* producers, who have instead maintained their community-based networks and individual processing (see Table 4 for the Pobé/Adja-Ouere case).

Table 4 Individual and collective *gari* production in Pobé/Adja-Ouere

Individual processing only	68%
Individual and collective processing	18%
Collective processing only	13%

Source: Fournier, 2002

Individual and collective processing coexist in Benin mainly because of financial reasons and processing facilities. The main motivation for the *gari* producers to gather in formal groups is to get subsidies and credits granted by

public and private bodies (the formal financial sector, agricultural services, NGOs, projects), from which individuals and informal groups cannot benefit (Fournier, 2002).

In the particular Missè case, the existence of two formalized groups is also linked to reputation: being member of an 'official' women's group known for making the best *gari* in the country enhances a producer's reputation. That is why the key producers of *gari* Missè are members of at least one of these groups, even if they continue to mobilize community networks for buying roots and selling the product, and to process individually (Fournier, 2002).

Relations between producers and other actors in the supply chain

Cassava growers-*gari* processors. The relation between cassava growers and *gari* processors is different in the two production systems:
- In Savalou the *gari* producers buy cassava on the local market or directly from farmers. Loyal relations between the two actors are rare. The processors are generally in a weak position: they buy only small quantities, so have little negotiating power and pay quite high prices for their raw material.
- In Pobé and Adja-Ouere, the heads of the small-scale enterprises that make *gari* Sohui and the farmers have stronger relations. The farmers regularly deliver large quantities of cassava directly to the processors. This wholesale arrangement means the processors pay less for their raw material.

***Gari* processors-retailers**. Relations between producers and retailers are reversed in the two areas:
- In Savalou, *gari* Missè processors are generally in a strong position. Retailers come and buy *gari* Missè directly at their homes, and not elsewhere. The price is fixed according to a specific measure and selling unit, a kind of big bowl, which differs from the one used by producers selling on the market. *Gari* Missè is not available on the local market because the women are not willing to mix with other producers, and because its prices are higher. The producers also frequently sell directly at home to consumers. In both cases customers' loyalty is established.
  The situation of the Sohui *gari* producers is somewhat different. Their product is sold in the local market, where producers are much more numerous than buyers; the latter can be considered as 'price-makers'.
- In Pobé and Adja-Ouere, the wholesale markets do not favour loyal relations between producers and retailers. The *gari* is sold in bulk, either on the market or at the processing units, to various traders who buy the lowest priced products. Despite this, relationships between producers and certain traders have been strong enough for the traders to make loans for mechanized presses and rasping machines, improving the efficiency of *gari* production (Fournier, 2002).

Processing methods have a clear impact on the quality of the final product, as well as on the level of output and the price. Table 5 compares manual (non-mechanized) production processes. The cost price of ordinary *gari* is only about half that of the high-quality *gari* Missè. The output and the time productivity are significantly higher for ordinary *gari*.

Table 5 Technical and financial performance of different *gari* products

	Ordinary gari	Fermented gari Sohui	Gari Missè
Kg of *gari* output per kg of cassava	0. 298	0.212	0.172
Time productivity (kg of *gari*/hour)	4.9	2.8	1.9
Cost price (FCFA/kg)	129	194	249

€1= FCFA 665

Source: Fournier, 2002

The type of market and the type of consumers also depend on the quality of the product. Ordinary *gari* and *gari* Sohui are sold on local and national markets and in neighbouring countries. During the boom of *gari* production in Pobé and Adja-Ouere, exports were regulated by Customs, but nowadays the cross-border trade passes through informal channels (Fournier, 2002). *Gari* Missè, on the other hand, is an 'identity' product, which is only sold on niche markets: localized markets in the capital, but mainly in Savalou through direct selling.

A study of consumption patterns in 2001 by Fournier and Mitchikpe (Fournier, 2002) showed that few 'average consumers' in Cotonou (the largest city in Benin) knew of or consumed *gari* Missè. Just a few are willing to pay an extra price for this quality *gari*, and almost all were natives of the very area of Savalou where *gari* Missè is made. It seems that the consumers' origin has more influence on their attitudes and propensity to buy expensive *gari* Missè than does their income.

Despite its advantages, *gari* Missè and its processing methods have not spread outside its original production area – even though the techniques could be easily duplicated. This may be explained by three factors:

- The producers of Missè district want distinguish themselves from other producers, so have not shared their processing secrets with other producers.
- *Gari* Missè is a niche product: it is consumed on specific occasions, used for a unique dish and reserved for specific consumers and markets.
- *Gari* Missè has a strong link to its geographic home, and is renowned as unique. Although the raw cassava does not significantly affect the quality of the final product, the localization of the processing and thus the know-how is extremely important. For consumers, *gari* produced using the same methods as *gari* Missè, but outside the Missè district, lacks the quality and reputation of the real thing. It is not clear how *gari* Missè acquired this strong

reputation, but we suppose it was a gradual process like that of many regional specialties.

Enabling environment

Few public and private institutions are involved in the *gari* sector. Exceptions are the agricultural departments (CARDER, Centre d'Action Régionale pour le Développement Rural), and some NGOs and projects. But these support only formal groups, generally through financial aids such as credits for processing equipment (e.g., presses, rasps) and working capital funds. One of the rare projects assisting producers in marketing was a Canadian project that worked with *gari* Sohui producers in Savalou on packing and labelling: the *gari* was sold in small bags carrying the association's name. The product was thus distinct, making it easier to access national supermarkets serving mainly upper middle class consumers, including foreigners.

The legal framework for *gari* is very weak. The Directory of Food and Applied Nutrition of Benin has defined a norm for *gari* production, but controls are irregular and not rigorous.

Benin is a member of the African Intellectual Property Organization (OAPI), a regional institution in charge of intellectual property registration in francophone Africa, and represented in Benin by the National Centre of Industrial Property, a unit within the Ministry of Industry and Small and Medium-Scale Enterprises. Through the Bangui Agreement (revised in 1999), OAPI envisages the creation, registration and protection of geographical indications within its member states. A project to identify the first products for registration is under way, but Benin does not figure among the pilot countries (Sautier and Sarfati, 2005).

Some commercial trademarks for *gari* can be found in Cotonou. In Savalou, the Canadian project mentioned above developed the collective trademark 'Association Màdouvô de Savalou', but it is unclear whether this mark still exists now that the project has closed (Fournier, 2002).

A geographical indication for *gari* Missè?

Gari is an important way for rural women to earn money, and it supports the livelihoods of many poverty-stricken households. There is currently no protection or labelling of *gari*, even though certain types – especially *gari* Missè – have characteristics (high quality, clearly delimited geographic origin, faithful consumers) that could be key elements for a certification process. So is a geographical indication (or some other distinctive sign) suitable for *gari* Missè?

Some producers and traders take advantage of the reputation of *gari* Missè by selling ordinary or mixed *gari* under the Missè name. Some processors (from Savalou) have also found they can limit the fermentation process by adding bicarbonate of soda, producing an imitation product. Labelled *gari* would set

processing and quality standards, helping to reduce the kind of practices and thus consumers' suspicions.

A geographical indication or trademark might protect producers and consumers through recognition of the origin. A trademark would benefit only the owners of the trademark, while a geographical indication would be open to all producers in the area.

Despite this, as far as we know, local actors do not currently see the need for better recognition and protection of *gari* Missè. The production and know-how of *gari* Missè as a local product does not seem threatened. Consumers acknowledge its quality and uniqueness, and the small-scale enterprises are able to maintain themselves.

Indeed, this system has existed for more than 70 years. It relies on social networks that control production and marketing practices through non-codified but efficient rules and controls based on cooperation and mutual trust. The producers live close to each other and can mobilize social networks, strengthening the collective efficiency and the viability of the system. The fact that traders or consumers buy *gari* Missè directly from the producers means that they are confident the product is genuine. For producers, direct selling enables them to differentiate their product from the other types of *gari* and gives them higher prices. So they already benefit from some economic and social added value.

A serious constraint to a geographical indication is the lack of a legal framework and institutional bodies that could define, enforce and control the rules that would be needed.

The type of market is also important. The production of *gari* Missè is strongly localized. This limits the supply, and the demand seems stable (it is, after all, relatively expensive compared to ordinary *gari*).

For a staple like *gari* Missè, which enjoys a price premium but has a limited and already endogenously regulated market, an official label may be a future prospect. But is not currently a priority for producers; nor does it seem to be one for traders or consumers.

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4 *Mantecoso* cheese in Peru: Organizing to conquer the national market

Astrid Gerz and François Boucher[8]

This case study describes how the production of specialty cheese evolved in northern Peru, in a context of high competition and product imitation. It shows how the development of this cheese relied on individual and collective innovations in processing, marketing and organizational arrangements. The local cheese production system has been able to mobilize resources to protect the image of its product and to strengthen its market competitiveness.

Mantecoso is a semi-fresh cheese produced by small dairies in the Department of Cajamarca. It is a typical cheese of this region – a local identity symbol. It has a strong reputation throughout the country, so might benefit markedly if it were registered as a geographical indication.

Mantecoso cheese involves:
- The use of specific local know-how in milk production and processing, and
- A cluster of many small firms, which cooperate in some aspects and compete in others. These firms are urged to develop better coordination to address common interests such as quality and market development (Boucher, 2004).

Cheese production in Peru

Peru produces about 1.2 million tons of milk a year. Most dairying is concentrated in three regions: Arequipa in the south, Cajamarca in the north, and near Lima, the capital. Most milk producers are small-scale, though there are two large processing companies, Nestlé and Gloria. The milk produced is used in different ways in each of the three regions, depending largely on the presence of rural agro-industries. Cheese production is relatively weakly developed.

The Department of Cajamarca, in the northern Andes, is the only area to have developed a real cheese-making tradition (Boucher, 2004). With a population of 1,362,300 in an area of 33,500 km^2, this Department it is one of the most populated in the country (Figure 3). Most people live in rural areas (75%), are engaged in farming (70% of the small-scale enterprises), and are poor (77% of the rural population earn less than twice the cost of a minimum food allowance).

[8] Research partnership CIRAD with *Pontificia Universidad Catolica de Lima, Centro Internacional de Agronomia Tropical* (CIAT, Cali, Colombia), *Soluciones Prácticas* (Lima, Peru) and APDL (Cajamarca, Peru).

Figure 3 **Cajamarca cheese production area in Peru**

The economic and administrative activities of the department are concentrated around its capital, Cajamarca, the only city connected to the coast by a tarred road. Poor roads make communication and trade with the mountainous hinterland difficult (Boucher and Guegan, 2002). The Department's economy is based on mining (particularly the Yanacocha gold mine, one of most profitable of the world), tourism and dairying.

The Department has 30,000 registered milk producers and produces an estimated 503,000 litres per day. A large number of small, rural dairies process about one-third of the milk output into cheese, making Cajamarca the most important cheese-making region in the country (Boucher, 2004).

Cheese is made in Cajamarca by very small units. The principal cheeses produced are:

- ***Mantecoso***, made from a fresh curd known as *quesillo* that has been manufactured for decades in rural Cajamarca. *Mantecoso* has become the 'typical' cheese of the area.
- ***Queso andino tipo suizo*** (Andean Swiss-type cheese), a hard cheese derived from technology imported by a Swiss project supporting rural cheese dairies.
- ***Queso fresco***, a generic fresh cheese without a special identity. This is a curd, a little more salted than the *quesillo*, and is sold in mounds of 2 or 3 kg.

It is possible to distinguish four specific cheese-making regions within the Department of Cajamarca, based on the concentration of cheese dairies, the characteristics and specialities of each production area, and the areas' links with cities and markets. These four regions overlap somewhat, with upstream links to milk and *quesillo* producers, and downstream links to markets, in particular in Lima and other north-coast cities.

The territory of Cajamarca (around the city of Cajamarca itself) is the largest and most important of the four regions. It produces a range of *mantecoso* and *queso andino tipo suizo* products and has a quality image and national reputation (Boucher and Guegan, 2002). Our study focuses on this territory and the *mantecoso* production system.

History of *quesillo* and *mantecoso*

Mantecoso and *quesillo* (see below) can be considered typical products: they are simple, attached to a territory, and the quality of the *mantecoso* is closely linked to the local soils and climate, which determine the richness of the pastures and thus the quality of the milk.

From quesillo to mantecoso

Mantecoso is a semi-fresh cheese produced from a fresh curd known as *quesillo*. *Quesillo*, which is found only in Cajamarca, stems from approximately 200 years ago. Farms in the Altiplano are very isolated, and the farmers needed to increase the shelf-life of their milk. So rural women processed the milk into *quesillo*, which could be kept for 7 days. They then salted the *quesillo* to improve its insipid taste, and ground and crushed it on a stone (known as a *batan)* to make *queso*. This processing further improved the taste, texture and lifespan of the end-product.

In the 1970s, the *batan* stones were replaced by manual mills. This technology shift also changed the nature of the resulting product: the *queso* became *mantecoso*.

The transition from *batan* to mill has had several other effects:
- Transition from a basic subsistence food into a commercial product.
- Transfer of processing from women to men (men handle *mantecoso* production, while women continue to produce the *quesillo*).

Geographical separation of the two production stages: *quesillo* is still produced on farms in mountain areas, while *mantecoso* is now mainly produced in cheese dairies in the town of Cajamarca.

Rural cheese dairies

The first small-scale dairy processing units emerged in Cajamarca in the 1950s and 1960s. During this period, the area became an important breeding zone for dairy cattle due to the rise of haciendas, Nestlé's establishment of its Incalac dairying plant and land reforms. The first small-scale dairy produced *manjar blanco* (a whole milk spread) for shipment to Lima (Grèzes, 2000). In the 1960s, some livestock keepers in the mountains started to produce *mantecoso*, selling it in non-specialist shops in Cajamarca.

Since 1975, cheese-making has turned into a commercial activity in three distant rural parts of the Department: Agua Blanca and Asunción (which produce *mantecoso)* and Chugur *(queso andino tipo suizo)*. In these places, three families decided independently to produce cheese exclusively for sale. This was the start of the cheese industry in Cajamarca. Commercial *mantecoso* production has grown in response to rising demand at the coast.

Producing *mantecoso*

Mantecoso processing consists of two stages. The first involves producing curd 'at the foot of the cow'. This is the *quesillo*. It forms the raw material for making *mantecoso* in the second stage.

The quality of the *mantecoso* depends mainly on the quality of the *quesillo*. This can be poor because of hygiene problems during processing:
- The milk may be contaminated by antibiotics or contain traces of dirt because of poor hygiene during milking (hand-washing, cleaning of the teats).
- The *quesillo* may become contaminated during processing, for example by the weight used to press the liquid, by rennet (which comes from the lining of calf's stomach) used to coagulate the milk, or by dirty containers.

These problems occasionally reduce the quality of the *mantecoso*, or may even spoil the *quesillo*, making it unfit for consumption. However, improved hygiene, training on milking practices and the use of industrial coagulation tablets (which are more hygienic) nowadays are reducing these quality problems (Boucher and Guegan, 2002).

Other factors affecting the quality of the *mantecoso* include processing methods, storage and transport conditions, and the relationships between middlemen and cheese-makers. Various factors affect consumers' perceptions of the quality of the product: local competition between cheese sold in city shops or by street and market vendors in Cajamarca, and (more seriously) fraud and adulteration of Cajamarca cheese by unscrupulous outsiders. Traders in the distant, coastal cities sometimes mix the original cheese with potato starch so they can sell a heavier weight, or sell it with false 'Cajamarca' tags.

The *mantecoso* chain

The *mantecoso* supply chain includes various actors. The main players are the producers of *quesillo* and *mantecoso*, middlemen and traders. The *mantecoso* cheese-makers are the key actors in the chain: they are in contact with the local *quesillo* producers and middlemen, and with supporting institutions and external traders as well. They are well anchored in their territory, proud of their products and willing to promote high-quality cheese and the image of Cajamarca.

Quesillo producers

The *quesillo* producers are generally poor livestock keepers who live in the mountains. They are highly connected and interdependent, and have a strong tradition and culture. However, they have not been able to organize their production of *quesillo*, and they do not consider their simple curds as an identity product, but merely as a source of income. They thus are concerned little about the quality of their product or how it is used further. But as demand for high-quality *mantecoso* rises, they are becoming more conscious of their role in the chain.

There are an estimated 19,000 *quesillo* producers in Cajamarca. Most are in the provinces of Cajamarca (6000), Chota (4500), Hualgayoc (3000), Celendin (2200), San Miguel (1300), Cutervo (1100) and Cajabamba (500) (Boucher, 2004). These *quesillo* production areas are closely linked to the cities of Cajamarca and Bambamarca (Hualgayoc province), where the most *mantecoso* is produced and sold (Boucher, 2004).

Mantecoso producers

There are 98 *mantecoso* cheese-makers in the Department of Cajamarca. They are mainly located in the provinces of Hualgayoc (34), Cajamarca (23), Chota (15), Celendin (13) and San Miguel (13). *Mantecoso* is produced mainly in the urban centres of Cajamarca, Bambamarca, Chota and Cutervo. However, the south of the provinces of San Miguel and San Pablo includes a rural area reputed for its good *mantecoso* (Boucher, 2004).

A large number of *mantecoso* cheese-makers are based in Cajamarca city. They operate individually; 80% are native to the Department, and 64% are descendants of farmers or livestock raisers. Production is family-based. Technical and marketing know-how is transmitted between family members. Approximately 60% of the specialist dairy product shops in Cajamarca belong to only 9 families (Grèzes, 2000).

Most of the small-scale enterprises are thus based on family networking and mutual assistance. The enterprises are generally managed by men assisted by their wives. Fifty percent of the Cajamarca cheese-makers have a university education. Many (45%) have become active in the cheese sector only in the last 10 years. According to Boucher (2002), there are two main types of cheese-making enterprises:

- **Small-scale enterprises**, producing one type of dairy product, mainly *mantecoso*. They have a restricted local market. Their communication about the product is limited, but they maintain a direct contact with their customers. Those located in urban areas sell their cheese in their own shops, in creameries, at the market or in the street.
- **Medium-scale enterprises**, with a more diversified lines of two to five products. These enterprises generally own their own shops, and serve customers at local and national level. They have better communication

capabilities, and buy 300-3000 litres of milk a day, as well as *quesillo* once or twice a week through middlemen.

Slow bureaucracy and the various requirements for registration mean that 81% of the cheese-makers have set up formalized enterprises (i.e., they have a trade registration), while only 36% have completed the necessary paperwork (e.g., hygiene and health registration) to sell directly to consumers. About one-quarter have bank accounts. In Cajamarca, eight cheese-makers have their own trademark, a status as an industrial producer, and are beginning to use barcodes – a requirement for selling in supermarkets (Boucher and Guegan, 2002).

Horizontal and vertical organization

While continuing to pursue their individual strategies, the *mantecoso* and *quesillo* makers have since 1998 started joining together in various local organizations and networks with the common objective of improving the quality and enhancing market access of their products.

APDL

The *Asociación de Productores de Derivados Lácteos* (APDL) is Cajamarca's cheese-makers' association. It was created in September 1999 by a group of 39 small and medium-scale entrepreneurs. As owners of processing units and shops in downtown Cajamarca, they identified some common problems in the quality and marketing of their product. These included in particular a lack of quality *quesillo*, unequal competition from the informal sector (since street vendors neither taxes nor have to pay the costs of maintaining a shop), insufficient information about quality control, and the evolution of consumer demand towards quality and healthy products (Boucher, 2004). Adulteration of Cajamarca cheese and the inappropriate use of the Cajamarca name by cheese traders and processors in Lima and other coastal cities are also a matter of great concern – though are more difficult for a local processors' group to tackle.

APDL focuses on producer-consumer relationships and enhancing the image of members' products and that of the region. The association organizes promotion fairs during the festive summer period. Besides *mantecoso* cheese, APDL members' shops also sell a range of other regional products (chocolate, honey, etc.). Synergies are thus being built between the quality of the cheese and of other regional foods and amenities (such as landscape). This collective action is tied to an exclusion process. Only specialized dairy producers and traders are accepted as members of APDL. Middlemen, informal cheese-makers and street vendors are excluded.

After initial setbacks, mainly due to the weak relationships between the members and to lack of a coordination structure, the association managed to develop a quality label, including a set of commitments (collective trademark 'Poronguito'). It is currently exploring the opportunity to develop a geographical indication for *mantecoso*. It has developed a strong lobbying

capacity within the city council to counter informal cheese sellers. Networking between cheese-makers has increased considerably since APDL was launched.

Quesillo mejorado groups in Chanta

A collective dynamic also exists around the quality of *quesillo* in the locality of Chanta. Producers willing to produce improved *quesillo* ('*quesillo mejorado*') have gathered into two groups and are being assisted by an NGO as well as by specific *mantecoso* cheese-makers. The ongoing merger of these two groups would allow them to set up a producer organization and thus further strengthen their collective action and efforts to raise quality.

CODELAC

CODELAC is a platform for coordination and partnership between all actors in the cheese-making sector in Cajamarca, including NGOs, public bodies and services. This association was set up at the end of 2002 as a result of the progressive convergence of APDL and the *quesillo mejorado* groups. Through a process of dialogue initiated by NGOs, both became aware of their complementarities in achieving quality, maintaining the regional reputation and developing new markets for Cajamarca cheese. CODELAC rapidly became a space for exchange, negotiation, promotion and coordination of common actions and projects. In accordance with APDL rules, CODELAC is also exclusive: i.e., those who do not share the concept of quality dairy products are excluded.

Relations among chain actors

The various chain actors have different and complex relationships. We will focus on the special relationships between the upstream *quesillo* and downstream *mantecoso* producers. Three types of commercial relations can be distinguished:

- Purely commercial relationships. In the markets of Chanta and Yanacocha the price and weight of *quesillo* are the main factors governing relations between the two groups of actors. The *quesillo* producers are in a weak position because they are uninformed about prices and have limited negotiation power. Loyal seller-customer relations are thus difficult – middlemen often cheat on weight – and this does not favour the development of high-quality *quesillo*.
- Semi-loyal relationships. These occur where *quesillo* producers generally sell to the same customers, offering an opportunity to improve quality and negotiate better prices while selling according to exact weights.
- Loyal relationships. Some *mantecoso* cheese-makers rely on specific middlemen (known as *quesilleros*) to buy the best *quesillo* from farms and to support the *quesillo* producers in technical and logistical questions. In this case, the quality is prescribed by the cheese-maker, based on the quality of the *quesillo*, and the price is fixed according to the quality and exact weight.

Trust between actors thus depends on three main elements: the quality of the *quesillo*, the price offered by customers, and the exact weight of the product. If these three elements are present, the level of trust is high.

Markets and consumers

Quesillo and *mantecoso* are sold at distinct markets. *Quesillo* is sold mainly at local wholesale markets to middlemen, who supply the cheese dairies with the curds for further processing into *mantecoso*. The *mantecoso* is sold in Cajamarca city at local specialist creameries and shops, and in the main cities of coastal Peru at wholesale markets and in mixed shops, supermarkets, bakeries and restaurants. Tourists and mine workers fuel local demand at the specialist shops in Cajamarca. Prices vary, depending on the market and the number of middlemen involved: wholesale market prices range from €1.2 to 2.9, while retail prices start at €3.1 per kg (Boucher and Guegan, 2002).

A survey (Theeten, 2001) of 80 consumers in Cajamarca town and two cities on the coast shows that *mantecoso* consumers are mainly from the medium or high income levels. Preferring healthy, quality products, these consumers buy cheese mainly in creameries and supermarkets, and rarely in markets. *Quesillo*, in contrast, is considered a popular product. It is sold mainly in the streets and is primarily consumed by people from the middle and working classes.

Only 56% of the people interviewed in this survey thought the Cajamarca cheese had good quality; 33% did not feel confident about the origin of the mountain cheeses they bought. As many as 93% were actually aware of the existence of fraud in the cheese sector, and a majority were willing to pay more (between €1.0 and 2.9 per kg of *mantecoso* cheese) for a quality guarantee. These findings reveal that consumers are aware of food safety and quality issues.

The demand for quality local cheese is stimulated by the rising numbers of tourists visiting Cajamarca. The area hosts 80,000 tourists a year, mostly from within Peru, and this figure has risen by 50% over the last 8 years. Specialist shops are known for their quality products and depend on tourism for about 40-50% of their turnover (Boucher, 2004). This link between tourism, the demand for quality products, and the image of the region, is enhanced by cheese-makers through advertising campaigns or by tourism agencies in Cajamarca, which offer visits to rural cheese dairies and old haciendas (Boucher, 2004).

Enabling environment

APDL was awarded its 'Poronguito' collective trademark in 2000. A large number of institutions are involved in the cheese sector. They include public bodies, private enterprises and NGOs, which back up producers through training, financial, technical and marketing support. This supportive environment is likely to favour further developments such as the establishment of a geographical indication.

Public bodies

The main public organizations involved are the Ministry of Industry, Tourism, Integration and Trade (MITINCI) and the Chamber of Trade. Rather than

supporting cheese-producers and favouring the sector, they are frequently perceived as constraints. For many producers they are synonymous with taxes and penalties.

Trademarks and quality labels are managed by one main institution at the national level, INDECOPI (the National Institute for the Defense of Competition and Protection of Intellectual Property), which is also responsible for intellectual property in general.

Private enterprises

Two types of private enterprises assist the cheese sector:
- Private banks, which grant credit to cheese producers.
- Incalac (the Nestlé subsidiary), which has supported the development of a large network of roads in the South of the Department, helps regulate markets (it is an alternative buyer for fresh milk, especially when cheese is in oversupply), and provides credit and training for milk producers. Incalac is one of several enterprises that have assumed functions formerly provided by the state (the production of public goods, and market regulation) (Boucher and Guegan, 2002).

Non-profit organizations

Several non-governmental organizations, including CARE, FONDER, CIPDER, Cepedaz and ITDG, along with public bodies such as SENATI and CIRAD, support the cheese sector in various ways. These include providing credit for small-scale enterprises, technical training on improved milk processing methods, or technical assistance (mainly for rural *quesillo* producers) on topics such as breeding methods, milking, innovative processing methods and conservation of *quesillo*. *Mantecoso* producers also receive assistance in product advertising and new market outlets.

Other professionals

Other professionals with an important role in the sector are:
- **Transport enterprises**, which carry the raw *quesillo* to Cajamarca, and the finished *mantecoso* to the coast.
- **Small engineering enterprises** responsible for selling, making or maintaining cheese processing equipment and tools.
- **Input suppliers** who provide ingredients (salt, milk fermentation tablets) and packaging material (Boucher, 2004).

Cheese production is therefore at the centre of a whole cluster of enterprises in Cajamarca.

Critical issues and challenges

As we have seen, the *mantecoso* has become Peru's most popular cheese in a relatively short time. It is recognized for its quality, based on traditional know-how, and the genuine produce is produced only in Cajamarca, although some counterfeit or adulterated products are sold in the main urban markets. *Mantecoso* cheese possesses the main characteristics needed to be awarded a geographical indication (link to the origin, processing based on traditional skills/know-how).

In the *quesillo-mantecoso* system a process of collective action linked to quality has emerged. On the one hand, ADPL with its collective trademark and its geographical indication project; on the other hand, a dynamic for producing quality *quesillo* that is likely to become an association of producers. Both groups have the same objective: the creation and maintenance of a common good – the reputation of their product. They have to set up common quality standards, functioning rules, coordination and quality control mechanisms, and exclusion devices. A first step in this direction was the alliance with public and private institutions, mainly NGOs, resulting in the CODELAC multilateral union.

The *mantecoso* cheese-makers of Cajamarca have taken the lead in this collective action and the structuring of the system. The future of the system probably depends on the capacity of all actors (and thus of CODELAC) in maintaining and strengthening solid relationships based on proximity, mutual trust and a capacity to negotiate quality accords.

Cheese production in Cajamarca offers a good example of the link between social capital and collective action. In a context of globalization, rural agribusinesses have to become more and more competitive. Conscious of this, the Cajamarca cheese-makers aim to produce high-quality cheeses through individual innovations and a steady increase in local know-how. Additionally, producer associations, as examples of collective action, have effectively emerged. They manage common resources such as the ability to lobby local authorities, access to technological support, common marketing facilities, and quality labels.

This local system enjoys a national market and a positive product image. It has undertaken collective action to improve its presence in the market. However, the recent steady rise of supermarkets that impose new food quality and safety norms and packaging requirements is creating new challenges.

The presence of several disparate groups of actors, with complex vertical and horizontal relationships, strongly favours a coordinated approach before a 'quality agreement' can be achieved to ensure market success. CODELAC is likely to play a central role in this process of coordination and negotiation (Boucher and Requier-Desjardins, 2005).

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5 *Rooibos* tea, South Africa: The challenge of an export boom

Astrid Gerz and Estelle Bienabe[9]

Rooibos is the Afrikaans word for 'red bush'. Commonly used as a tea, *rooibos* refers to a group of more than 200 endemic species that belong to the *Aspalathus* plant group originating in the Cedarberg Mountains of South Africa. Over 16 species are collected from the wild and only the species, *Aspalathus linearis*, is cultivated.

This case study focuses on the production and marketing of *rooibos*, which are largely dominated by large companies. However, cooperatives of indigenous communities who use traditional cultivation and processing methods are emerging as new models of successful business. Since international demand for *rooibos* tea is increasing, other countries might try to imitate the production. We ask how this product and its markets might be protected against this through a geographical indication. We also assess the options for benefit sharing between large and small-scale producers.

Product background

History

Over 300 years ago, the indigenous San and Khoikhoi people used this tea plant as natural remedy for a wide range of ailments (stomach disorders, etc.). Botanists studied it in the 18th century. Its commercial exploitation outside the area was started in 1904 by Benjamin Ginsberg, who traded with the local mountain population (Wilson, 2005). Cultivation techniques were then developed.

Aiming to improve marketing, in 1948 the producers established the Clanwilliam Tea Cooperative. In 1954, the *Rooibos* Tea Control Board was set up to regulate marketing, stabilize prices, and to improve and standardize quality. Since then, the industry has made steady progress, refining production methods and increasing distribution so that *rooibos* production reached significant quantities and the tea an important export product. Nowadays the tea is processed, packaged and despatched worldwide; more than 6,000 metric tons of *rooibos* are exported annually.

[9] Research partnership CIRAD with Western Cape Department of Agriculture (Johannesburg) and University of Pretoria (Pretoria), South Africa.

Figure 4 ***Rooibos* production area in South Africa**

Geographical origin

Rooibos grows exclusively in the Northern and Western Cape provinces of South Africa, specifically in a small area 200 km north of Cape Town, the Cedarberg Mountain region and around Clanwilliam and Citrusdal (Figure 4). The Cedarberg area is a rocky range with a Mediterranean climate. This area shelters part of the *fynbos*, a highly specific ecosystem with the highest known concentration of plant species in the world (Cowling et al., 1997).

The *rooibos* product

The rooibos plant

The *rooibos* plant is a shrub with a central, smooth-barked stem. Near the ground, the stem subdivides into many strong offshoots, followed by countless thin side branches which carry bright green, soft, needle-like leaves about 10-40 mm in length. The plant varies from 1 to 1.5 metres high in its natural state, while harvested plants measures between 0.5 and 1.5 metres, depending on their age, the micro-climate and the soil conditions (Van der Bank et al., 1995).

Production and processing

Traditionally gathered in the wild, *rooibos* is nowadays mainly cultivated on large farms in a variety of locations, but its natural habitat is above 450 m above sea level. Small-scale farmers and underprivileged communities produce only around 2% of the total output. Almost all the output of big processors is cultivated (less than 1% is gathered from the wild), while small-scale farmers

still gather from the wild part of their output. Production per hectare can vary between 250 kg and 1000 kg of fresh leaves per year.

Large-scale farmers produce *rooibos* on up to 1500 or 2000 ha, while small-scale farmers grow *rooibos* on plots ranging from a tiny 0.2 ha, up to 18 ha in the case of Heiveld Cooperative members, see Box 2 (EMG, 2006).

Cultivation practices depend on the size of the farms, production volumes, certification strategies and marketing channels (conventional, fair trade, organic, etc.). Fifteen percent of the output processed by Rooibos Ltd. (by far the leading processing company) is grown organically and is certified as such internationally. The use of pesticides on other land is still low, but pest management is becoming an issue. Small-scale farmers in the Heiveld Cooperative and the Wupperthal Rooibos Association (Boxes 2 and 3) are both registered organic and fair trade growers. They use indigenous, extensive farming practices for their entire production.

Even though *rooibos* cultivation practices have evolved considerably, processing still relies on traditional methods, which trace back to the Khoisan people, except that methods nowadays are more mechanized and refined. The *rooibos* plant is first harvested 18 months after planting. It is then harvested annually during the summer by cutting the branches 50 cm above the ground. Though manual picking is still largely dominant, 30% is harvested mechanically.

The harvested *rooibos* is bound into bundles and taken to the processing units, where the leaves are cut by special machines to maintain a uniform length. The leaves are then bruised between rollers to activate a fermentation process. At this stage, the *rooibos* is still green. Fermentation is essential to enhance the flavour of the tea. After aeration, the leaves are fermented in mounds or heaps, and are then spread thinly in large yards to dry in the sun. During fermentation, the product turns red and develops its typical flavour and sweet aroma.

In a final process, the tea is sterilized with steam, dried in commercial dryers, sifted, weighed and packaged. The next step is blending. The product is sorted and graded according to length, colour, flavour and aroma before it is packaged (in bulk, teabags or as loose leaf). *Rooibos* Ltd. considers this last step as having an important influence on the final quality and taste of the product. Throughout the process, a laboratory regularly tests the product to ensure the quality of the final product.

The range of services and products vary according to the company. Rooibos Ltd. probably has the widest range of products: mixed, flavoured teas (*rooibos* and honeybush, Earl Grey *rooibos*), unfermented ('green') *rooibos*, fresh 'health' drinks (herbal blends, instant ice-tea), as well as cosmetic products.

Box 2 The Heiveld Cooperative

In the Suid Bokkeveld region, farmers were confronted with substantial difficulties in sustainable production and marketing of *rooibos*. This as due mainly to poor information and organization, inadequate local processing infrastructure, limited market access, a quota system imposed by the big processors, and low prices.

With the support of the NGO Environmental Monitoring Group and the Northern Cape Department of Agriculture, the Heiveld Cooperative was founded in 2000. The cooperative organizes farmers engaged in *rooibos* cultivation in Suid Bokkeveld, especially those who are disadvantaged because of their race or their sex. The cooperative rapidly gained the opportunity to sell a limited amount of organic *rooibos* on niche markets in Europe through a fair trade organization in the Netherlands. Its 14 founding members, who were already cultivating without external inputs, all became certified as organic producers.

Members produce organic *rooibos*. They are certified by the EU (public standard) and by Naturland (a private standard), as well as by Fair Trade Labelling Organization International. Most cooperative members have also adopted conservation farming practices to prevent soil loss and damage to their *rooibos* crop.

The cooperative was the first organization to market sustainably harvested wild *rooibos*. Organic certification for wild *rooibos* requires farmers to follow a code of sustainable harvesting practices.

The cooperative has grown to 34 members (including 9 women), and is well managed and financially stable. It has established relations with alternative trade organizations in nine countries.

Fair-trade prices enable all members of the community to improve their livelihoods. The income of individual producers rose from €1/kg in 2001 to €2 in 2003. In 2003, the cooperative made a profit of €19,624, of which €13,737 was distributed to members on the basis of the amount of business each had done via the coop. The rest (€5,887) was shared equally among the less advantaged members. The prices paid to members for their product are among the highest in the *rooibos* industry (€2.5 per kg in 2004). The cooperative's minimum wage for tea planters and harvesters is almost the double the legislated minimum for the area.

The cooperative is a good example of how poor rural communities can set up a functioning organization in a relatively short period (5 years), and can strengthen their production capacity and market position. The coop is now financially sustainable thanks to sound management and sustainable trading relationships. Its tea processing facility was more than 50% self-financed by earnings from 2003.

Since developing their own processing facilities and becoming more involved in value-adding, the farmers have a reawakened sense of self-pride and mutual trust and a much bigger voice. The coop has developed its own cloth packaging, managed by women, and has increased its ability to respond to international market trends and demands. It has developed long-term trading relationships, especially with Germany and the Netherlands.

Sources: EMG, 2006; de los Santos, 2005

Box 3 The Wupperthal Rooibos Association

Wupperthal is an isolated rural community in the heart of the Cedarberg Mountains. The Wupperthal Rooibos Association, created in 1998, is involved in the production, processing and marketing of *rooibos*. It has 170 small-scale farmer members, all of them of San and Khoi ethnic origin.

Wupperthal farmers used to cultivate *rooibos* on a small scale, gather it in the wild, and sell their production at very low prices to commercial farmers, processing companies and exporters. The main difficulties they encountered were the poor infrastructure, limited production capacity, and the sale of low-valued raw produce.

The association is now assisted by development agencies, especially the NGO Agribusiness in Sustainable Natural African Plant Products (ASNAPP).

The farmers harvest their entire output by hand, leading to a strong reputation for quality. They also now process the leaves on farm (previously this was done by third parties).

Rutgers University has helped them set 'good agricultural practices', 'good field harvesting practices' and 'good manufacturing practices'. Wupperthal received full organic certification in 2005.

The output has averaged 80 tons a year, with large variations according to climatic conditions. The association's annual turnover from *rooibos* sales rose from €27,156 in 2000 to €271,699 in 2004. The association has grown from 40 members in 1998 to about 170 members in 2005.

International demand for Wupperthal's tea is continuously increasing. Its *rooibos* has switched from a commodity to specialty product status under the fair trade label in various European countries, and since 2005 in Canada.

Harvesting of wild tea is nowadays controlled to preserve the wild plants. However, nearly 11% (10 tons) of the total community production is still gathered from the wild.

Source: ASNAPP, undated b

Specific characteristics

Rooibos is known as a specific product from South Africa. It became a popular tea worldwide, and is especially appreciated for its delicate, naturally sweet flavour and its health benefits. It is free of caffeine, oxalic acid, colourants, additives or preservatives, very low in tannin, and rich in minerals. It is known for its physiological and therapeutic properties, and is used to attenuate many health problems, such as insomnia, stomach cramps, irritability, headaches, allergies, nervous tension and hypertension. Rooibos is also rich in natural antioxidants, which are reputed to slow the aging process and boost the immune system (Joubert and Ferreira, 1996).

The producing region has specific conditions that mean it is ideal for *rooibos* production. It has rain in winter (between May and August, 180-500 mm per

year), while the rest of South Africa generally has rain in summer. The dry summers, the altitude, and the acidic, coarse sandy soil, mean that *rooibos*, and especially 'wild *rooibos*' (which is seen as having specific qualities) grows only in this area. Rooibos tea grown at higher altitudes is darker and has a stronger taste. Various qualities of *rooibos* are identified by their production area, which influences the speed of spontaneous fermentation after harvest and the colour and flavour of the tea. The type of harvesting also influences quality: hand-picked tea is finer.

The *rooibos* sector

Large-scale rooibos enterprises

Rooibos production and processing is dominated by a small number of companies that collect and process *rooibos*, and sell it to intermediaries who market it. There are eight sterilization factories in the country, mainly located in the Cedarberg production zone (only one is in Cape Town).

Among these processors, Rooibos Ltd. is the market leader. It captures 75% of the market share, and in particular dominates the national market through the Freshpak brand (part of the National brands group). Rooibos Ltd. is not involved in production, nor does it have its own trademark. It arose from the state-owned Rooibos Tea Control Board, which was created in 1954 to organize the production and the marketing of *rooibos*. Until the 1990s, this organization was the only actor in processing and marketing *rooibos*. In 1993 it was voluntarily dismantled and its assets were shared among the producers, who founded Rooibos Ltd. Even now, some 200 producers retain the majority of the company's shares and are its principal suppliers through a fixed annual price system.

Other companies in the Cedarberg area also produce and process *rooibos*, but they are not involved in marketing. Some do not even own the product, but merely provide services during processing.

In the export market, a wide range of products and trademarks, as well as various labels, are present. By contrast, the national market is strongly dominated by just two companies, Freshpak and Rooibos Ltd.

Community-based rooibos enterprises

The industrial sector relies mainly on large farms for its supplies: only 1-3% of Rooibos Ltd.'s suppliers are small-scale producers. However, some other small communities are involved in production, processing and even marketing of *rooibos*. They contract out the sterilization stage, because this would be too expensive for small-scale farmers to afford. Examples of these are the communities of Wupperthal and Suid Bokkeveld (Boxes 2 and 3).

Production volume, prices, sales and markets

Turnover in the *rooibos* industry was estimated at €22.5 million in 2004. This is generated through exports (approximately 6000 tons) and sale on the national market (4000 tons). In 2002, *rooibos* represented 75% of the total exports of teas from South Africa to the United States (Tralac, 2005). International demand for *rooibos* is growing. The main importing countries are the United States, Japan, China and various European countries, including Germany, Belgium, and the Netherlands. The last has a special role in fair trade and organic certified products.

A comparison between Rooibos Ltd. and the Wupperthal community reveals strong differences in prices paid to the producers. In 2005, Rooibos Ltd. paid €1.9 for 1 kg of dried *rooibos*, while the Wupperthal community paid €3 per kg. This difference is partly because the whole Wupperthal output is organic (against only 15% for Rooibos Ltd.), and is sold mainly through fair trade channels.

Enabling environment

Legal protection and regulations

The legal framework for *rooibos* production and marketing currently relies on the trademark regime. There is a multitude of private and collective trademarks, mostly owned by the traders. The qualification and certification strategies are also diverse: fair trade, organic farming, 'wild *rooibos* tea', and so on, but this diversity concerns primarily the export market.

The word *rooibos* is considered as a public good and cannot as such be registered as a trademark in the Southern African law. This was not the case until recently in other countries, especially in the United States, where the term '*rooibos*' was registered as a trademark in 1994 by the South African company Forever Young so it could enjoy exclusive rights to marketing *rooibos* under this name in the United States. In 2001, Forever Young assigned its trademark to its US agent, the company Burke International. Rooibos Ltd., assisted by the South African Department of Trade and Industry and the Western Cape Government, contested this registration for nearly 10 years and had to spend almost Rand 6 million (€750,000) in legal fees before they reached an agreement with Burke International. Following a court judgement in Missouri, Burke International in June 2005 officially recognized the cancellation of its registered trademark in the United States. This was possible because the name *rooibos* was recognized as a generic, descriptive term, commonly used to describe the *Aspalathus linearis* plant, so it cannot be used as a trademark (Silver, 2002).

Regarding geographical indications, in South Africa only wines and spirits currently enjoy a specific protection system and benefit from an official protection scheme, the Wine of Origin Scheme. The protection required by WTO

for other products is guaranteed through the national legislation on trademarks and through laws regulating competition and consumer protection. However, the promotion and development of a specific system of protection for food products other than wines and spirits is currently being debated by the agricultural departments of four provinces (Western Cape, Eastern Cape, Northern Cape and Kwazulu Natal), which see geographical indications as a potential tool for adding value to local produce and improving the livelihoods of poor communities.

Institutions in the supply chain

Various public institutions are involved in the *rooibos* tea sector. They include:
- The Western and Northern Cape **departments of agriculture**, which provide agricultural advisory services to farmers.
- The national **Department of Trade and Industry**, which is in charge of the legal framework.
- **District and local municipalities**, which coordinate local development activities (social, economic and environmental dimensions).

Several international and national projects are also involved, mainly in the field of biodiversity conservation. Among them is the Greater Cedarberg Biodiversity Corridor, which especially concerns the *rooibos* production area. Research institutes, universities and laboratories are also engaged in the sector (EMG, 2006).

More strikingly, several non-government institutions support poor, marginalized producers. The two most prominent are the following:
- The **Environmental Monitoring Group (EMG)**, an NGO created in 1992 to set up appropriate policies in the fields of environment, conservation and resource management. EMG has two integrated projects related to *rooibos*: one to conserve *Aspalathus linearis* subspecies and record indigenous knowledge relating to *rooibos*, and another to use *rooibos* as an indicator species of climate change. EMG supports the Heiveld Cooperative (Box 2) and to a smaller extent the Wupperthal community (Box 3) through capacity building, legal advice, development of management systems, accessing financial services, improving relationships with processors and trading partners, and developing standards for organic and fair trade production (EMG, 2006).
- **Agribusiness in Sustainable Natural African Plant Products** (ASNAPP), an NGO created in 1999 with USAID funding to enable emerging African entrepreneurs and small-scale suppliers to compete in local, regional and international markets by developing high-value natural plant products, such as *rooibos*. ASNAPP supports more than 280 producers of *rooibos* and honey bush (another indigenous beverage unique to the *fynbos*) from three rural communities (Wupperthal, Haarlem and Ericaville) through trade linkages, market access facilitation, capacity building and other interventions. The three communities are all applying organic cultivation practices (ASNAPP, undated a).

Critical issues and challenges

The *rooibos* sector involves a variety of actors and is in expansion. A number of resource-limited small-scale farmers have succeeded in penetrating markets through alternative marketing channels. But small-scale farmers are still at a disadvantage because they lack capital and land, are isolated from the rest of the sector and produce tiny amounts compared to the big firms. We will examine the opportunity to develop a geographical indication for *rooibos* in this context.

What justifies a geographical indication for rooibos?

Certain underprivileged communities already have access to the market and can differentiate their product. With NGO support, they are able to add value to their output through well-targeted marketing channels based on fair trade labelling. However, their market access is very dependent on the whims of fair trade. They and other communities might be able to strengthen their position in the market through a geographical indication, since they are located in the best area for high-quality *rooibos*.

The rising international demand for *rooibos* is a second consideration. If demand continues to increase significantly as expected, other countries might be tempted to start producing *rooibos*. The *rooibos* plant is adaptable: it could thrive outside its natural habitat (e.g. in Australia). This poses a real risk to South African producers. The establishment of a geographical indication could help these producers to protect their markets by stressing the link between the *rooibos* product and its area of origin.

The development of production methods is a third factor to consider. Intensifying cultivation practices and the rising use of pesticides raise environmental concerns. In addition, it is uncertain whether the current level of wild gathering can be sustained. NGOs are working with the communities on these issues, but it would still be necessary to tackle questions of sustainable cultivation at the level of the whole supply chain, and collectively to define production rules. The development of a geographical indication could be a relevant framework to negotiate a code of practices.

Which prerequisites, constraints and stakes?

To benefit from an international geographical indication as provided for by the WTO Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS), South Africa must first prove that *rooibos* is protected at the national level. But South Africa regards the word *rooibos* as a national good, so it cannot be registered as a trademark. The opportunity to develop a *sui generis* (home-grown, specific) system in South Africa for recognizing geographical indications is currently being debated, particularly by the agriculture departments of the four coastal provinces mentioned earlier.

The protection of *rooibos* through a geographical indication raises many questions. *Rooibos* is not the name of a geographical area, but the Afrikaans term for 'red tea' the colour of the product. However, this product comes from an endemic plant that only grows in the Cedarberg area; its production and processing are still highly localized and rely on common practices, and it is known as a typical, uniquely South African product.

Another important question is that of the organizational set-up to establish and use the geographical indication. Though a geographical indication strategy may appear attractive for players in the *rooibos* sector, its future will depend in the first place on their ability to work together (that includes both large processors and small-scale farmers). They would have to define the product specification and its link to origin, which includes agreeing on the production area, the specific name to use, etc. Up to now, processors have cooperated mainly on research; collaboration is still dominated by Rooibos Ltd. Until the end of the 1990s, efforts to organize *rooibos* producers in a national forum did not bear fruit because of the strong competition between them in marketing their products (Downes and Laird, 1999). However, the position of the processors, in particular that of Rooibos Ltd., has changed recently as a result of the *rooibos* trademark dispute in the United States. The processors all became aware of the need to protect their product and markets. They are encouraged by public institutions to cooperate and are more willing to explore the potential for developing a geographical indication around *rooibos*.

Success will also depend on the evolution of the legal framework, with geographical indications either staying protected as collective trademarks or certification marks (so dependent on private strategies), or benefiting from a *sui generis* home-grown system (which would probably foster common interests).

Who would benefit from a geographical indication?

As our case study reveals, most *rooibos* producers are not smallholders, but are large scale producers. The processing sector is also highly concentrated. These large players have a powerful market position and the financial means to make the investments needed to capture benefits from commercial *rooibos* markets.

But which of these two categories could, and should, benefit from a geographical indication? Downes and Laird (1999) pose the following questions:

> *'Should mechanisms be established to channel benefits to the settler community who developed and invested in a commercial product, and who control the modes of production today? Or should the benefits flow to indigenous communities who first developed the use of* Aspalathus linearis *leaves and twigs for sale, as well as the processing techniques (and aspects of propagation and cultivation know how) still employed today?'.*

The debate about a geographical indication for *rooibos* is just starting, so it is difficult to draw up scenarios. The question of who should benefit from a

geographical indication is related to who will 'own' the project: who will fix the objectives and specifications. Will the primary objective be to protect the name *rooibos* against any abuse on the international market, or to preserve the *fynbos*, the natural habitat of *rooibos*? Which *rooibos* species will be subject of a geographical indication: wild plants, or the cultivated crop? Which cultivation practices and production conditions would count?

Disadvantaged communities, such as the Heiveld Cooperative, which only use wild *rooibos*, might receive more benefit if a geographical indication were established for the wild plant. However, these communities would probably not be able to develop and support such a project without institutional and financial support and expertise.

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6 Costa Rican Arabica coffee: Legitimacy for specialty

Astrid Gerz and Jacques Avelino[10]

The worldwide drop in coffee prices and the rising demand for products linked to original characteristics have led actors in the coffee sector to develop new ways to differentiate their products and access new markets. These strategies require international legitimacy – which geographical indication may be able to provide.

This case study looks at Costa Rican coffee – one of the country's main exports and sources of growth. It focuses on how coffee is currently marketed, and how it might be labelled in the future. It discusses the possibility of establishing a geographical indication for Costa Rican coffee as a way to sustain its quality, reputation and premium price, in a context of liberalization and free trade agreements. It focuses particularly on two coffee-producing areas, Orosí and Santa Maria de Dota, where an action-research project is currently under way (Avelino et al., 2006).

The world coffee crisis

Coffee is the second most traded commodity in the world. It is an important income earner for rural areas, providing jobs and income for more than 125 million people worldwide (Osorio, 2002). Since the 1990s, coffee has seen a crisis of oversupply that led to price drops unprecedented in recent history. According to the International Coffee Organisation (ICO), between 1997 and 2004, global coffee production has been rising at an average annual rate of 3.6%, but demand has only increased at 1.5%. As a result, wholesale coffee prices have fallen. In the 1980s, a pound of standard-grade green coffee sold for around US$1.20; by 2002 its price had dropped to about $0.50 – not enough to cover production costs in most parts of the world (Osorio, 2002). This crisis has above all affected small and medium-scale coffee farmers. In Costa Rica these are 98% of farmers, who produce 77% of the country's coffee (KFPE, 2006).

Gourmet coffees have resisted the crisis better. These coffees are known for characteristics such as taste, production processes, marketing conditions or origin. These special characteristics correspond to the demands of specific coffee roasters and consumers, so can be sold for higher prices. That in turn means the producers can receive a higher price for their crop (Levin, 1996; Lingle, 1996).

[10] Research partnership CIRAD with *Instituto del Café ICAFE*, Costa Rica, and IICA-PROMECAFE.

Figure 5 **Coffee production areas in Costa Rica**

Coffee in Costa Rica

Costa Rica, an important coffee producer in Central America, has over time built a strong reputation in the world coffee market. Coffee runs through Costa Rica's history, culture and economy. Production began at the end of the 18th century in the Meseta Central (Central Valley), an area with almost perfect soil and climate conditions for coffee growing. The coffee varieties introduced to Costa Rica were first cultivated in Saudi Arabia, so are known as 'Arabica'.

Coffee production quickly exceeded that of cacao, tobacco and sugar, and around 1829 the commodity became the major source of foreign exchange. A non-perishable commodity in an era of slow, expensive transport, coffee proved an ideal export. Exports to neighbouring Panama began in the late 1820s, and around 1832 coffee was also being exported to Chile. A group of producers decided to export directly to England. The first load was sent in 1843, and the British started to invest seriously in the industry, becoming the principal purchaser of Costa Rican coffee until the Second World War.

The country's tropical rainy climate and volcanic soils, which are slightly acidic and rich in organic matter, are ideal for coffee growing. More than 70% of the coffee is produced in the mountains, at altitudes of 1000-1700 m and with temperatures averaging 17-23° C. These are optimal conditions for the growth of Arabica, and are important contributors to the quality of Costa Rican coffee (ICAFE, undated).

The Instituto del Café de Costa Rica (ICAFE) divides the country into seven main coffee-producing regions: Tarrazú, Brunca, Orosí, Tres Ríos, Turrialba, Valle Central, and Valle Occidental (Figure 5). The lowlands (below 1000

metres) produce lighter coffees. Highland (over 1200 metres) coffee is stronger, more acidic and more aromatic.

The coffee trade has received strong support from successive governments, and coffee was long Costa Rica's economic mainstay and main export, a position it maintained until recently. More than 100,000 ha of coffee are cultivated, yielding 150,000 tonnes each year (ICAFE, undated). Ninety percent of this is destined for export. Coffee accounts for 11% of the country's export earnings. The sector employs 5% of the country's workers, or 20% of the rural workforce (Global Exchange, 2005).

The main export markets are the United States, UK, Germany and other European countries. On the national market, which is almost all supplied by the Costa Rican roasters, coffee is consumed in two ways: pure, or mixed with 10% the amount of sugar. The latter is popular: Costa Ricans consume it 70% of the time. But thanks to a wider supply of fine, speciality coffees, consumer habits are changing, and demand for pure coffee is rising (ICAFE, undated).

Major actors in the coffee sector

The Costa Rican coffee sector covers over 78,000 growers, 94 processing firms, 73 roasting companies, and 30 export firms.

The **growers** are large, medium and small-scale farms, but small-scale farmers are dominant: 92% of growers have less than 5 ha of coffee. They market their produce either through cooperatives or individually.

Coffee **processing firms** buy the beans at competitive prices from special collection centres in the coffee-growing regions. They support growers through technical advisory services and credits. The processors must register with the Costa Rican Coffee Institute (ICAFE). Their profits are fixed by law at 9% of the profit from sales after deducting processing costs.

The **roasting sector**, industrialized since 1920, is a consolidated industry. It plays a key role in the production chain, as it is strongly linked to other actors in chain, both upstream (processors) and downstream (traders, exporters).

The 30 **export firms**, of which 70% are small, must also register with the Costa Rican Coffee Institute. Their profit is fixed by law at 2.5% of the transaction value (if the exporter buys the coffee and assumes the risk of market fluctuations), or 1.5% (if the exporter simply acts as middleman) (ICAFE, undated).

Producer organizations

Each set of players in the supply chain has its own national-level organization (ICAFE, undated).

National Union of Small and Medium-scale Farmers of Costa Rica. The *Unión Nacional de Pequeños y Medianos Agricultores Costarricenses* (UPANacional) was created in 1981 and has 19,000 members. With 93 local divisions throughout the country, it facilitates networking between small and medium-sized farmers, provides training for members, and defends their interests.

Costa Rican Coffee Millers Association. The *Asociación de Beneficiadores de Café de Costa Rica* was formed only recently (in 2000) to promote relations between the private sector and cooperative processing firms and to provide a forum for discussing issues related to the coffee-processing industry. It has 18 members. Its aims include networking with other specialized groups, improving the competitiveness of members' products, and promoting the development of the sector.

National Chamber of Coffee Processors and Roasters Association. The *Asociación Cámara Nacional de Procesadores y Tostadores de Café* promotes the development of roasting in Costa Rica. Its main role is in advocacy and the protection of coffee prices and producers by ensuring fair treatment by tax authorities. It supports the legal protection and regulation of the coffee industry, and advises the Costa Rican Coffee Institute on local market supplies. It holds seats on the board of directors of ICO, the main intergovernmental organization for coffee. It played a key role in the creation of both the National Coffee Stabilization Fund and the Association of Coffee Producing Countries.

Specialty Coffee Association of Costa Rica. The *Asociación de Cafés Finos de Costa Rica* is a group of growers, processors, roasters and exporters. Formed in 1993, the association's aims to promote Costa Rican coffee on the international gourmet market and to achieve international recognition for the country's high-quality coffees. It organizes promotional campaigns and training for producers and consumers. It has also developed a certification programme for speciality coffees and cooperates with the Speciality Coffee Association of America on market, production and certification issues.

Other institutions in the supply chain

Costa Rican Coffee Institute. The *Instituto del Café de Costa Rica* (ICAFE) was created by law in 1985 to 'protect the interests of the country's coffee-producing sector and to insure that it receives fair treatment'. Now a private organization, it has six regional offices throughout the country that provide support such as quality controls and technology transfer to the different actors in the sector (ICAFE, undated). ICAFE has taken the lead in comparing and integrating quality data from various regions. It has classified the country into seven coffee-growing areas, and set up a nationwide coffee-related geographical information system. It is now conducting the detailed studies in Santa María de Dota and Orosí on the quality and specificity of two high-potential coffee production areas (Avelino et al., 2006)

Coffee Research Center. The *Centro de Investigaciones en Café* (CICAFE) was founded by ICAFE to develop and spread technology on various aspects of coffee production. Its research includes surveys, breeding, field experiments and laboratory tests.

Legal protection and regulations

Various national regulations govern the coffee sector:
- **Law No. 19302-MAG** (4 December 1989) forbids production of any other variety than Arabica coffee.
- **Law No. 2762** governs relations between coffee producers, processors and exporters.
- **Law No. 7978** (promulgated in 2000) covers marks and other distinctive quality signs.
- Certification standards also exist for Costa Rican specialty coffees.

Marketing coffee

Costa Rican coffee is promoted worldwide in various ways: through fairs, conferences and sports events in the United States and Europe, for instance. Within the country, promotions include campaigns on radio, television and in the press, as well as various marketing activities (ICAFE, undated).

The coffee sector has implemented a special programme since October 2002 to improve the quality, image and market position of Costa Rican coffee. The strategy is to reduce the coffee supply by withholding 5% of producers' lower-quality coffee from the export market, thereby boosting consumption of higher-quality coffee in traditional and emerging markets. Minimum grades and maximum moisture content are fixed for exports, eliminating the lower grades from the market. This programme is conceived as a medium-term investment to raise prices for high-quality coffee in new market niches (ICAFE, undated; ICO, undated).

Fair trade coffee is emerging slowly in Costa Rica. COOCAFE, the only certified fair-trade coffee cooperative in the country, represents 3,500 small coffee producers, grouped into nine independent cooperatives throughout the country. In 1993-2000, an average of 53% of their production was sold on the fair trade market in the Netherlands, Germany and the United States; the remaining 47% of their sales went to the conventional market. During the last 10 years, COOCAFE's sales through fair trade channels brought in premiums of over €5.9 million out of a total income of €33.6 million. This profit allowed COOCAFE to create a €2.4 million fund, which is available for loans to cooperatives and growers at low interest rates (Global Exchange, 2005; Grant et al., undated).

Estate coffees are also being successfully developed in Costa Rica. These coffees are processed on the farm, promoting quality control and producers' participation in the reputation and added value of the end product. A similar approach at a microregional level might bring collective benefits to coffee growers.

Research on coffee quality

ICAFE, CIRAD and PROMECAFE (a regional programme on coffee of the Inter-American Institute for Cooperation on Agriculture) began in 2002 to study the feasibility of establishing a geographical indication for coffee. They are conducting this research in two well-known production areas, Santa María de Dota (in the Tarrazú region) and Orosí (see Figure 5). Both areas cover about 1500 ha (Table 6). Surveys cover the organizational and technical aspects of coffee production; the quality perceptions of producers, exporters and consumers; and market, legal and institutional aspects (Avelino et al., 2006).

Most producers in Santa María de Dota are organized in a cooperative, unlike those in Orosí.

Various actors in the supply chain (coffee growers, exporters and Costa Rican consumers) perceive coffee quality differently (Figure 6).

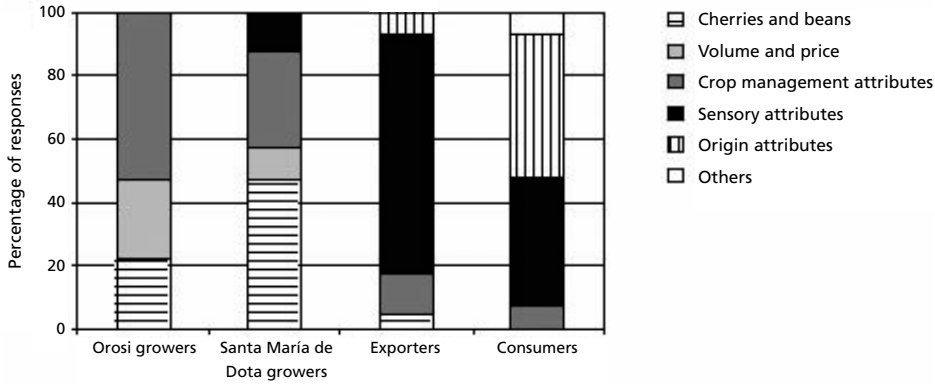
Table 6 Characteristics of Orosí and Santa María de Dota

Characteristics	Santa María de Dota	Orosí
Start of coffee cultivation	End of 19th century	Since 1860; one of the oldest coffee-producing areas of the country
Climate	Pacific influence (less rainy, well-defined wet and dry seasons)	Atlantic influence (very rainy, no well-defined dry season)
Altitude of coffee plantations	1500-1800 m	1000-1300 m
Coffee category	'High Grown Atlantic'	'Strictly Hard Bean'
Producers	Small farms, 80% Medium farms, 8% Large farms (around 50 ha), 12%	Dominated by large companies (4 firms process more than 90% of output) and small- to medium-scale producers
Organizational arrangements	Cooperative includes most producers in the area	No collective organization

Source: Avelino et al., 2006

- Producers associate quality with volume and prices, appearance of the cherries and beans, and crop management. They mention sensory attributes (such as flavour, aroma, acidity and balance) only a little, origin not at all.
- For exporters, sensory attributes are the strongest determinants of quality (75.4% of the total responses).
- Costa Rican consumers also associate quality strongly with sensory characteristics (40.3%), but many (45%) also associate it with the origin of the coffee (climate, altitude, landscape and environment).

Figure 6 Perception of coffee quality in Orosi and Santa María de Dota



Source: Larrain, 2004.

A national geographical indication...

National regulations, agreed in 1963, require careful screening and selection of beans, and set remunerative farm-gate prices. Since December 1989, all coffee grown in Costa Rica must by law be Arabica. According to ICAFE, Costa Rica is the only country which has banned the production of other varieties (ICAFE, undated).

Enforcing these rules means that Costa Rica enjoys a strong worldwide reputation for high-quality coffee. Maintaining this reputation is obviously a major concern of growers and the government: '*Costa Rican coffee has always enjoyed a reputation for excellent quality, particularly in Europe, and keeping that reputation is one way for a small nation to hold its place in a glutted world market*' (Sick, 1999). But globalization and free trade are challenging the competitive advantages which were built through state-regulated markets. The Central American Free Trade Agreement with the United States contradicts the government's ban on the imports and sale of foreign coffee into Costa Rica. Foreign coffees and multinational firms are entering the national market, forcing Costa Rica's coffee sector to seek new strategies to sustain the country's good practices, its reputation and premium prices.

One of the mechanisms currently being considered is the promotion of distinctive quality signs, such as a geographical indication (Granados and Alvarez, 2002). Several possibilities are under discussion. One is a nationwide geographical indication for quality Costa Rican coffee. This may be difficult, given the variety of agro-ecological conditions, processing techniques, know-how, and product characteristics embodied in Costa Rica's coffee. This approach is being considered by a part of the private sector. It would have to be based on fairly broad qualitative rules, rather than tying it to a specific locality or production system.

Other countries, such as Colombia, have indeed moved in this direction: a request to register a geographical indication for 'Café de Colombia' was submitted to the European Commission in June 2005.[11] This shows that countries which have through years of persistent effort achieved a distinctive national reputation on the world market are seeking new ways to maintain their recognition – and their premium – even though the context is now liberalized and globalized, and the state no longer controls the market.

...or a local indication?

Another possible approach is to pursue local geographical indications, linked to specific coffee-producing territories with established market reputation. Cooperatives and small-to-medium enterprises might be drivers in this process. Such a geographical indication may be a way for producers in areas that produce outstanding quality beans, like Santa Maria de Dota and Orosi, to gain formal recognition and to enhance their product quality further.

A study in 2003 showed that Costa Rican coffee producers, traders and consumers have similar view about which region produces the highest quality coffee: they all ranked the Tarrazú-Los Santos area top (Larrain, 2004). Multi-disciplinary studies are under way in this area to understand the basis of its reputation and to characterize the distinctive features of the area (Avelino et al., 2005; Avelino et al., 2006). These studies aim to identify the agro-ecological factors and cultivation and processing practices that underlie this reputation, define a set of requirements and control rules, strengthen dialogue so that these rules may be agreed upon locally and be respected outside the region, and develop local cup-testing capacities. This 'denomination of origin' approach is more demanding than a broad geographical indication. But it is expected to generate a more profound and longer-lasting differentiation process (Avelino et al., 2006).

These two strategies – national and local – are not necessarily exclusive. But they imply different scales and actors.

Critical issues and challenges

As this case study shows, qualification approaches already exist for Costa Rican coffee. A national premium price exists on the world Arabica market, thanks to a long-standing voluntary policy on quality. A number of private or collective initiatives addressing speciality, gourmet and fair trade coffees are under way. What about the potential for promoting quality through a geographical indication?

What justifies a geographical indication for coffee?

The trend in European and North American markets is for good-quality, blended coffees. Specialty or gourmet coffee is the fastest growing segment (ICO, 2002).

[11] The result of this application is not yet available.

This is a new opportunity for Costa Rica to enhance its position in the world market and to gain international recognition for the high quality of its coffees. Various initiatives to produce gourmet coffees and to access this market are emerging (Avelino et al., 2006). The existence of the premium gourmet and specialty markets explains the interest in Costa Rica and Central America to develop geographical indications or a 'denomination of origin' for its products (Avelino et al., 2002; Avelino et al., 2006).

The promulgation in 2000 of Law No. 7978 about marks and other distinctive quality signs created a new perspective for the coffee sector. The ICAFE study in Santa María de Dota and Orosí showed that agro-ecological factors (soil type, altitude, slope) have an important impact on the coffee flavour; they could constitute a basis for the geographical delimitation of the production area. The project also developed along with the producers several production norms – a first step in the definition of specifications required by a geographical indication (Avelino et al., 2005).

A geographical indication would guarantee at the same time the origin of the coffee (which is lacking today), as well as its quality and production process. This triple guarantee might even interest roasters of blended coffee: it would assure them a raw material with some stable characteristics over the years, limiting the need to reformulate their blends. In addition, a geographical indication may reduce the cost of quality controls during marketing. The markets would be more stable and more segmented, yield higher prices, and be more easily accessible by small-scale producers – who so would stand to earn higher incomes.

What steps are still needed?

Significant progress has been made in understanding the links between the origin, the quality characteristics and the reputation in the case of coffee. Coffee clearly has a great potential for expressing the capacity of a given geographic environment to supply an original product. Nevertheless, a number of steps still need to be taken before a geographical indication for coffee can be established in Costa Rica:

- A decision on the best size of the areas must be made: national or local – and if local, which areas?
- A set of requirements and specifications must be determined.
- A formal group of stakeholders (and perhaps facilitating institutions) must be constituted who are willing to coordinate negotiations within the supply chain on product characteristics and production rules.
- A public institution must be put in charge of evaluating and recording geographical indication requests, controlling product specifications, and managing the certification process. ICAFE has the capacity to assume this role.
- Further market testing in collaboration with exporters is needed. Given the limited roasting facilities in producing regions, the description of coffee as a 'designation of origin' should concern 'green coffee' (as generally sold to exporters). The description of the product as a geographical indication at

large – meaning that the production or processing (or both) must take place in the defined geographical area – might concern either green coffee or roasted coffee.
- A supply chain institution must be identified to conduct negotiations on the sharing of costs and benefits.

The fact that distinct coffee production areas are already identified may facilitate these steps. These areas (like Costa Rica as a whole) have a majority of smallholder producers. A geographical indication could support their marketing strategies. Coffee could well pilot the introduction of geographical indications for other products in Costa Rica.

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7 Comté cheese in France: Impact of a geographical indication on rural development

Astrid Gerz and Franck Dupont[12]

The example of Comté cheese in France shows how a Protected Designation of Origin (PDO, known in France as *Appellation d'Origine Contrôlée*, AOC) can generate public recognition of a product's quality and so bring economic, social and environmental benefits to a rural area. It also shows that strong coordination and communication among networks of producers throughout the entire food chain is a key for success.

Examining the case of Comté cheese also allows us to draw lessons on adding value to and protecting traditional local products and know-how that may be relevant also in developing countries. How far might small and medium producers in the South learn from European experience with PDOs to protect their resources and enhance their competitiveness on local and international markets? This will depend on the specific situation in each country and product type.

Comté is a cheese made from cow's milk. It is produced in the Jura mountains, in the Franche-Comté region of eastern France, near the Swiss border. Its production is the highest of all French PDO cheeses. It was awarded a PDO in 1958, the first French cheese to be awarded such a label guaranteeing its originality.

A history of Comté cheese

Franche-Comté includes four *départements*: Jura, Doubs, Haute Saône and the Belfort Territory. The delimited production area of Comté covers the department of Jura, part of Doubs and a small part of Ain, a *département* in the neighbouring Rhônes-Alpes region (Figure 7). The Jura Massif consists of a series of plateaus with altitudes ranging from 500 to 1500 m. The plateaus are separated by green valleys and many rivers. The seasons are marked, and the winters extremely severe (MAAPAR, 2004).

Comté cheese has been produced in Franche-Comté since the 12th century. The harsh mountain winters forced farmers to convert their milk into huge, round cheeses, known as *vachelin*, that could be kept for a long time. Only such large

[12] Research carried out by the French Ministry of Agriculture in partnership with the inter-professional organization of Comté producers (MAAPAR, 2004).

Figure 7 Comté cheese production area in France

cheeses could be preserved for long enough to satisfy the needs of an entire family for the whole winter.

Its long shelf-life and its improvement during the maturing process made this type of cheese well-suited for sale outside Franche-Comté.

Making the big cheeses required a lot of milk (500 litres each). So groups of farmers would gather their daily milk output at the local cheese dairy, or *fructerie* (now known as the *fruitière*). This 800-year century-old form of organization is one of the oldest and most traditional features of life in the Jura (MAAPAR, 2004).

Making Comté cheese

Belonging to the same cheese family as Gruyère, Comté cheese is made from unpasteurized, partially skimmed cow's milk. It has a soft, creamy flesh and a golden-yellow to brown rind. A Comté cheese is cylindrical, 75 cm in diameter and 8-13 cm high; it weighs 30-48 kg. Because of variations in the duration of maturing, Comté cheeses from different seasons are available on the market. 'Summer Comté' (with a deep yellow flesh) has more diversified and fruity flavours. 'Winter Comté' (clear, ivory flesh) is characterized by hazelnut, spicy and roasted flavours (INAO, undated; Comté, undated).

As with other PDO products, the quality and reputation of Comté cheese are based mainly on the influence of particular agro-ecological conditions found in a specific area, and on local know-how (traditional methods of cattle rearing, cheese manufacture and maturing).

In order to bear the name 'Comté', a cheese from the designated area must conform to a strict set of PDO rules. These rules are set by the local professional community who has the necessary know-how, but they are validated and approved on the national (and since 1992, European Union) level. These rules are decided upon and adapted when necessary by the inter-professional association of Comté producers, and are printed in a book. They apply to each stage of the production process – from pasture to finished product.

Comté cheese undergoes controls at each stage in processing. Once the cheese is matured, a jury of experts checks its taste and appearance. Each cheese is awarded a score out of 20 points, according to its overall appearance (1 point), quality of rind (1.5), internal appearance (3.5), texture (5), and taste (9). Cheeses scoring 15 points or more are given green labels (a green stripe with a picture of a bell). Those scoring 12-15 points get a brown stripe. Any cheese that scores less than 3 marks for taste, or less than 12 overall, is downgraded and is instead used to make fondue preparations.

A key feature of Comté cheese is its amazing aromatic diversity: more than 200 aromatic components, according to a 1993 study (Comté, undated). The taste, flavour and texture of each cheese is unique, and depends on four main factors: the conditions in the specific location area where it is produced; the season; the special touch and know-how of the cheese-maker, and the maturing process (cellar conditions, length of maturing period and know-how).

The Comté chain

The Comté supply chain includes 3200 milk small-scale milk producers, 190 *fruitières* (organized in cooperatives), and 15 maturing cellars.

This professional network is a partnership of producers, cooperatives and private contractors, who are linked by history, culture and economic interdependence. With a production of nearly 44,000 tons in 2004, Comté contributes significantly to the economic life of the Jura.

The cheese-makers are closely linked to local cheese refiners, to whom they deliver each month their pre-matured cheese. These refiners sell cheese to the consumer market (Jeanneaux et al., 1999).

Coordination, management and funding

Several organizations enhance communication and maintain commercial regulations throughout the Comté supply chain.

Inter-professional Gruyère and Comté Committee (CIGC). Created in 1963, the CIGC is both the representative of the actors within the supply chain, and their intermediary with the economic, administrative, political and university partners. It promotes Comté cheese commercially, defends the interests of the

professional network, and organizes cultural and research activities. Its activities include market management, protection and regulations of the PDO, communication and advertising, and managing the internal cohesion of the network (Comté, undated).

The CIGC covers 95% of its operating costs from the sale of the green or brown labels[13], i.e., by implementing controls. It receives public grants for some research activities; they only represent 5% of its budget (Comté, undated).

Comté Technical Committee (CTC). Funded and financed by users, the CIGC and the French government, the CTC is the network's technical and scientific arm. It is responsible for technical advice and monitoring as well as quality control (Comté, undated).

Volume, sales, consumers and markets

In 2004, Comté production amounted to 43,555 tons (INAO, undated), a little less than in 2003 (44,717). Despite this small decline, Comté production increased significantly since 1993, rising by a steady 3% per year (MAAPAR, 2004). A comparative study of cheeses concluded that the increase in Comté production is partly due to the PDO procedure, which contributed to '(1) an improvement of the cheese intrinsic quality, (2) a strong coordination for the promotion of the product with an efficient image of authenticity and (3) a strong *terroir*-effect'[14] (Barjolle et al., 2000).

About 3-4% of Comté output is intended for export, mainly to the USA, Germany and Belgium. In 2004, firms declared exports of 1,153 tons to Germany (6% more than in 2003) and to 572 tons to Belgium (22% more than in 2003). These figures do not take into account direct exports by wholesalers (*Les Nouvelles du Comté*, 2004). Sales in France have risen slowly but steadily since the beginning of the 1990s, but their nature has changed: more is not prepacked rather than sold as freshly cut blocks. Between 1990 and 1999, the sale of blocks has fallen by 6.8%, while that of pre-packaged cheese has risen by 13% (Comté, undated).

The location of sales and consumption within France has also changed. Between 1990 and 1999, traditional distribution channels (local markets, producers, local shops, etc.) sold significantly less, but the amount of Comté sold by hypermarkets and supermarkets rose from 66% to almost 85% of the total. The region where Comté is produced (east-central France) accounted for 55.2% of the French market for the cheese in 1990. It is still the most important sales

[13] The CIGC allocates these small, oval labels, made of casein protein, to each dairy cooperative. They are embedded in the cheese rind during manufacture, allowing each cheese to be identified and production to be controlled. The price paid for the labels by the dairies is their contribution to the CIGC budget (Comté, undated).

[14] A *terroir* is a historically developed interaction between (a) the biophysical properties that result from a specific geographical entity, and (b) the local community with its culture and skills that exploits this entity.

area, but its share has fallen to 39.4%. Consumption has grown in all other regions of France, especially in the southeast, whose share doubled from 6.7% in 1990 to 12.6% in 1999 (SECODIP panel, in Comté, undated).

People aged 35-49 are the most important consumers (31%), followed by 50-64-year-olds (27%). Buyers under 35 years form the weakest group (15%).

Households with two members account for 37% of sales, followed by those with four members (27%). Households with one or three members consume less (19% and 17% respectively). Low-to-middle income earners buy 37% of the cheese, followed by the middle-to-high income group (33%). Affluent consumers buy a further 20% (Comté, undated).

Many consumers undoubtedly buy Comté cheese out of habit. But quality, traceability and authenticity also play an important role. The fact that Comté is still mainly consumed in the area where it is produced is probably because it is well known and seen as authentic there. A SOFRES public opinion poll in May 2005 found 20% of French consumers recognized Comté spontaneously (compared with 38% for Roquefort cheese), and 42% had bought Comté during the last 6 months (49% had bought Roquefort) (CIGC, 2005).

However, a '*Eurobaromètre* 50.1' study in 1998 on consumers' knowledge and perceptions of PDO products found that many consumers do not notice the PDO label or do not know what it means (Barjolle et al., 2000). So it is unlikely that they are moved to buy a cheese only because of its PDO label. Other motivations, such as taste, origin, quality and perceived food safety (which is related to traceability) are likely to be stronger.

Regional identity

The mountainous Comté region is seen as an authentic, natural area – an image reinforced by CIGC's advertising strategy. A common interest in preserving this image, and Comté as a local, traditional product, has motivated the various actors in the Comté value chain to cooperate in promoting its image (Barjolle et al., 2000).

The tie with the regional identity is maintained through specific, local production and processing practices, and is conveyed through communication and advertising campaigns. CIGC organizes a wide range of activities. These include regular surveys (e.g., studies on reputation, consumer surveys); national media campaigns; visits to farmers, dairies and maturing cellars; tasting events at fairs, in shops and in schools; recipe competitions; and beginning in October 2004, the *Comtéales*, a local trade fair. It publishes a wide range of promotional media (the *Comté Newsletter*, postcards, calendars, a website, etc.). The advertising and communication budget for Comté amounted to €3.7 million in 2000; this was 63% of CIGC's total budget, or about €82.5 per ton of cheese produced (*Voix du Jura*, 2002).

The *Route de Comté* is a tourist itinerary that passes through the most beautiful scenery and cheese-related landmarks. It is a major project to brand regional identity by promoting the region, its products and its traditional way of life. The CIGC cooperates on this with the Boards of Tourism for Jura and Franche-Comté.

A quotation from the CIGC chairman illustrates well the interrelationships between Comté cheese and the area: '*We decided to play a synergy with the area, because Comté is the bearer of its traditional values, of solidarity, of handicraft and the respect of nature. The area is a tool to attract visitors to the cheese dairies, while the Comté attributes a strong image to the local community of Franche-Comté*' (Jean-Jacques Bret, in Gerbau, 2001).

This relationship between product and what the French call *patrimoine* (heritage) is underlined by *La Maison du Comté*, a museum dedicated entirely to Comté cheese in Poligny, the capital of the Comté area and headquarters of CIGC (Dupont, 2004).

Enabling environment

Legal protection and regulations

Comté was awarded the official PDO label in 1958. As for other PDO products in France, Comté is protected against imitations and misappropriation on several levels.

- In France, Comté is protected as a part of national heritage. French law punishes counterfeits and misuse of the name. Violations are identified by the anti-fraud unit in the Ministry of Finance, and the Public Prosecutor will initiate legal proceedings. If the state fails to do so, CIGC will also take legal action.
- The European Union formally recognized Comté in 1992 as a PDO (Community Regulation 2081/92). The name is thus protected from misuse throughout Europe.
- Internationally, the French and European authorities negotiating the 'TRIPS' (Trade-Related Aspects of Intellectual Property Rights) accord in the World Trade Organization favour extending the same level of protection already given to wines and spirits to other agri-food products, including cheeses.
- To complement the public system of denomination protection, the CIGC has registered the 'Comté bell' logo as a private trademark in most countries. This enables it to act quickly if anyone attempts to usurp the product or its name (Comté, undated).

As with many other local products, the future of Comté depends partly on national and international regulations. The range of legislation is vast. It covers the PDO itself, hygiene, raw milk, environment, labelling, French economic regulations, international trade, etc.

PDO regulations. The various stages in the PDO regulations are prepared and negotiated within the inter-professional framework of the CIGC. The results are then submitted to the Institut National des Appellations d'Origine (INAO), the national body responsible for PDOs.

PDO control/audit. The Comté PDO is controlled on several levels and by various bodies:
- Before the PDO was first granted, INAO checked on the cheese's taste and other sensory properties, as well as the processing conditions claimed by the interprofessional body. INAO has since supervised annual random controls to confirm that the cheese complies with the specifications.
- At each stage of processing, from farm to finished product, the anti-fraud unit of the Ministry of Finance is in charge of conducting regular inspections to check that producers are complying with the PDO regulations.
- An agricultural law of July 1999 grants CIGC prerogatives to control the quality of the cheese. CIGC organizes such controls when the cheese is being loaded onto lorries for transport.
- The CTC (the technical and scientific arm of the Comté network) and processing firms also conduct regular microbiological, physico-chemical and taste tests (Comté, undated; INAO, undated).

Research. Various studies over the last 20 years have improved knowledge about Comté processing and quality management. This research has focused on two main themes:
- The natural microflora in the milk and their impact on the taste of Comté.
- Field research on the aromatic profile of the *cru* (vintage) of each cheese dairy by profiling the soil, pasture flora, etc.

These studies are financed by CIGC, and many also receive public co-finance. They are conducted by CTC or research organizations such as the Institut Technique des Fromages Français (Technical Institute for French Cheeses), the University of Besançon, the Institut de l'Elevage (Animal Husbandry Institute), and chambers of agriculture. CIGC participates in several European programmes and also cooperates with foreign laboratories (Comté, undated).

Promotion. We have described above how Comté cheese is promoted via the mass media and through interpersonal channels. The promotion of Comté also benefits from a strong partnership with several public and private bodies (the media, the tourist boards of Jura and Franche-Comté, the national government, communities, and professional organizations). The European Union also finances multinational promotion campaigns to Comté, along with other PDO cheeses.

Impacts on rural development

Geographical indications have a two-fold impact on rural development. Their recognition of the special nature of the product gives it a privileged position in

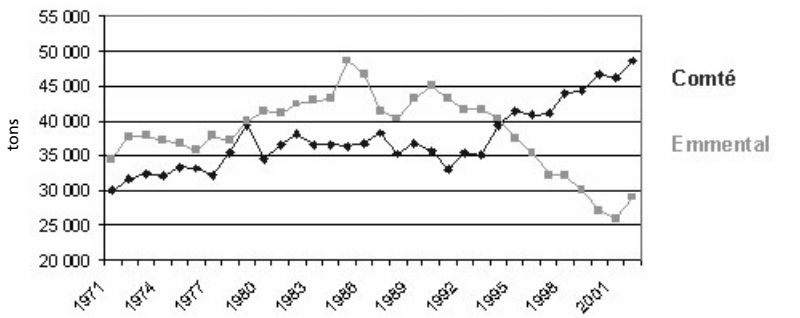
the market. In addition, defining and implementing the geographical indication require collective mobilization of the actors in the chain (Sautier, 2004).

Geographic indications can have multiple effects on rural areas, their economy, tradition, employment and environment. The specific effects depend on the situation: product, market, actors, and so on. Comparing Comté cheese with similar, but non-PDO product, Emmental cheese, is illuminating. Both share the same geographical and historical origins, but have different production and marketing strategies. Comté has used a PDO strategy focusing on local development and protecting its cultural heritage. Emmental, on the other hand, has followed an industrial strategy, without no protection of its name or origin. This has led to a generic Emmental product and the delocalization of production to other, more intensive dairying regions such as Brittany (Dupont, 2004).

Economy

The production of Comté has risen by 3% a year over the last 10 years as a result of supply controls, quality improvement, business and promotion strategies, etc., whereas the production of Emmental cheese has fallen by 3.5% a year (Figure 8).

Figure 8 Production of Comté and Emmental, 1971-2002



Source: Dupont, 2004

Comté production has remained an upmarket product, localized in its area of origin, making it possible to retain the essential added value within the region. The production of Emmental (a generic product, 55% of which consists of rasped cheese) has moved to western France, where milk is less expensive.

Compared with Emmental, Comté's upmarket strategy produces higher prices at each stage in the supply chain – and the gap is increasing (Dupont, 2004).

At the **micro-economic** level, the Comté PDO strategy provides added value to producers. French farmers get an average of €0.30 a litre for their milk, but milk destined for Comté fetches 14% more. Dairy farms in the Comté area have become more profitable since 1990, and now are 32% more profitable than

similar farms in Franche-Comté outside the PDO area. Their income is also more stable, since the PDO counterbalances external economic risks (Dupont, 2004).

At the **marketing** level, Comté has been better able to resist the downward pressure on prices from the supermarkets. The retail price of Comté has risen by 2.5% per year (against 0.5% for Emmental), while the wholesale price has risen by 1.5% a year (no change for Emmental). Part of this added value accrues to producers and other actors in the supply chain. All of the 0.5% rise in the retail price of Emmental has been appropriated by the retailers (MAAPAR, 2004).

At the **meso-economic** level, Comté plays a major role in attracting tourists to Franche-Comté, so contributes to the development of catering and lodging services in the region. In 2002, tourists spent 2.19 million nights in the area; 115,000 persons visited cheese dairies and 30,000 visited cheese cellars, where many bought Comté cheese. The figure for total nights amounts to 0.45% of the 480 million total nights spent by tourists in the French countryside (MAAPAR, 2004). Five percent of farms engage in at least one tourist activity in the Comté PDO area, against three percent in the Franche-Comté region as a whole.

Quality and tradition

PDO rules require the preservation of the traditional know-how that contributes to the specific quality, characteristics and uniqueness of Comté cheese. The manufacture of Comté relies on various traditional techniques (Table 7). Certain other traditional techniques have been abandoned (for example, hand-milking and hand-turning of the cheeses) because they do not add value or specific characteristics to the product.

Table 7 Effects of processing methods on cheese quality

Technical process	Quality contribution
Local pasturage	Development of specific flavour
25 km collection area	*Crus* of Comté (specific aromas due to the local flora)
Processing within 24 h	Preservation of milk characteristics
Use of copper tanks	Stainless steel allows unpleasant tastes to develop
Maturing on spruce shelves	Improves absorption of humidity
Rind naturally developed	Improves gustatory quality
Maturing period at least 4 months	Development of distinctive flavour

Adapted from MAAPAR, 2004

Employment

The two strategies (PDO for Comté, industrial for Emmental) have different effects on employment. Comté generates five times more jobs in processing, maturing, marketing, packing, etc. than does Emmental: three direct, full-time

jobs per million litres of milk collected for Comté, and only 0.6 for Emmental. Comté also indirectly generates 0.5 jobs per million litres in promotion, advising, etc.). The total number of jobs in the Comté sector is about 5000 (3200 milk producers, 1520 direct jobs, 250 indirect jobs).

Migration away from the countryside in the Comté PDO area is only half that of the non-PDO area. The PDO offers local people the opportunity to develop profitable businesses on a smaller area of land, improving the viability of small farms (Dupont, 2004).

Another positive effect is on job quality. The use of extensive, rather than intensive, livestock-keeping practices means livestock management is easier and less time-consuming. Similarly, Comté dairies employ more qualified cheese-makers than do Emmental factories. At a national level, although the PDO cheeses account for only 10% of total French cheese output, they are responsible for 40% of the job offers for students who have been trained in cheese-making in vocational schools.

Environment and landscape preservation

The Comté PDO specifications limit the intensification of farming, so farmers use fewer inputs and the environment is better protected. Extensive cultivation practices mean that pasture is fertilized sparingly, so preserves its rich floristic diversity.

Profitable traditional livestock raising in the Comté area has limited the loss of pastureland. Between 1988 and 2000, the area of grassland fell by 7% in the PDO area, but by 18% – 2.5 times faster – in the non-PDO area (DRAF, in Ministry of Agriculture, Food, Fishing and Rural Affairs 2003/2004).

The Comté PDO contributes to maintaining the open landscape of both pasture and woodland that is typical of the Jura.

Critical issues and challenges

Trend to homogeneity

In spite of its strong specification as clearly defined in the PDO regulations, Comté cheese is tending to become less variable. According to Jeanneaux et al. (1999), this is because of three main factors:
- The mechanization of certain stages in the maturing process.
- Evolution of cheese-makers' practices and know-how, from craftspeople to qualified technicians.
- Consumers' preferences for soft cheeses.

These changes contribute to the standardization of certain processing practices. The cheese differentiation tends to depend more and more on the maturing stage. In general, Comté is developing its distinctive characteristics in relation

to other cheeses; but the internal diversity of practices and products within the Comté type is decreasing.

Comté market position and pressure

Professional coordination and management of the supply chain has led to a strong collective promotion of Comté, the limitation of production volumes and the maintenance of economic activities in a disadvantaged area. Comté has nevertheless attained only a medium position in terms of market competitiveness because the hard cheeses (like Comté) are generally less attractive than soft cheeses. Moreover, Comté's relatively large volume means sales depend largely on big retailers, which have increasing market power, causing bottlenecks in the supply chain (Barjolle et al., 2000).

Although big firms have increasingly penetrated the supply chain, the Comté production system is still organized around traditionally separate tasks: cheese-making and maturing. Despite their different business culture, the big firms have until now accepted the traditional system of 'co-production', where the cheese-making activity is decentralized in many villages, while the maturing activity is much more concentrated (Jeanneaux et al., 1999).

Reform of the European Union's Common Agricultural Policy is expected to have a strong impact on the milk sector, with its further deregulation in 2008. Some fear this may cut the price of milk and affect the balance of prices within the Comté supply chain. To avert a possible price slump, the CIGC president has suggested new PDO rules: limiting the production of milk per cow, further reducing the number of animals per hectare, and limiting fodder supplements per animal. These measures could even cut production volumes – which would meet the disapproval of dairy processors and big retailers (Bordur, 2001).

Even though Comté is currently able to resist pressure from big retailers and dairying firms, actors in the supply chain must remain vigilant and anticipate potential market trends and regulations. To enhance their position on the global market and to guarantee that the added value accrues to them, they must be able to counterbalance new production and market conditions. Protection and regulation policies and marketing tools must be updated to fit these new trends.

Lessons from the Comté experience

The case of Comté shows that products that are recognized and valued by the market make it possible to increase the incomes of various rural producers (in this case, milk producers, cheese-makers and refiners) and to contribute to rural development. The PDO label has proved an adequate tool to add value to the product in both local and export markets, take advantage of local know-how, create and maintain jobs in the region, and preserve landscape while developing tourism. The successful commercialization of Comté capitalizes on its unique identity, which in turn derives from its cultural, natural and technical characteristics.

Factors that might be relevant for the promotion and protection of local products and the welfare of small-scale producers in developing countries include:

- Initiatives that build on existing economic, social, natural and cultural assets.
- Mobilization of individuals willing to produce and collectively market quality products.
- Strong relationships between the actors involved in production.
- A functional network or coordination structure to set up and manage the project, develop quality standards, and protect and promote the product.
- A producers' organization backed by public authority to enforce production rules and make investments necessary to maintain quality.
- Smooth, transparent communication between actors in the production chain.
- Production practices focusing on the preservation of the natural environment.
- The existence of an enabling institutional environment (laws, policies, local and national institutions) to protect and promote the product and the natural environment, strengthen the capacity of the producers and provide financial support.
- Strategic alliances between producers and various public and private actors (policy makers, funding agencies, research centres, extension services, etc.).
- An applied technology compatible with the local environment.
- A synergy between tourism and product sales.

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8 Conclusions and agenda for action and research

Denis Sautier and Petra van de Kop

In this book we have analysed five case studies to understand the opportunities and challenges of origin-based labelling of food products for smallholder producers in the developing world. The cases cover very diverse experiences with origin-based labelling. They present products in different types of markets (local, national, international) and different levels of formality, legal protection, and degrees of horizontal organization and vertical coordination. While they do not offer an exhaustive view, they do give rise to a number of conclusions to help focus future action and research.

Characteristics of regional products

The regional products described in this book reflect a rich and variegated history, local environment, culture, social structures and food styles. All five cases show the intrinsic features that differentiate regional products from other consumer items.

The cases of *gari* (Chapter 3) and *rooibos* (Chapter 6) underline that regional products convey strong local values and identity, and are not just a matter of forging a marketing image – as often the case of global brands. A binding feature of regional products is their geographical origin and ecosystem specificity (the region's 'natural capital'), which are reflected in the quality of the product. Moreover, these natural factors combine with human factors to produce the unique characteristics of the end product. Locally-adapted production and processing practices are key. Specific production knowledge may be required, for instance in the *rooibos* and coffee examples (Chapters 5 and 6).

The *gari* and the *mantecoso* cases (Chapters 3 and 4) also show that quality may be linked to specific processing techniques. Sometimes these techniques are intrinsically related to the intensity of the production process, which is the result of the use of family labour and production by small-scale producers (the 'social capital' of the area).

Traditional knowledge and skills ('human capital'), as well as organizations (social capital) are an essential component of regional products. This is illustrated by *gari* Missè in Benin, the sustainability of which relies on social networks that efficiently control the production and marketing practices through non-codified but very efficient rules and controls, based on cooperation and mutual trust. Local institutions and coordination in the *mantecoso* cheese

chain in Peru show that regional products can catalyse horizontal (e.g., collaboration among producers) and vertical (e.g., cooperation between producers and processors) organization within the sector or region.

Markets and consumers

The cases of *gari*, *mantecoso* and *rooibos* (Chapters 3, 4 and 5) give diverse examples of consumer demand for regional products in developing countries. This demand is particularly strong both where consumers have migrated recently to the cities or maintain close cultural linkages with the type of foods used in rural areas. It is also stimulated by middle-class consumers who seek a diverse, high-quality diet. Regional products are present in many types of markets (local, national, international). They represent an important way to maintain food diversity in an increasingly urbanized and globalized world.

At the local level, direct selling is still attractive for many producers of regional products; such sales may offer high prices and form a basis of trust for other market relations. In Benin, *gari* Missè is mostly bought directly from the producers. Direct links between producers, traders and consumers mean that all are confident the product is genuine, raising the level of mutual trust among these actors.

When the distance between producers and consumers increases, the connectedness of consumers with the region of origin is no longer guaranteed. When strong cultural links exist, these form an important impulse to purchase regional products. With their cultural links and food styles, diaspora populations are important export markets for regional products. They may also spread these products to new consumer groups.

For consumers without strong cultural links to the region of origin, it is important to 'sell' the story behind the product. The cases of *mantecoso* and Comté cheese show that tourism can enhance consumers' understanding and appreciation of the product even though they do not have such links.

Origin-based labelling for smallholders in developing countries

The case of Comté (Chapter 7) shows how rural European producers have been able to increase their incomes by marketing a product on the basis of its links to a locality. Smallholder producers in developing countries are generally strongly embedded socially and historically in their localities, so may be able to take advantage also of a number of specific natural, cultural and technical assets. Their strong regional ties (natural capital), unique local skills (human capital), organization and intensive mode of production (social capital) and limited production volumes offer opportunities for the marketing of regional products. The existence of strong social networks (as in the *mantecoso* and *gari* examples) may offer important advantages for the organization of value chains. These networks foster trust and facilitate cooperation, so reducing risks and transaction costs.

If they are organized, smallholders have a few advantages over large-scale producers. The smallholders put in more knowledge and labour per unit of output, which is reflected in the quality of the product. Chains that value this particular asset provide an opportunity for smallholder producers. A strategy for origin-based labelling targets low levels of production and differentiated end-products, and stressing competitive factors other than price, such as quality, identity and trust. This allows producers to partially avoid direct cost-based competition.

Efforts to foster such production and marketing networks must prevent the misuse of the product's name, reputation or image by newcomers and free riders. They must establish a basis for recognition of the regional products in non-regional markets. They may even open the way for their recognition as a collective intellectual property right. Geographical indications are thus a tool for developing the potential of regional foods to benefit smallholder producers and the region as a whole.

'Name piracy' – the appropriation of geographical names by groups not connected with the area – has become an important and sensitive issue in many countries today. It can be fought by the use of geographical indications.

Defining good production and processing practices offers opportunities to reactivate neglected local products. Defining these practices allows the role of natural and human factors in creating a specific product to be defined. It can foster a shared vision among stakeholders. A side-effect of product specification schemes is thus to support the coordination and co-ownership of local assets.

Quality assurance is another opportunity linked to origin-based labelling. For producers, it means defining and enforcing rules, and limiting free-riding. For consumers, especially distant ones, labelling ensures that the product they are paying for actually comes from the right place and is made in the right way.

Challenges for smallholder producers

Marketing regional products requires a good understanding of consumers' demands and behaviour. The success of regional products depends on the consistency with which a regional product is positioned in the market. To ensure consumer satisfaction regarding product quality, a high degree of organization and coordination among producers is needed. For most small producers in developing countries, the concept of supplying a product according to a code of practices, meeting some pre-specified quality requirements, is novel. Strong vertical networks (linking producers with processors, marketers and consumers) and horizontal networks (associations of producers) are important to facilitate this.

Traditional production systems build on existing knowledge and well-established local practices. Still, engaging them to correspond to new product attributes (quality control) and transaction attributes (volume, regularity, terms

of payment, etc.) requires changes in technology, organization and management. Implementing these changes requires certain capacities on the part of the smallholders. Such capacities are directly determined by their assets (financial, physical, natural, human and social capitals) (Berdegué et al., 2005).

The case of *mantecoso* cheese in Peru (Chapter 4) is a good example of the link between social capital and collective action. But it required an intensive and sometimes difficult process of dialogue and capacity building. Financial and physical capital might impose particular challenges for smallholders. Smallholders cannot always implement difficult procedures and controls, or afford them. The efficiency of endogenous quality control and marketing systems, as shown in the *gari* case (Chapter 3), should not be overlooked. The natural, social and human assets of small-scale production strongly determine the intrinsic qualities of the regional product. But influencing these assets to expand markets may undermine them. A careful approach is required.

As with any other export, selling regional products abroad poses an additional challenge. Regional products are at risk when the market suddenly widens because of globalization, usurpation or trademarking by foreign countries. This is clearly demonstrated by the *rooibos* example (Chapter 5).

A supportive institutional framework and environment is key. The Comté case (Chapter 7) demonstrates the importance of active public policies that acknowledge and support the regional products and professional organizations. In the developing world, the capacity of the state to deliver such policies and services varies considerably from country to country. While the recognition and protection of origin-based products (for example, via a geographical indication) has many expected benefits, it may have disadvantages: lowering the value of products outside the borders of the delimited area; excluding some producers who think the benefits of participating may not be worth the costs; and raising prices on selected products (Mendes, 2001).

Smallholders can access secure markets for origin-based products only if they are organized. The case studies show that social cohesion contributes to the smallholders' level of organization. Generally speaking, historical horizontal ties between producers and kinship should be considered as important assets. It must be noted that we have not investigated the internal dynamics of producer organizations that may result in the unequal sharing of benefits.

Policy implications

Origin-based products are old-established. The first important policy conclusion derived from our case studies, is that origin-based products have been present for many years and have generally developed from endogenous supply chains with existing production organizations, quality regulations, and distribution channels. Policy interventions should in the first place pay attention to, and build from, existing collective practices of producers, processors, traders and consumers in these chains.

Policy intervention may not be needed. The second conclusion, drawn from the *gari* case, is that not all regional products need policy intervention, nor are they all current candidates for official recognition schemes. They may be sustainable without external or state intervention, relying on endogenous social regulations.

National geographical indications are needed. However, in a number of cases regional products may need protection or recognition. To benefit from geographical indication protection at the international level as provided for by the WTO TRIPS agreements, a national geographical indication framework is needed. The *rooibos* case shows that developing countries are not entitled to geographical indication protection in developed markets for products that they do not protect at home (Laing and Erasmus, 2004).

Give high levels of responsibility to producers. The Comté case, the only one from Europe, should not be seen as a model for the rest of the world. But it does demonstrate an adapted institutional framework and a set of public policies (on food safety, rural development, etc.). Both give a high degree of responsibility to the producers and processors themselves to collectively manage their specific product.

Rules and enforcement require ownership. When discussing the prospects of origin-based labelling, special attention must be paid to the global governance of the system. Defining a production area or certain production rules is not the end of the story. It is only a beginning. It sets a common framework for a further management of the product's reputation and market development. The effectiveness of the rules and decisions depends on the ownership of these rules by the producers and processors, and by the supply chain and society in general. This is shown by the history of geographical indication regulation in France, where at the beginning of the 20th century it took many years to strike a balance between the judicial, administrative and professional leadership in geographical indication governance (Box 4).

The problem is thus rather how to ensure coherence between the rules and the controls. Chapter 2 lists a number of examples in developing countries where non-labelled regional products do play a positive, satisfactory role in the regional economy and rural livelihoods. The need for protection often proceeds from external threats, such as counterfeiting on national markets and biopiracy or trade marking of regional names in foreign countries – mostly in Europe, the United States and Japan.

Specific policies may be needed to ensure pro-poor impact. Compared to a trademark, a geographical indication has the potential to be profitable for many more producers in the delimited area, since its can be used by all producers in the area who respect the common production rules. Of course, as with any form of product definition, a geographical indication might include some groups and exclude others. The organization and leadership of the governance structure is key. As our case study reveals, most *rooibos* producers are not smallholders or

Box 4 The creation of geographical indications in France: Wine Designations of Origin

1905: Administrative stage

In 1905, wine prices drop because of oversupply. The government asks public bodies to define those areas that might benefit from an appellation of origin. The lack of technical limitations for production and political pressures on the administrative body do not help solve the problem.

1919: Judicial phase

The government gives tribunals the responsibility to define the boundaries of production areas and to define the corresponding 'local, faithful and constant' practices. This solution is not satisfactory either: the procedures are lengthy and decisions are sometimes contradictory. Mistakes cannot be corrected.

1935: Creation of a nationwide inter-professional body

In 1935, protected appellations of origin are finally instituted. A national institute is created, which combines administrative, legal and professional components. The recognition of geographical indications and their rules are entrusted to a public body, the Institut National des Appellations d'Origine (INAO, National Institute for Designations of Origin). Producers and administration sit together on the board. INAO has the capacity to send proposals to the relevant government departments.

Source: INAO (2005)

under-privileged groups, but large-scale producers. A broad-based sectoral regulating body will thus tend to reproduce the power relations that exist within the supply chain.

Fair trade channels have been instrumental in including underprivileged groups in this chain. In the medium term, fair trade or other forms of affirmative action may complement geographical indications: the geographical indication can ensure a shared framework for managing the product's reputation and long-term sustainability of the market. Additional public or private support will probably still be needed for pro-poor market development with regional products.

Agenda for action and research

Marketing regional products in new markets confronts developing country producers with consumer choices and preferences, and with performance requirements of these new markets. Can they establish and maintain linkages in these markets? Will actors in the developing world benefit?

This depends on many factors: the intrinsic features of the product, local capacity, the competence and assets of producers to meet new performance requirements, the opportunities provided by the market, and enabling policies that support origin-based marketing by small producers.

The case studies raise various issues that need to be considered when designing interventions to support the inclusion of smallholders in regional product chains. Box 5 highlights the most important of these. It presents some

guidelines for deciding whether it is worthwhile exploring such an intervention, and if so, for designing a strategy that benefits smallholders.

Box 5 Criteria for action and research on regional products as a market and rural development tool

Product-related assets

- Intrinsic quality features of the product: Is the product unique?
- Raw materials, resources and know-how: Is the product's uniqueness related to the natural and human factors of production?
- Geographical area: In which area can these natural and human factors of production be found?
- Strong identity of the product
- Strong product image

Assets of producers and their organizations

- Access to natural resources required (natural capital)
- Traditional knowledge and skills, entrepreneurial skills (human capital)
- Social organizations and vertical networks (social capital)
- Understanding of consumer demand and markets
- Access to financial capital
- Group(s) of stakeholders able to participate in negotiations within the supply chain regarding production and marketing

Market-related assets

- Existing reputation and demand for the product
- Consumers with strong ties to region (urban, diaspora, tourists, etc.)
- Consumers willing to pay a premium price for specific products
- Direct links between producers and consumers

Enabling policies and institutional environment

- Official recognition schemes for differentiated quality products and for producers' marketing tools (such as geographical indication)
- National policies to promote regional products
- Enabling public policies (food safety, rural development, etc.)
- Public or private business support organizations

To further operationalize these guidelines, a wider understanding is needed of existing regional products in the developing world and their historical, social and cultural dimensions. It is important to understand the geographical, social and even ethnic nature of their specificity. More insight is required in the internal dynamics of producer organizations and the keys to inclusion of women and less-endowed households and social groups. Is a history of unequal benefit sharing among different groups replicated in new producer organizations? Or do traditional social relations prevent market mechanisms from increasing income disparities? Opportunities of origin-based products must be analysed in their particular social, political and institutional contexts.

Further insight will also be needed into the potential pro-poor benefits of marketing regional products. Positive linkages between fair trade labelling and regional marketing, as demonstrated by the *rooibos* case (Chapter 5), could be more systematically explored. Regional and national governments, as well as NGOs and public-private partnerships, may play a key role in establishing these arrangements.

The cases in this book were intentionally restricted to food products. Non-food regional products, such as crafts and artisan products that are based on local know-how and resources also have strong potential for regional-based labelling and market development. In particular, the implications of new WTO rules that extend the geographical indication notion to food and non-food products alike, have to be considered. Several of the insights and experiences related to food products may prove useful for non-food products.

A final word: this book brings together a number of theoretical bases and empirical cases to demonstrate that regional identity is a significant dimension of market development. Regional identity is frequently underestimated as a component of rural development and of market strategies. It deserves better attention from local and national decision makers as well from development practitioners.

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