

Market situation of Norwegian bacalao on the Mediterranean Spanish coast

Barcelona and Valencia as an example of different tastes for bacalao

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Consumption of products from salted and cured cod (bacalao) has a long tradition in Spain and even today the demand is fairly high. But the Spanish market for such products cannot be regarded as homogenous because the different regions weight the product attributes differently. The Barcelona region is dominated by Icelandic type of bacalao while the region south of Barcelona has a much more diverse demand for these products. If Norway wants an increased market share in Spain, the producers should strive for a more homogenous quality and tailor products to suit the regional differences.

Salting together with drying is one of the oldest preservation methods used to increase the shelf life of fish. Salted fish products have played an important role in the diet of mankind throughout history and it has been times when these products have been taken for granted as they have almost always been used as a last resort for our sustenance (Gallart-Jornet *et al.*, 2004).

Salt-cured cod, wet or dried, has been an important economic and cultural product in Spain, especially in the south-east coast (i.e. the city of Alicante), which has been a "salted fish product area" for centuries. The demand for salted cod is still driven by a cultural desire for traditional dishes (*ibid.*). Salt-cured cod and salted and dried cod are called "*bacalao*" in Spanish. Even if the popular name for cod (*Gadus morhua*) is *bacalao*, it will not be understood if one uses "*bacalao*" for fresh or frozen products of cod. "*Bacalao fresco*" could be used if one demands fresh cod (Østli & Heide, 2004).

Consumption

In Spain, the drop in domestic consumption has been very substantial. By using statistical figures, the consumption has dropped from approximately 70-80.000 metric tonnes 20-30 years ago to around 30.000 metric tonnes today. Due to difficulties of distinguishing between import, domestic

production and export numbers, the statistics for domestic consumption are very inaccurate (Østli *et al.*, 1997). The overall impression is however a very substantial drop. In Portugal, on the other hand, the situation is different. Salted and dried cod is the main product in this market, and statistics indicate a steady (some even say increasing) consumption (Jensen pers.communication). One explanation could be that a lesser amount of women are working outside home and thereby having time to manage the desalting process themselves. Another explanation is the deeply rooted connection between "bacalhau" and the Portuguese identity (Abel & Consiglieri undated). A good example is the export of "bacalhau" from Norway to France. Almost all of this "bacalhau" will be bought and consumed by Portuguese people living in France (Jensen pers.communication).

In over-sea markets the consumption is strongly related to the relative price of *bacalao*. Most of the salted and dried fish consumed in countries like Brazil and Jamaica are of Norwegian origin, and the exchange rate between Norwegian and local currency (contracts are mostly done in US dollars) have a profound impact on retail prices. Since *bacalao* is in the upper price range among food alternatives, the general situation in the domestic economy also influences the ability to buy these products (www.seafood.no).

Bacalao industry in Spain: Between tradition and new products

Contemporary trends in Europe show a decreased popularity of cured salted fish products towards more lightly salted, non-cured fish products with less distinct taste. People are demanding fresh/chilled products and consumer habits have evolved towards ready-to-use products. In addition there is, due to health issues, a substantial interest in a reduced intake of sodium (Gallart-Jornet *et al.*, 2003; Skjerdal, 2002).

The usual way to desalt cured (and dried) cod is to soak it in water for a period ranging from 24 to 48 hours depending on the thickness of the fish. The water should be changed at least twice a day and the fish should, at least in hot climates be kept refrigerated. While the consumers earlier desalted their fish in-house, the lack of time due to changing working and living patterns has made these products more inconvenient (*ibid.*). This is the main reason why the Spanish industry has started to substitute the traditional "*bacalao*" with a number of other products:

(a) **Lightly salted cod fillets quick frozen.** These products are made by injecting a solution of salt and water into the filets before they are frozen. Being lightly salted, the fish can be used by the consumer immediately after it has been defrosted. Products like these are very popular due to the convenience and the less distinct flavour of a truly cured and desalted cod. Due to the increased water content these products can be sold at very competitive prices. It is also easier to make fixed size and weight portions from the filets before injecting the salt solution thereby offering exact portion sizes. This reduces the time and effort spent in the kitchens and represents a very attractive alternative for restaurants and other catering establishments.

(b) **Partially desalted cured products made from *bacalao***, called "*bacalao tipo*

Inglés (English style *bacalao*). It is presented in different shapes (individual portions, tiny loins without bones and strips from belly flaps and tail). This could either be eaten raw or it could be soaked in water for a short period making it possible to use in *bacalao* dishes the same evening. This is a very attractive product in the South-Eastern Spain (Valencia-Alicante-Murcia). At the same time it is quite the opposite of what people demand in Madrid, Catalonia and in the Basque Country, where they prefer a saltier and whiter *bacalao* product (Gallart-Jornet *et al.*, 2004).

(c) **Ready-to-cook desalted cod made from *bacalao*** presented in different product forms (thick loins, individual loin portions, tiny loins without fish bones, tails, belly flaps, jaws/cheeks, etc.). These products are generally sold frozen due to the extreme vulnerability of the cod muscle when it is desalted.

Interviews: Traditional markets and Intermediates Barcelona: North-Eastern Medi- terranean coast of Spain

A survey done in two of the biggest consumer markets (conglomerates of specialty shops under the same roof mostly offering food stuff) in Barcelona underlined the complete Icelandic domination in this part of Spain. Here small stalls have been selling *bacalao* for generations. The *bacalao* is split into different products like loins, tails and strips ("migas"). Some of it is desalted, while the rest is sold to be desalted in the home of the consumer.

A total of 13 stall employees/owners were interviewed. 12 of them sold Icelandic *bacalao* exclusively. One stall offered both Norwegian and Icelandic *bacalao*. The reason for the dominance of Icelandic fish was, according to the respondents, the way the fish was caught and processed. The Icelandic fish was fresher and without blood spots. This gave a firmer, juicier and whiter *bacalao*, compared to the Norwegian.

Another advantage was that the backbone of the Icelandic fish was on the right side of the fish, resulting in a better loin yield. One of the respondent preferred Norwegian *bacalao*. She found it juicier and tastier. The reason for this was that the Norwegian was salt cured for a longer time than the Icelandic.

Bacallaneries Ràfols S.A., one of the *bacalao* intermediates in Barcelona is mainly producing desalted and frozen *bacalao* products. They prefer the Icelandic *bacalao* prior to any other origin, but as the respondent said:

"The problem is not the origin of bacalao, the problem is the quantity and what you can have and what you can choose, since the stocks and therefore the quantities of salted cod are decreasing, but there is still a high demand for this product. Iceland harvests 30 percent of the stock every year, which means they are taking care of the cod stocks and they provides us with an ensured quantity and good quality of salted cod such as winter cod with tight meat, etc. Therefore, our final product will always give the best quality, taste and colour. In Norway, however, there are very small quantities of fresh cod, the stocks are totally collapsed and therefore they have been forced to perform a biological stop, and they are not harvesting for a while. The small amount they can get is of poor quality, it is reasonable that we don't accept this level as the domestic bacalao either, but maybe Portugal accepts it."

Valencia and Alicante: Middle-Eastern Mediterranean coast of Spain

The Mid-South Eastern area is known to have the highest consumption of different salted fish products in Spain (Gallart-Jornet et al., 2004). They use brine dried salted tuna loins, brine salted tuna belly, dried

salted roes of different fish species, brine salted mackerel, dried-salted blue whiting, dried salted bonito, etc., in addition to *bacalao*. There is a characteristic demand for the partially desalted and golden *bacalao* ("*bacalao tipo Inglés*") which generally is consumed raw in many typical dishes. This product is very seldom consumed elsewhere in Spain (ibid.)

A survey done in the most important traditional markets in Valencia and Alicante (two of the three major cities in the Mid-South Eastern area of Spain), showed a preference for the domestically caught and produced *bacalao* called: "*bacalao nacional*" (cod caught by Spanish vessels in the Atlantic Ocean), and a shared market for Norwegian and Icelandic *bacalao*. People working at different stalls were interviewed, and all of them were asked to rank the 3 origins (domestic, Norwegian, and Icelandic). One respondent said the domestically caught and produced *bacalao* was the best for handling and cooking because of its taste and less thickness. The Icelandic was perceived better than the Norwegian because the Icelandic waters are colder and thus it gives a spongy product and loose flesh.

One of the respondents emphasized that most of the whole *bacalao* were sold with the labels of origin (National, Norwegian, and Icelandic). But from her point of view, the origin had no meaning after the *bacalao* had been transformed (desalted or partially desalted and dried and cut to various products) in the stall. It was then sold as "*Bacalao de Emilia*", "*Bacalao de Vicente*", "*Bacalao de Pepe*", etc. In this way, the stall owners guaranteed the product and wanted to create trust among its clients. Others confirmed this and said it was a way to compete with the large super- and hypermarkets.

Another respondent replied that the different *bacalaos* should be used differently:

"Icelandic bacalao is more convenient for consumption in white table cloth restaurants because it is whiter, thicker and after desalting is ready

for frying and for making more elaborate dishes. The domestic and the Norwegian are matured, thinner and tastier and more suited for «the average people» either to be prepared raw or cooked".

Other respondents commented that the Norwegian and the domestic *bacalao* were the best for making the "*Bacalao tipo Inglés*" because it gives a better taste and the attractive golden colour, compared to the Icelandic *bacalao*. The price of Icelandic *bacalao* was also so high that transforming it into "*Bacalao tipo Inglés*" was not profitable.

One of the important intermediates in Valencia (Pescafina S.A., dealing mostly with food chain retailers), insisted that every region has its own perception of what is the correct taste and colour:

"A good example is the traditional taste in Valencia (yellowish colour, slim, strong cured taste, "bacalao tipo Inglés") versus the "modern taste" in Barcelona (whiter colour, thicker, light taste). Some of the consumers actually prefer bacalao without any fish taste! Traditionally the domestic bacalao caught by Spanish ships are slim, have a yellowish colour and strong taste after being cured for a long time aboard the fishing vessel. Hence it is called the "golden bacalao" (bacalao dorado). Today most bacalao is thicker and softer; the maturation period is very short, resulting in white colour and neutral taste. Our main bacalao purchases are of domestic bacalao followed by the Norwegian or Icelandic depending on the price. It is evident that Iceland offers a product with more homogeneous quality and a higher price. The consumer seems to be willing to pay for this quality. The Norwegian bacalao does not have such a homogeneous quality between the different producers, which is my main complaint."

Another intermediate (Salazones Romà, S.A), mainly supplying catering businesses and traditional markets) had previously experienced problems with the Norwegian *bacalao* due to poor quality and/or heterogeneous quality. This company decided only to work with domestically caught *bacalao* for making the above mentioned "*bacalao tipo Inglés*" and the Icelandic for catering customers. But they are not fully satisfied with the Icelandic products, so far. There are frequent complaints about the way of salting which is mainly brine-salting instead of dry-salting used by the domestic and Norwegian producers. They are also suspicious about the way of processing and handling:

"it might be possible to add other additives during the processing (preservatives, artificial whiteners or water retainers) that could result in a whiter colour and higher water holding capacity in comparison with the domestic and the Norwegian bacalao. Consequently, after desalting, the product has less taste (due to the short period of curing) and a considerable lower yield compared to the national bacalao."

Representatives for the intermediates El Ancla, S.L. (working for department food store chains such as "*El Corte Inglés*", "*Carrefour*", and "*Eroski*") and Vicente Leal, S.L. (working for catering and traditional market) both from Alicante were also interviewed. They were asked if the traditional *bacalao* was only offered by small retailers and "the modern taste" *bacalao* was sold by the big supermarket chains. They agreed on the differences between the big retailers ("white, clean, tasteless *bacalao*") compared to the traditional markets ("golden, cured, tasty *bacalao*"). "*Bacalao tipo Inglés*" is much preferred in the Middle and South-Eastern area of Spain but since the big retailers only want to stock products with a national demand, it is difficult to convince them to also stock the traditional

products. One of the respondents "complained" about the great diversity of *bacalao* preferences within the same country and thereby having difficulties to make reliable market studies. Regarding the quality, he considered Icelandic as the best origin followed by Faeroe Islands and domestic *bacalao*. Norwegian *bacalao* was the least preferred.

Conclusion

In the Mid-South Eastern Mediterranean (Valencia, Alicante and Murcia) they have consumed many kinds of salted fish products since the Roman Ages. It is important to keep in mind that there is still high demand for "old fashion" *bacalao* even if the "moderen" taste for *bacalao* is present in the same market. The Icelandic focus on the Spanish market has lead to a total dominance in the economically important region of Barcelona. In Valencia, where fish from

domestic fishing vessels, Norway, Iceland and the Faeroe Islands are sold, the situation is much more diverse. Golden coloured, tasteful *bacalao* have a lot of aficionados in this area, and the consumption seems to be driven by tradition. For consumers looking for *bacalao* traditional style, domestic and Norwegian seem to be preferred. Icelandic *bacalao* is regarded as having very good quality, and is preferred in the restaurant segment. For the Norwegians it seems like an improved and more consistent quality would be the best strategy to better the position in the south-east part of Spain. This is probably the main reason behind the fact that one finds a price premium of 20-25 percent for Icelandic *bacalao* compared to Norwegian, even if the Icelandic contains more water (Anonymous, 2005).



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Noter

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