

THE MARKET FOR FARMED RED PORGY IN FRANCE, GREECE, ITALY AND SPAIN

FRANCE

A study made within the COLORED project (Contract Q5RS-31629)
"Environmental, nutritional, and neuroendocrine regulation of skin
colouration in the Red porgy (*Pagrus pagrus*) towards the
development of natural hue in culture populations"

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Project Summary

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| ENVIRONMENTAL, NUTRITIONAL AND NEUROENDOCRINE REGULATION OF SKIN COLORATION IN THE RED PORGY (<i>PAGRUS PAGRUS</i>), TOWARDS THE DEVELOPMENT OF NATURAL HUE IN CULTURED POPULATIONS | | |
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FRANCE

1. FRESH FISH IN FRANCE

1.1 IMPORTANCE OF FRESH FISH

The fish department in France is considered **as very important** by the major retailers, in order to project an overall good image of their stores to consumers. AUCHAN appears to be the retail chain which offers the biggest fish range in France. The fish department accounts for 2% of the store's turnover on average.

It is said that the French market has the reputation for searching above all for cheap products, contrarily to other EU countries.

1.2 THE ROLE OF MEDITERRANEAN FISH

1.21 CONSUMER TRENDS

Mediterranean fish accounts for an estimated 15% of the overall fish market in France. The main species consumed are sardine, tuna in particular, followed by sea-bream, grouper and sword fish.

Mediterranean fish **has been slightly declining over the years**. The decrease in availability is being felt more and more. Moreover, supplies are very irregular due to changing fishing conditions. This irregularity does not favour consumption.

The image of the Mediterranean fish is **not clear**:

- for some chains (e.g. CARREFOUR, AUCHAN), Mediterranean fish enjoys an excellent image. These fish have an image of « holidays », « exotic fish »...
- for others (e.g. CASINO), the consumer is unclear which species come from the Mediterranean. Some fish such as cod or angler are more clearly identified by the consumer.

Where a retailer's customers are mostly located in the west of the country (e.g. SYSTÈME U OUEST), their preference is for Atlantic fish.

1.22 CONSUMER PROFILE

The main consumer of Mediterranean fish **tends to live on the Mediterranean coast**, as cooking and eating requires a minimum of knowledge about these species. These fish require some degree culinary skill; it is not a convenience product.

The average consumer tends to be 45-50 years old, with a medium to high income level.

The frequency of consumption is difficult to estimate, however, it is probably around once to twice a month on average (less than for Atlantic fish). People who are really fond of fish will eat it once a week (especially if the price is low).

1.23 WAYS OF COOKING

Mediterranean fish tends to be baked whole in oven, or grilled on a barbecue. Less often, fish is steam-cooked.

1.3 PERCEPTION OF FARMED FISH IN FRANCE

The perception of farmed fish has been improving gradually as producers communicate about fish farming (mostly through posters in fish departments or at fishmongers).

However this is a slow process. The buyer tends to promote sales of wild fish more than farmed fish, and **the French consumer still believes that farmed fish is of lower quality and less healthy** than its wild counterpart. The average consumer believes that farmed fish brings less nutritive elements than wild fish, as it is not as natural. Moreover, farmed fish has suffered from the recent food scandals.

There is some fear about the fish feed used, especially regarding animal based meal that may have been given to the fish. Some buyers have doubts about farmed fish from abroad (Greece and Turkey) in terms of feed used as well as the integrity of the cold chain and sanitary conditions.

Price has a positive influence on farmed fish consumption. However, the consumer will sometimes prefer a wild sea bass at EUR 22/kg to a farmed sea bass at EUR 8/kg, even if it means eating sea bass less often.

Traceability is appreciated by the consumer and not put into question. Chains such as CARREFOUR and AUCHAN communicate about:

- the conditions of farming
- healthy feeding

- absence of growth promoters
- respect of the cold chain
- hygienic conditions in processing plants,

as these are all aspects which are strictly controlled by them.

It is important for producers to communicate about the extensive farming methods and the respect of animal life conditions in order for prejudice to disappear.

Buyers appreciate farmed fish as production is fully controlled, unlike wild fish. Products are considered as fresher than in the case of wild fish, due to the shorter distance from production sites to stores. Moreover supplies are regular.

1.4 NEW SPECIES INTRODUCTION

1.41 EXAMPLES OF SUCCESSES & FAILURES

What counts for the success or failure of a newly introduced species is:

- **its price.** For instance, farmed cod failed because it was too expensive compared to wild cod. The fish needs to be good value for money - as perceived by the consumer. For instance, a grouper is seen as an up-market fish and can be sold at EUR 23/kg
- **its appearance.** Silurid failed because of its low visual attractiveness (and high prices). Some species are not sold whole as they have an unattractive appearance. This is the case of the anglerfish, whose head is never shown. **The colours have to be attractive** as well
- **its exotic image.** African sole sells well. It is considered as “exotic” and has a good perceived value for money at EUR 11 to 14/kg. The same thing applies to Nile perch (EU 13/kg).

1.42 PRICE FORMATION

The consumer selling price is derived from various criteria :

- buying price, of course
- mark-up (20 to 30% in the case of retailers, 8 to 18% in the case of wholesalers, depending on conditions and species)
- consumer perception of value for money

- psychological price. Swordfish, for instance, is an up-market fish in the consumer's mind, hence its high price.

Thus, in the case of a hitherto unknown fish, the retail chain has to arrive at a price which can be acceptable to the consumer.

1.43 DEGREE OF BUYER RECOGNITION & FISH KNOWLEDGE

Table 1 indicates the answers given by the various interviewees when having to guess which fish were presented on 7 pictures. Names in italics indicate the wrong names given by the interviewees.

| Photo n° | Fish names | Retailers' answers | | | | Wholesalers' answers | | | Others |
|----------|-------------------------|-----------------------|------------------|-----------------------|------------------|----------------------|-----------------------|------------------|---------------|
| | | Retailer A | Retailer B | Retailer C | Retailer D | Wholesaler A | Wholesaler B | Wholesaler C | |
| 1 | Morocco dentex | Dentex | Does not know | Does not know | Does not know | <i>Red porgy</i> | Dentex | Does not know | Dentex |
| 2 | Blue-spotted seabream | Blue-spotted seabream | Does not know | Blue-spotted seabream | <i>Sea-bream</i> | <i>Sea-bream</i> | Blue-spotted seabream | <i>Sea bream</i> | Does not know |
| 3 | Pink dentex | Does not know | Does not know | Dentex | Dentex | <i>Sea-bream</i> | Does not know | <i>Sea bream</i> | Does not know |
| 4 | Gilt-head seabream | Sea-bream | Does not know | Sea-bream | Sea-bream | Sea-bream | Sea bream | Sea bream | Sea-bream |
| 5 | Mediterranean red porgy | Does not know | <i>Sea-bream</i> | <i>Sea-bream</i> | <i>Sea-bream</i> | Red porgy | Does not know | Red porgy | Sea-bream |
| 6 | Farmed porgy | Does not know | <i>Sea-bream</i> | <i>Sea-bream</i> | <i>Sea-bream</i> | Does not know | Sea bream or porgy | Does not know | Sea-bream |
| 7 | European seabass | Seabass | Seabass | Seabass | Seabass | Sea bass | Sea bass | Sea bass | Seabass |

Table 2 translates these answers into figures, to assist us in drawing conclusions.

| Photo n° | Fish names | Retailers' marks | | | | Wholesalers' marks | | | Others | Average |
|----------------|-------------------------|------------------|-------------|-------------|-------------|--------------------|--------------|--------------|-------------|-------------|
| | | Retailer A | Retailer B | Retailer C | Retailer D | Wholesaler A | Wholesaler B | Wholesaler C | | |
| 1 | Morocco dentex | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0.38 |
| 2 | Blue-spotted seabream | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0.38 |
| 3 | Pink dentex | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0.25 |
| 4 | Gilt-head seabream | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0.88 |
| 5 | Mediterranean red porgy | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0.25 |
| 6 | Farmed porgy | 0 | 0 | 0 | 0 | 0 | 0.5 | 0 | 0 | 0.06 |
| 7 | European seabass | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Average | | 0.57 | 0.14 | 0.57 | 0.43 | 0.43 | 0.64 | 0.43 | 0.43 | 0.46 |

0: wrong answer or no answer at all

1: right answer

From these two tables one can say that:

- Common wild red porgy is **generally unknown** to French buyers, who generally mistake it for a sea-bream.
- None of the buyers interviewed **recognized the farmed porgy** (apart from one wholesaler, who was not sure whether it was porgy or sea-bream) and they generally mistook it for sea-bream.

- Dentex and blue spotted sea-bream are **slightly better known** by the various operators.
- Gilt-head sea bream and sea-bass are **the two fish which are best known** to the buyers.

Clearly, fish buyers make many mistakes when asked to recognize pictures of fish.

2. RED PORGY SALES

2.1 SALES TRENDS

Red porgy **sales are very low in France**. AUCHAN, which seems to be the French chain which sells the most red porgy, sells 120/130 tonnes of red porgy a year. METRO sells 130 tonnes a year, mostly to caterers. Some chains have decided not to sell red porgy because of the irregularities in supplies.

Sales are **stable** or slightly increasing. AUCHAN has decided to develop its porgy sales and is making a particular effort in that direction, as is METRO. Sales are not monitored by any consumer panel in France.

It seems that consumption is slightly higher in the south of France, because of proximity to the red porgy fishing in the Mediterranean.

2.2 ORIGIN

The French catch of red porgy is a maximum of 2 tonnes a year, all the rest of consumption is imported, mostly from **Africa** (from Mauritania in particular) **and South America** (Brazil in particular). French fished porgies are mostly destined to the catering sector. It appears that Moroccan porgy, which is of excellent quality, is too expensive for the French market.

Wholesalers represent 90% of the total supplied.

2.3 SIZE AND PRICE

The most common size is 300g-400g and over 800g.

The average selling price is EUR 10 to 11/kg (for a EUR 4.20-4.90/kg wholesaler price). When detailed by size, the producer prices are the following ones:

- less than 400g: EUR 4.4/kg
- 400-600g: EUR 4.7/kg
- over 800g: EUR 6.8/kg

2.4 STRENGTHS AND WEAKNESSES OF WILD RED PORGY

| Strengths | Weaknesses |
|-------------------------------------|--|
| Reasonable prices of imported porgy | Unknown to the consumer |
| Good margin for the retailer | High prices of French produced porgy |
| | Direct competition with seabream |
| | Irregular production supplies |
| | Sales mostly in June/July (lower prices) |
| | Problems of transport |
| | Necessity of strong commercial promotion |
| | Taste put into question |
| | Short shelf life |

Red porgy is effectively **unknown to the French consumer**. Only fish experts know it. There is thus a strong promotion campaign to carry out. It is important to note that professional and buyers do not know it well either and often confuse it with seabream.

French production porgy prices are high (EUR 11/kg in 2001/2002 rising to EUR 16/kg in 2002/2003). Imported porgy prices are considered as "reasonable".

Producing countries do not necessarily have airlines adapted to fish transport. The problem with red porgy is that it has a short shelf-life and loses its colours quickly.

Moreover there are production peaks in countries like Mauritania in June and July, which brings a steep decline in prices during those 2 months.

The taste of red porgy is questioned: it is considered by some retailers as an exquisite product, while for others it has less taste than a grouper.

However, **buying prices of imported porgy are low**, which makes it possible for the retailer to get realise margins, a distinct advantage.

2.5 COMPETING FISH

Red porgy is mostly competing with sea-bream as they are similar in appearance. It is a common mistake among retail buyers to mistake red porgy for sea-bream. Sea-bream is available in much larger quantities than red porgy and has regular supplies.

Red porgy is competing with dentex at fish mongers.

3. FARMED RED PORGY

3.1 DEGREE OF KNOWLEDGE OF THE FISH

The buyers **sometimes** know the existence of farmed red porgy (CARREFOUR, AUCHAN for instance), but it is unknown to non-specialists in general.

There is no farmed red porgy in France.

3.2 STRENGTHS AND WEAKNESSES

On top of the weaknesses already mentioned for wild red porgy - essentially the lack of consumer recognition, and hence the need for considerable promotional efforts - farmed red porgy would suffer from the global problem that customers still prefer a wild fish.

However, it would also **benefit from the advantages of all farmed fish**: regular supplies, and rapid delivery from farm to store.

3.3 DIFFERENCES IN COLOUR

Retailers would be reticent to have wild and farmed red porgy in the department at the same time, otherwise the farmed red porgy prices would have to be fixed at a much lower level than that of wild red porgy.

4. CONDITIONS FOR A SUCCESSFUL FARMED RED PORGY OFFER

4.1 NAME

According to almost all operators interviewed in France, farmed red porgy has to be sold under the name “porgy”. The fact that the French name for the fish (pagre) has no connotation of colour means that the name can be retained for the farmed variety. Obviously, it has to be specified that the fish is farmed.

4.2 OPTIMAL SIZE AND COLOUR

There are two alternatives in terms of size:

- either a big fish to be shared between 4 people
- or single portion sized fish.

Retailers and wholesalers seem to be orientated towards larger fish (over 600g) which offers a better valorisation. There seems to be a real demand for a bigger size, in catering in particular.

The appearance/colour is important to the consumer as the way the fish looks is the first criterion of choice, even in the case of farmed fish.

However it seems that a **red colour is not fundamental**, as the general public does not know wild porgy.

Some buyers think that the colour should not be grey, but red or pink, because it is more attractive. Others consider that it could be grey, providing it is an attractive grey... Some buyers mentioned its nice blue colour !

4.3 OPTIMAL SUPPLIER

Retailers tend to favour European origins such as France, Greece, Italy and Spain.

4.4 OPTIMAL COMMUNICATION

Positioning farmed porgy could be difficult, considering that the general public does not know its wild counterpart anyway. It is thus important for there to be a **strong communication campaign** for the general public.

It is the role of producers - and not of retailers - to communicate to the consumer and make red porgy known. Retailers can only communicate on quality, taste and safety, and it must fit with their global marketing strategies.

4.5 OPTIMAL PRICE

It would probably be advisable to start selling farmed porgy along with price promotions (EUR 7-9/kg instead of EUR 12/kg, regular selling price). The product will have to be **competitively priced** to succeed (at least 10% cheaper than wild porgy), otherwise the product will have problems on the French market - unless the product has an exceptionally good taste.

Retailers/wholesalers are ready to pay EUR 4 to 5/kg to producers.

4.6 INFORMATION REQUIRED ABOUT THE FISH

Information has to be provided by the farmers. The information required to sell farmed red porgy is the same as for any other farmed fish, covering:

- farming methods (including feed and medicines used)
- slaughtering
- packaging,

along the usual specifications. Some retailers (e.g. CASINO) require OGM free feed.

4.7 POTENTIAL CONSUMER

The typical consumer for this kind of fish would probably have to be:

- knowledgeable about fish
- curious to know a new species
- someone who can cook
- and would probably be middle aged.

One wholesaler indicated the ethnic market as the most obvious one, since African consumers know this fish better than French ones.

4.8 VOLUMES EXPECTED

Volumes that could be expected are difficult to estimate. Sales indicated by interviewees were **between 50 tonnes and 100 tonnes at best per operator and 500 tonnes overall.**

It is rather unlikely that farmed porgy will take market share away from wild porgy, because of the negative prejudice that the consumer has against fish farming.

5. CONCLUSION

All the buyers GIRA interviewed already sell wild red porgy, even if they are in small, stable quantities, coming from Africa and sometimes South America (Brazil).

They would be ready to introduce farmed red-porgy into their range, however:

- it is absolutely necessary to develop a **major communication campaign** to make the fish known to the general public (and to the buyers also to a certain extent, as they do not know farmed porgy either)
- the **red colour is not fundamental** for farmed porgy, however its colours must be **attractive**
- its **positioning has to be clear** in order to get the right balance between perceived quality and price. It would be possible to focus on its “exotic” image and its rarity. Its price will strongly depend on the image created by the communication campaign as well as by the fish's taste. It would be advisable to have a **lower price than that of its wild counterpart**
- even if buyers appreciate farmed fish because it is easier to manage than wild fish, **consumers still prefer the wild counterpart**
- good **traceability** is a pre-requisite for a farmed fish to be listed by a retailer
- wild imported red porgy are acquired by retailers at relatively low prices, so retailers/wholesalers are currently ready to pay only EUR 4 to 5/kg to producers of farmed red porgy
- farmed porgy will probably sell better if in sizes greater than 600g, for a better valorisation.

Farmed red porgy cannot expect to reach more than 500 tonnes per year in France, unless it is made more widely known to the consumer.