

DOLPHINS WP 5 :

Case Study on Bavarian beer

0. General information

Name of OLP: Bavarian beer

Type of product: Alcoholic beverage of light or dark colour; between 0,5 and 9 % alcohol.

Type of denomination: PGI

Country of Origin: Germany, Bavaria (Bavaria is one of the 16 German "Laender")

Area of production: Bavaria



Fig. 1: Bavaria

1. Definition, Characteristics and legal protection

1.1 Characteristics of the OLP and its production system:

There is archaeological and historical evidence that beer was brewed in Bavaria since the 9th century. The world's oldest, continually active brewery is the "Weihenstephaner Brauerei" near Munich, where monks started brewing in 1014.

Nonetheless, in these early times most beer was brewed in private households and mostly had not very much in common with the beer we know today. All sorts of spices, herbs and fruit extracts were added in order to cope with product quality problems. Very much hop was added as a preservative. Because of lacking cooling techniques, beer was brewed for almost immediate consumption and only in wintertime. The common alcoholic beverages were ciders and wines, mixed with water.

Professional beer brewing came to Bavaria from the north of Germany. In the 15th century, Hamburg counted some 600 breweries and the Bavarian dukes imported beer for their private consumption from the town of Einbeck near Hanover. Following the receipts of north-German brewers the duke Wilhelm IV decreed the “Bavarian beer purity law” in 1516, admitting only “barley, water and hop” as ingredients (yeast being not considered as an ingredient at that time). The new law was meant to improve beer quality and to get the relatively cheap and nourishing beverage more common. The duke's prescription to use barley as malt was, at the same time, an interdiction to use wheat and rye for brewing. These cereals were too precious for brewing, as they could be used for bread making.

The foundation, in 1591, of the now world-famous “Hofbräuhaus” (the court's brewery near the Munich residence) as the next measure of Bavarian dukes in order to make high quality beer common in Bavaria. In 1634 they called for the brew master Elias Pichler from Einbeck to run the production in the Hofbräuhaus. His “Einbecker Bier” was what is today called “Bock Bier” in Bavaria (different spelling but phonetically unchanged).

Breweries began to develop in major Bavarian cities, but it took until the mid-19th century to replace wine and cider as the everyday beverage. Learning brewers still went abroad, to England and to Bohemia, and hop was imported until royal administration encouraged hop growing in the Bavarian region of Hallertau.

In 1842, the Munich brewer Sedlmayr brought bottom fermenting –technique and ice cooling from England. From now on, high quality production of beer was possible all year through. Huge caves were driven in hillsides all over the country in order to stock huge quantities of natural ice that was cut from lakes during the winter. Fast growing trees were planted in order to shadow the caves, people rapidly appreciated the shadow and the fresh beer: the “Biergarten” (beer-garden) became an all-Bavarian phenomenon.

The Bavarian brewing industry grew rapidly now. After having absorbed European knowledge and raw materials during centuries, the region had now the most innovative and technically advanced brewing sites, foremost in Munich and in Kulmbach. More than 40 types of beer were created. A “brewing university” was installed in Weihenstephan that attracted (and still attracts) brewers from all over the world. Bavaria and beer got almost synonyms and hundreds of breweries worldwide took up “Bavaria” as brand name.

As for the “Bavarian purity law”, it was not taken up as easily and rested limited within the Bavarian borders. When technical additives (preservatives, colorants, anti-oxidants and defoamers) became common practice, rendering brewing more efficient and reducing costs, Bavarian brewers had to face concurrency disadvantages.

Thus, the production process of Bavarian beer is still as simple as the “purity law” wants it to be, even though wheat, rye or other cereals were meanwhile admitted to malt production.

Principal production process:

1. Mixing, heating



Bavaria is still the world's region with the highest density of breweries sites in the world, even if their number is declining (Fig. 2).

Some 40 % of all European breweries are situated in Bavaria and more than 19.000 jobs are directly linked to the brewing business. The output of the Bavarian brewing industry amounted to some 23 million hectolitres in 2000 (fig 3), generating a turnover of 4.3 billion Euros.

The output of all the breweries and brand marks in the world that use the term "Bavaria" is certainly higher. For example, the "Bavaria Brouwerij" (the Netherlands) is producing more than 4 Mio hl per year.

1.1.2 To what extent is OLP made differently in the local area?

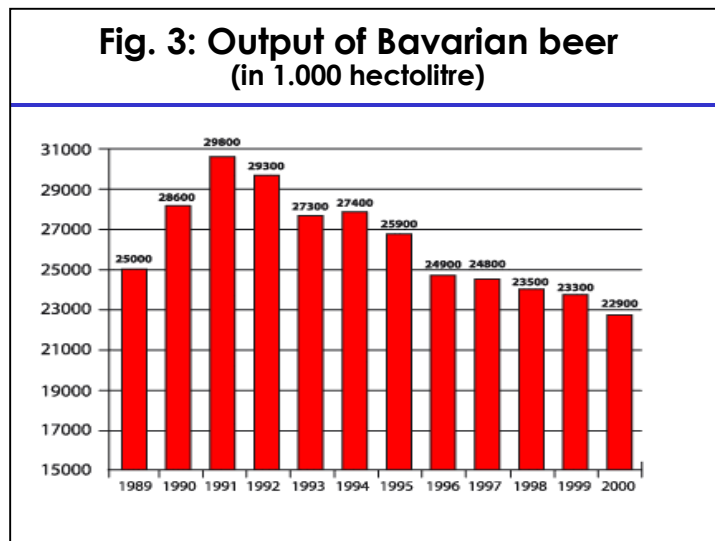
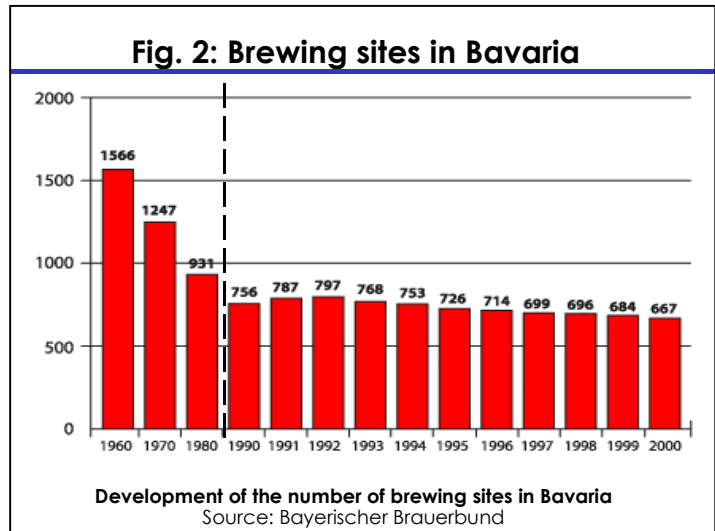
In comparison to German beer, Bavarian beer won't be brewed in a different way. But compared to modern beer production anywhere else in the world, the production

process in Bavaria is characterised by the absence of any additives and the strict limitation on the ingredients malt, yeast, hop and water.

This limitation of the production process has preserved, in the region, a special know-how on additive-free beer brewing.

1.1.3 To what extent is there heterogeneity production techniques, production costs and in the firms involved in the supply chain?

The some 650 subsisting Bavarian breweries are very different in size, production costs, technical equipment and market access. There are a few "global players", mainly in the Munich region and in the area of Kulmbach / Franco-



nia, for example “Löwenbräu”, Spatenbräu”, “Paulaner”, “Erdinger” and “EKU”, who areas well present in national supermarket chains. Most of the other breweries are closely linked to the local markets and distribute their products within a range of some 50 kilometres. They are, thus, rather competitive in their local markets and their competitiveness depends on a more or less strong traditional consumer linkage.

These relatively small breweries differ in production techniques (very modern or traditionally equipped firms), size (from medium size to one-person- micro-breweries). Their access to retail systems is limited to their “home area”.

1.2 The process of institutionalisation

The PGI for Bavarian beer is only one year old. Many of the consequences of this protection have not yet been put into praxis.

1.2.1 Which were the problems faced before the activation of the legal protection system?

Two major problems: firstly, a general lack of information, understanding and know-how with regard to the LP-topic, secondly, the lacking will for common action in this area, partly due to rivalry between breweries.

1.2.2 Who activated the request for protection? Which are interests and economic actors?

Finally, the Bavarian Brewers' Association (Bayerischer Brauerbund), that represents the vast majority of Bavarian brewers, applied for PGI protection in the name of all Bavarian breweries.

Small local breweries were much less interested in this process than the relatively few big breweries with export activities.

1.2.3 Which problems were to be faced in the drawing of the code of practice?

The code of practice consists of the “Beer Purity Law” and is, thus, common praxis in Bavaria since the 16th century. The main element of a „Code of Practice“ is, that the beer has to be brewed in Bavaria in accordance with the “purity law” and that essentially Bavarian raw materials are used.

There weren't any major problems.

1.2.4 Which conflicts emerged?

There weren't any larger conflicts within the Bavarian brewing scene, even though small brewers weren't much interested in the topic (the activities of the Bavarian Brewers Association are financed by all brewers, not only by the big ones who are likely to profit the most out of the PGI protection).

But external conflicts emerged very rapidly with breweries all over the world, that claimed “Bavaria” to be a generic term.

It was, thus, much easier to obtain the PGI for local Bavarian (and German) beer specialities than for Bavarian beer in general. "Münchner Bier, Kulmbacher Bier, Hofer Bier, Mainfranken Bier" got their PGIs in 1998.

But the all-Bavarian demand for PGI protection was fought by brewers from the Netherlands and from Denmark, who were afraid of being obliged to rename their breweries (the "Bavaria" brewery in the Netherlands exists since 1852) or their brands.

1.2.5 Was the solution reached a good compromise (accepted by all actors) or did it give way to unstable equilibrium?

When, in 2001 the commission accorded the PGI to Bavarian brewers by means of the Commission Regulation (EC) No 1347 / 2001, it was affirmed that "Bavarian beer" is not a generic term in Europe (only in some regions). On the other hand, the persistence of brand marks as "Bavaria" was accorded.

In spite of this compromise, the application of the PGI is actually matter of a lawsuit between the Bavarian brewers association and the "Bavaria" brewery.

1.3 Code of practice

The code of practice consists mainly of the "Bavarian Beer Purity Law" and of the prescriptions, that the applying breweries have to be situated in Bavaria and that essentially Bavarian raw materials have to be used.

As the PGI doesn't prescribe a change in brewing praxis frauds are not likely in Bavaria. The institutions concerned with controls are the Bavarian food board and the Ministry of Agriculture.

1.4 Certification

As there is now difference to the legislative level assured beforehand by the "Purity Law", there are no extra certifications systems or costs. Eventual sanctions are applied according to the German and Bavarian food law.

The PGI label is, at the moment, not used for labelling.

1.5 Legislative aspects

1.5.1 Laws that institute and regulate the denomination of the product

Common German law on brand names: Deutsches Markengesetz.

1.5.2 Legal institutions concerned

Common legislative bodies concerned with food production, food control and brand topics:

Food boards (on laender level)

Deutsches Patent und Markenamt (nation-wide).

1.5.3 Existence of trademarks and collective brands

There are at least 650 brand names and probably several thousand trademarks for Bavarian beer.

1.5.4 Existence of indications which can mislead the consumers

Misleading indications do not exist in Germany, neither in Bavaria. But abroad, many breweries put forward the term “Bavarian” in the marketing for their products.

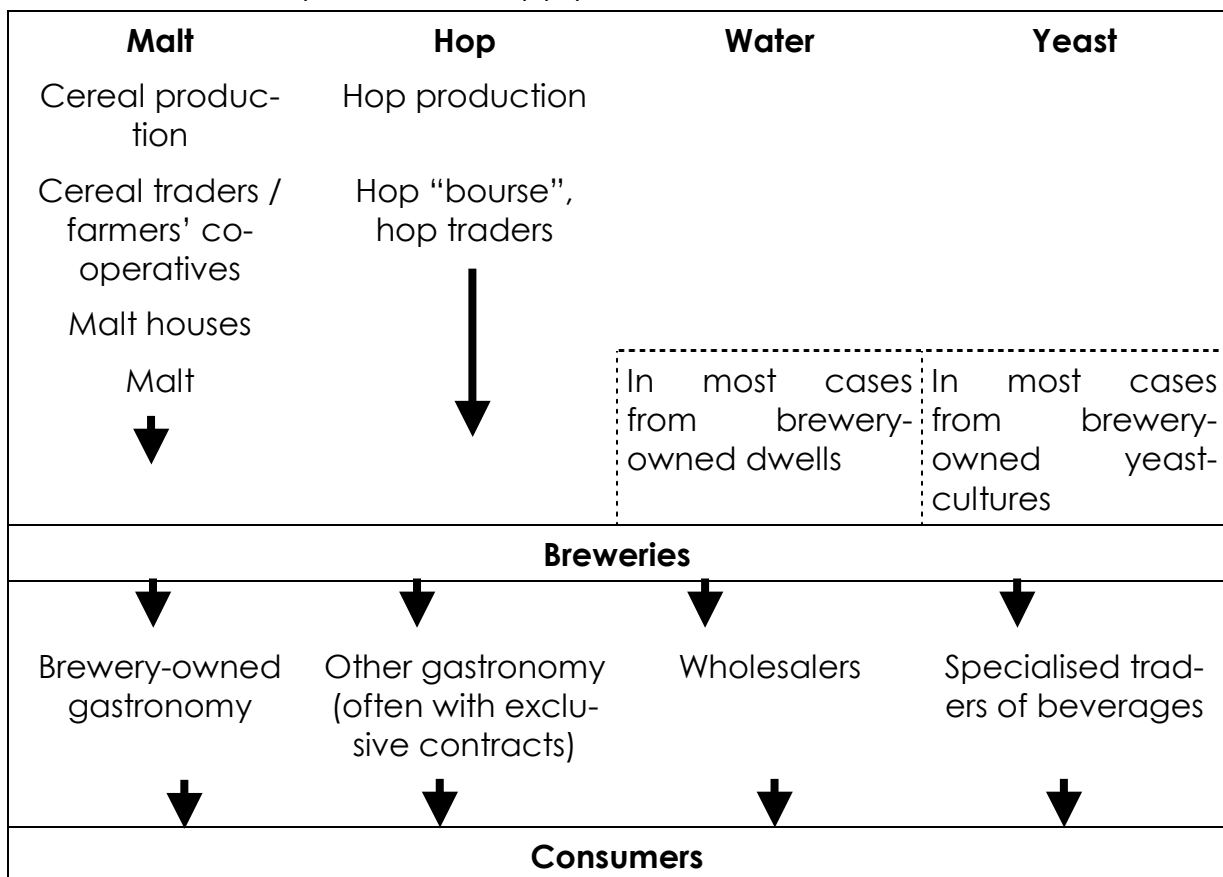
1.5.5 Existence of jurisdictional case involving or concerning quality, imitation or denominations of the product.

Only on international level.

2. Link with production and marketing system

2.1 Production chain aspects

2.1.2 A short description of the supply chain:



2.1.3 Organisation of the supply chain

Vertically organised supply exists both from farmers to brewers as from brewers to a part of the gastronomy. The brewers have a rather strong position in

these vertical systems and their policy is ambivalent, as far as malt supply is concerned. On the one hand, breweries cooperate with farmers in order to obtain optimal cereal and malt qualities. On the other hand, they appeal easily to foreign suppliers and their relatively cheap offer. In last years, on third of the malt used for Bavarian beer production came from abroad (Canada, Denmark and others).

2.1.4 Characters, typology, and structure

- No relevant data -

2.1.5 Strategy of main actors

In Bavaria, Bavarian beer holds some 75 % of the market in 1999 (in 1988 the market share was 95 %!). The most important competitors are north-German breweries. International competitors are, until now, not very successful on the German beer market in general (market share: 2 %), but they provide almost 25 % of the beer sold in German gastronomy. Many of these brands head especially for the young consumers, putting forward lifestyle and fun arguments.

In order to differentiate their products, small and medium- scaled breweries in Bavaria use in most cases the arguments of "micro-regional traditions", what consequently gives them a somewhat old-fashioned image. Only a few houses try compete by modernizing their image (innovative bottling, new products, hedonism-orientated advertising).

Other (small and medium) breweries differentiate their products by using organically grown ingredients. As organic beer is a best-selling product, some of them develop even international marketing activities. They are likely to use the PGI label, as they already use the European label for organic products in some cases.

2.1.6 Quality Management

Very different between firms.

2.1.7 Characteristics of the marketing channels

See 2.1.2

2.1.8 Effects of PDO-PGI on prices, volumes marketing channels...

The effect of the PGI obtained will probably be negligible for the breweries orientated on regional marketing. But it might strengthen Bavarian breweries' position on export markets.

2.1.9 On which basis do the firms decide weather to use PDO/PGI rather than sell the product without it?

Probably this decision will be taken according to the market the individual brewery is aiming at.

2.1.10 How are these effects distributed along the supply chain?

Not relevant.

2.1.11 Does PDO-PGI create different opportunities for industrial and artisan firms?

Yes, as shown in 2.1.8.

2.1.12 Which kinds of firms use PDO-PGI in OLP and in which marketing channels?

The sue of the PGI Label is very rare at this moment and might first be taken up by huge breweries for international marketing.

2.1.13 Are the firms specialised in PDO-PGI?

Willingly or not, any Bavarian brewery “specialises” on beer production according to the PGI rules, as these are identical with the national law on brewing and beer labelling.

2.2 Consortia and inter-professional bodies

2.2.1 Description of origin and the structure of the inter-professional bodies involved.

There are several associations of breweries. The most important one is the Bavarian Brewers' Association (Bayerischer Brauerbund) who represents some 90 % of the production.

2.2.2 Role of the inter-professional bodies

It was the Bavarian Brewers' Association, that raised the discussion about PGI and that applied for the protection. The association is representing the Bavarian brewers in the different lawsuits engaged with foreign breweries.

2.2.3 Issue related to the governance of the chain.

3. Link with rural development

3.1 Area of production

The area of production is Bavaria. Barley producers are mostly situated in the region of Franconia in the north of Bavaria, while the hop-production area “Hallertau” is rather in the country's centre.

3.1.1 Relevance of the OLP for the region

The actual price situation does not encourage Bavaria summer barley farmers (in 2000 some 35.000 farms are involved, 160.000 ha of barley are cultivated for malt purposes) to enhance this production branch. Partly linked to malt

houses and breweries by contracts, they have seen their prices go down in recent years.

The situation of the hop supply is different. The world's most important hop production area in the Bavarian region "Hallertau" provides the world market with ten times more hop, than is needed for the Bavarian beer production. The hop-farmers (1.780 farms in 2000), who during long decades earned their money rather easily (hop is "green gold") had to face quality and variety problems as well as overproduction lead to sinking prices in recent years. Recent initiative on marketing, research and development brought about promising results, but hop prices are still down.

3.1.2 To what extent OLP specificity come from local natural resources?

There is no direct linkage from natural resources to OLP specificity, that results mainly out of traditions and know-how.

3.1.3 In which way PDO-PGI Code of Practice take into account these relationships?

The code of practice prescribes the use of Bavarian raw materials in a predominant way.

3.1.4 Which are the links of the OLP with the local culture

See chapter 1 – very strong links – beer is an integrative part of Bavaria's identity and in the centre of a multitude of festivals, gastronomic traditions...

3.1.5 Which are the stakeholders other than firms involved in the supply chain?

Very many stakeholders ... from tourism and consumers' associations to universities and political institutions. See also 4.1.

3.2 The effects of PDO-PGI (Institutionalisation")

3.2.1 How do the definition of production area, techniques and characteristic of the final product affect the value of local resources in the supply chain and outside of it?

Perhaps the PGI might indirectly strengthen Bavarian farmers' position (see 2.1.3).

3.2.2 Have small and / or artisan firms difficulties in implementing PDO / PGI schemes?

No, there shouldn't be any major problems.

3.3 Rural development tools

3.3.1 Are OLP important for stimulating the demand for other local products

As already shown, beer is in the centre of Bavarian traditions and closely linked to other food-products but a close linkage to rural products resulting in an extra-demand would be hard to measure.

3.3.2 Are there any tools for building networks between different local economic activities starting from the OLP, that can create diversification activities?

Yes, there are some successful examples of tourism oriented to visiting brewing-sites.

3.3.3 Which are the actions of rural development based on the OLP product? Which is their legal base?

There aren't any rural development activities especially based on beer.

3.3.4 and 3.3.5 are consequently not relevant.

3.4 Evaluation

3.4.1 Keeping in mind your case study, which are the most appropriate methodologies, criteria and parameters to use when evaluating the economic, social, cultural environmental impact of OLPs on rural development processes?

Economic impact might be relatively easy to measure on the basis of market share and price data, information on economic development of the branch concerned.

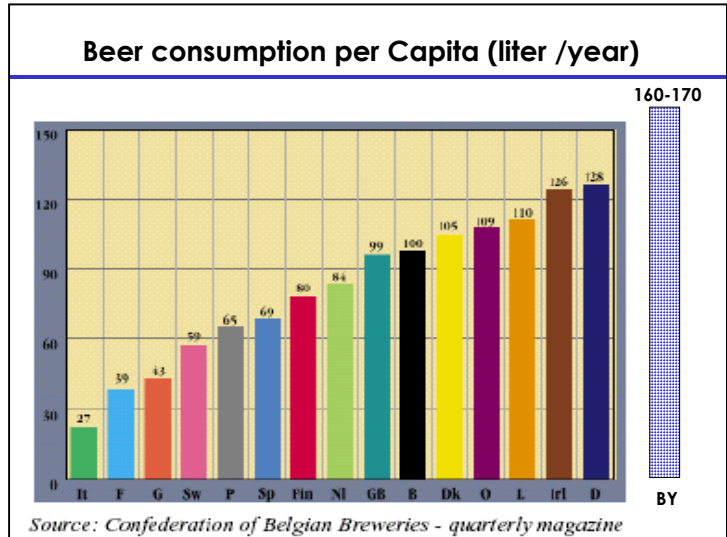
Information in the social and cultural impact might be gathered by consumers surveys / image studies in the product in the region of its production and abroad, combined with data on consumer behaviour / buying habits.

4. Link with consumers and citizens

4.1 Image of the product and Marketing differentiation

Bavarian consumers are strongly linked to “Bavarian beer”. Their beer consumption is twice as high as the European average (but it is declining as in most other countries).

The “purity law” and the beer drinking habits are almost sacrosanct: as some Munich beer gardens were obliged by their neighbours, after lengthy lawsuits, to close at 10 p.m., an uproar of protest and mass demonstrations pushed the Bavarian parliament to vote a “beer garden law”, allowing open air beer selling until midnight.



The attempt of the “Löwenbräu” brewery, in the 1990s to introduce corn malt into the beer production was severely sanctioned by the public opinion. The brewery had to cope with reduced sales and image problems and rapidly gave up on the idea.

Surprisingly the image of Bavarian beer is less good among younger citizens, who consider it to be old-fashioned.

4.1.1 Description of promotion

The promotional arguments of most breweries are very similar: quality, taste, freshness, water purity, traditional brewing process ...

4.1.2 Perception by consumer

Beer is a product for everyday consumption.

4.1.3 Image of the product versus competitors

As indicated above, younger consumers often prefer beer from northern Germany or from international breweries, who succeeded in being accorded a more modern image.

4.2 Marketing differentiation

4.2.1 Capability of consumers to recognise and perceive OLP / non OLP

In Bavaria, consumer will recognise Bavarian beer.

In the rest of Germany and on international level, only well informed consumers might be able to recognise the product among other beers labelled "Bavaria", as there isn't any labelling of the PGI.

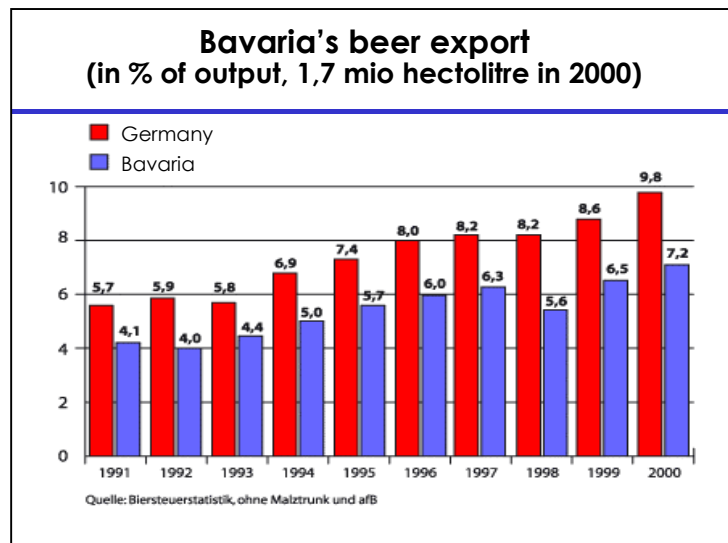
4.2.2 Competitive advantage and disadvantage of OLP against non OLP

The disadvantage was already mentioned: higher production costs due to restriction in terms of ingredients and additives.

4.3 Strategies

Bavarian brewers are attempting, by means of co-operative communication, to modernise the image of their product and to reinforce their position in the declining market, in order to cope with the publicity campaigns run by international and north-German brewers.

Only some 7 % of the Bavarian beer are exported, tendency growing. Perhaps the PGI opens some perspectives to better market Bavarian beer on European and international level.



4.3.1 Influence of PDO on the chain

No direct influence as production process rests unchanged. But perhaps an indirect influence through better export possibilities.

4.3.2 Quality strategies: " Cost Leadership" ...

Most breweries employ quality strategies, prices are rather homogenous.

4.3.2 Most relevant actions of marketing supporting the product

Beer marketing depends on high communication /advertising efforts in general, there is no special activity since the PGI was obtained.

4.3.4 Strategies of diversification followed by the firms involved

All Bavarian breweries are involved. It is too early to distinguish between firms who actively will take up the OLP opportunities and those who won't.

Sources / Links /Useful information

Useful homepages :

www.bayrisch-bier.de/

www.bayerischer-brauerbund.de/

An English translation of the "Bavarian Beer Purity Law", by Kyle WOHLMUT can be found on (<http://users.rcn.com/thor.dnai/dboard/dbnews/t9511e.htm>):

How beer is to be brewed and poured out across the land.

We decree, establish and ordain at the behest of the Lords of Bavaria that henceforth in all the land, in the countryside as well as our towns and marketplaces, there is no other policy than this: From Michaelmas until the Feast of St George, one mug or 'head' of beer will not be sold for more than one Munich penny; and from the Feast of St George until Michaelmas, a mug will not be sold for more than two pennies of the same reckoning, and a head for no more than three heller, under pain of penalty. But when one brews any beer (other than Marzenbier), it will under no circumstances be poured or sold for more than one penny per mug. Further we decree that henceforth in all our towns, marketplaces and the whole of the countryside, no beer shall contain or be brewed with more ingredients than grain, hops, and water. He who knowingly violates these laws will be summarily fined a keg of beer, each time it happens. However, if a publican buys one, two, or three Eimer of beer from a brewery in our towns, marketplaces, or the whole countryside, to sell to the local townspeople, to him alone will it be allowed and permitted to sell mugs and heads of beer for one Heller more than is written above. Also the Lords of Bavaria reserve the right to decree appropriate changes to this decree for the public benefit in the event that strong hardship arises from shortages and price increases of grains (since the seasons and the region and the harvest times in our land can vary); in that event the right to adjust the regulations over the sale are explicitly expressed and established.

Mug = (Bavarian) 1.069 Liters; Head = round container for fluids, containing slightly less than one Bavarian 'mug'; Heller = Munich half-penny; Eimer = 60 Bavarian 'mugs' (64 liters)