# SHORT FOOD SUPPLY CHAINS IN BARCELONA'S MARKETS

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#### ABSTRACT

The relationship between the city of Barcelona and the surrounding countryside has always been partly responsible for shaping the territory. Throughout history, the supply of food to the city has been shown to be the principal vector connecting these two settings. Within the city of Barcelona, food supply was traditionally linked to its immediate hinterland. However, starting in the 1960s, with the adoption of the productivist agricultural model, the commercial range became greatly expanded. Together with other factors, this seriously threatened much of the city's agrarian hinterland. In recent years, this has started to change. Given the increased geographical mobility of the population and the lack of knowledge of the agricultural world, tendencies to revalorise the environment and the territory surrounding the city have emerged. These movements are committed to maintaining farming activity and heavily promote local consumption. In this work, we study how "local food" is represented in one of the most important examples of the traditional commercial fabric of the city of Barcelona: the municipal markets. To this end, we selected a sample of the 39 food markets in the city and identified the stalls that sell this type of produce. We established a typology of products, of traders according to their interest and involvement, and of consumers. Our results show that, although local produce is advertised in many of the stalls in the markets we visited, there is considerable variation in the concept of "local", in the quantity and type of food products on offer, and in both the commitment of the traders to local produce and the consumer demand for it.

Keywords: local food, urban municipal markets, Barcelona.

### 1 INTRODUCTION

For decades, many academics who specialise in the rural world have spoken of the confrontation between the globalising industrial food model and alternative food models [1]-[4]. Among the alternative proposals, commitment to more environmentally friendly and socially just agricultural production has grown in recent years. Taking these two premises into account, it has become necessary to interpret the new models of production, distribution, marketing and consumption; what we can generically call "local food". This local produce can even be considered as an example of a backlash against the prevailing industrial agri-food model [5] which is controlled by market forces. Thus, in turn, industrialised markets can be seen to control our food, which is becoming increasingly unrelated to consumers' immediate settings. As a consequence, our culinary traditions, often based on the consumption of fresh and seasonal food, are losing the importance they once had [6].

Here, we aim to show the degree to which local food products are available in a traditional commercial framework: municipal markets. Such establishments are an institution that is certainly in no way exclusive to the city of Barcelona, despite the fact that some consider it to be "the city with the greatest number of markets in the world" [7]. Indeed, there is a universal character to municipal markets: they have their own rules and are highly social places that serve different functions [8]. There are many different embodiments of this typical establishment in the city of Barcelona, which vary depending on factors ranging from the geographical location itself to the socioeconomic profile of the area they serve. In addition, we will analyse the concept of "local food" that different market traders have.



# 2 METHODOLOGY

We adopt an essentially qualitative methodological approach. First, we carried out a literature search for work that addresses the subject of municipal markets and the typology of local food products, and we reviewed the results. In the light of this, we designed a semi-structured interview concerning local produce and how both market traders and consumers relate to it. Finally, the responses were collated and analysed, and we interpreted the results in order to present them.

We decided to work with just a sample of the 39 municipal food markets in the city of Barcelona. In order to achieve broad geographical coverage, we selected 10 markets: one from each of the ten city districts or boroughs (see Fig. 1 for location of selected markets). We conducted a total of 38 interviews with market traders working with different types of food (fruit and vegetables, fish, poultry, fresh meat, processed meat products and eggs). The duration of the interviews varied greatly due to the range of interest and degree of involvement of the traders. Moreover, they were conducted *in situ* on working days and so most of them were interrupted by the need to attend to customers. Despite this, most of the interviewees were very receptive and interested in the study (see Table 1 for a typical interviewee profile).

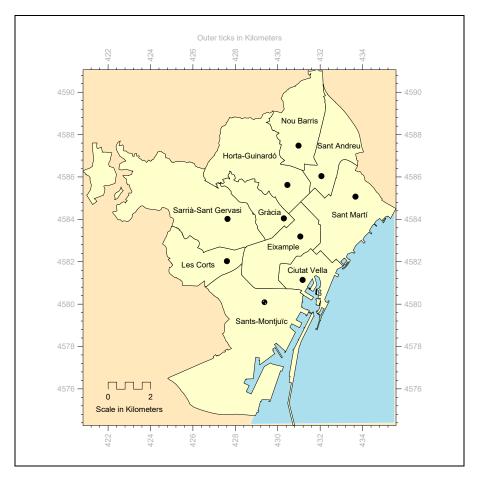


Figure 1: Barcelona's city Districts and location of 10 selected markets.



Sex	Female
Age	46–60 years
Size of stall	11–20 m <sup>2</sup>
Age of business	> 50 years
Number of workers	2–5
Main products	Fish and seafood, meat and meat derivatives, fruit and vegetables

Table 1: Profile of a typical interviewee

## 3 BARCELONA, A CITY OF MARKETS

Municipal markets came into being in Barcelona over a hundred years ago in response to the growing problem of supplying demand for fresh produce within the city. Their ultimate goal was to offer the city's population a broad and reliable range of products, within the context of increased political concerns for public sanitation and hygiene. The model was very popular in the city and the municipal markets grew in importance as the population increased. This growth was the result of the city becoming consolidated as a first-order industrial and service centre. It was not until about thirty years ago that the city's markets started to fall into decline, due mainly to changes in patterns of consumption. Thus, this business model fell under threat from changes in product preferences, a timetable that restricted opening to the morning, an aging clientele linked to the massive incorporation of women into the labour market and, most importantly, competition from other operators: supermarkets, specialist shops and department stores [9].

The municipal markets in Barcelona are 180 years old, although of course food markets date from much earlier and evolved in parallel with the very first growth of the urban area. In the Mediterranean world, the agora first and the forum later functioned as places of exchange for all kinds of products. After the gradual expansion of trade over several centuries, real growth did not come to fairs and markets until the Middle Ages, when some became periodic meetings of merchants in urban centres that were well connected to their surrounding territory [10]. In the 19th century, industrialisation and urban growth inevitably led to the expansion of food markets, driven by the growing need for food. During the 20th century, markets around the world evolved very differently, depending on the city where they were and on the socioeconomic context of the country, they were in.

The first permanent market in the city of Barcelona dates from the 10th century, although the current model of municipal markets first took form in the 19th century, as laid out in the Urban Planning Ordinance [10]. This was the time when many of the city's most emblematic markets appeared: La Boqueria (1840), Barceloneta (1884), Santa Caterina (1888). From the last part of the 19th century and throughout the 20th century, numerous municipal markets came into being in the city. They would go on to have very different fates. Some became consolidated hubs of commercial or tourist activity, such as the markets of Santa Caterina or La Concepció. Meanwhile, others simply disappeared, as in the case of the markets of Vallvidrera and Carme: swallowed up by competition from renewed more flexible trading guidelines that were adapted to the timetables of workers, and the opportunities presented by improvements in local and regional transport.

Since the early 1990s, Barcelona's municipal markets have been the responsibility of the Barcelona Municipal Institute of Markets (Institut Municipal de Mercats de Barcelona). This is a self-governing body that functions as a subsidiary of Barcelona City Council. In this period, more than half of the municipal markets have been overhauled and modernised. This restructuring has involved infrastructures being updated, commercial offers being adapted, supermarkets being introduced into dedicated areas and new services being incorporated. Overall, the social and environmental functions of the markets, as well as the roles they play within the city, have been reinterpreted [10].

Barcelona's markets currently generate 7,500 jobs; they occupy a trading area of 60,901 m<sup>2</sup>, accounting for 26.6% of the commercial offer in the food sector; and they have an annual turnover of over €950 million [7], [8], [10]. In addition, the 39 markets receive a total of 62 million visits per year. According to the latest Barcelona municipal survey, the city's markets are the first choice of consumers when it comes to buying fresh food; although they lag far behind supermarkets in more general terms of food; the preferences of buyers lie on supermarkets when food is considered as a whole category.

## 4 THE PRESENCE OF LOCAL PRODUCE IN BARCELONA'S MARKETS

As a result of the in-situ interviews we conducted with market traders, we can describe and interpret the presence of food from short supply chains in Barcelona's municipal markets. In this section, we consider the conception of local produce, the classification of products according to geographical range, and the strengths and weaknesses of these products in the opinion of the market traders.

# 4.1 Short food supply chain and local produce: traders' nuances

Establishing a single definition to refer to local produce is a rather complex task. The manifold and specific characteristics of each type of product, the range of geographical characteristics, the varied socioeconomic and environmental relationships that occur in the different territories and at the different scales in question [5], together with political ideology and the historical moment, make complete agreement on this issue almost impossible. However, the "short supply chain" concept can generate a greater degree of consensus; although, it is not without its ambiguities either.

For the topic we are dealing with here, the perspective that is introduced according to the type of establishment, and therefore the type of product, is of considerable importance. This means that the responses to the interview varied depending on whether the interviewee ran a fish stall, a butcher's stall or a fruit and vegetable stall. These were the three main categories covered in this work, as they are also the most common in Barcelona's markets. In general, we can say that for many of the respondents, the precise meaning of "local" was somewhat complicated; although we can glean some overall results. The notion of "short food supply chain" turned out to be even more complex, since the terminology was new for most of the interviewees. Notwithstanding, once the meaning was clarified, most of them considered that a short supply chain would be one that consisted of no more than three links in making produce available to consumers.

For products from the sea, on several occasions the territorial dimension of "local" was equated to speaking of the Mediterranean Sea. The most common reference was to what was the neighbouring area: the Mediterranean Sea as a unifying and defining element of this part of the world, and also of the sentiments of traders in a coastal city such as Barcelona (see Fig. 2). Many times, when asked by the interviewer "the whole of the Mediterranean Sea?" the respondent would offer a limit that was highly variable and ranged from the areas where

fishing boats captured the fish sold by them (almost always, very close to Barcelona) to an idea of the Mediterranean Sea that stretched beyond Spanish territorial waters. Another frequent response was the use of the concept of "costal fish" to refer to the catches of inshore fishing. With regard to a short food supply chain, there were two classifications identified in the responses. On the one hand, there were stallholders who mostly bought their fish from Barcelona's central wholesale food market (Mercabarna) and who, therefore, introduced at least one intermediary into the supply chain. On the other hand, there were fishmongers who purchased supplies, at least in part, directly at the fish auctions organised at nearby ports by the local fishers' guilds. In the latter case, this was the main argument offered to clarify what they understood by quality; adding that arriving straight at the stall, without intermediaries, should be considered as the most important added value of such products.



Figure 2: Fish stall with the local sign. (Source: Image by the authors.)

When it came to fresh meat products, the responses tended not to clarify the reference scale. There was a fairly even division between those who considered "local" to refer to the whole of Spain and those who limited "local" to the region of Catalonia. The issue of the origin of meat and the extent to which it can be considered local proved to be rather difficult to resolve, and numerous variables related to the concept of quality emerged. The idea of quality was associated with geographical origin (where the highest accolades went to Galicia for beef, Aragon for lamb and Andalusia for kid), but it was also linked to the breed of the animal as well as to livestock management practices and proximity to distribution channels (feeding methods, distance to slaughterhouses, etc.). It was in this context that the concept of a short food supply chain was once again introduced; although, as we have said, most of the interviewees were not familiar with the term. However, once the concept had been clarified, they were quick to establish a threshold for considering a product to come

through a short supply chain. This can be summed up in a statement made by one of the stallholders "the meat is brought to me from the slaughterhouse in Caldas de Montbui [a town 35 km from the centre of Barcelona] and that means that from the farmer, it only passes through two sets of hands before it arrives at my stall (...)".

Fruit and vegetable sellers mostly thought that "local" meant from the region of Catalonia. For this type of produce there was, however, a greater variety of local scales offered – from specifying the central coast of Catalonia to specifying the province or the metropolitan area of Barcelona. There were even traders who quantified in kilometres how far "local" stretched: one cited exactly 100 km as the limit; while another extended that distance to 200 km. Once again, conceptualisation of short supply chains was, from the start, more complicated. In fact, for some interviewees, the short supply chain was reduced to the distance between the producer and the market stall. We should note that some of the respondents owned agricultural plots and therefore channelled their produce through their own stalls and offered their personal experience as an example of a short supply chain.

# 4.2 Products and their origin

Almost all the interviewees stated that they sold the type of produce that we address in this work. In this section, we specify the origins given for the produce included in the three food groups applied in the previous subsection: fish and seafood; meat and meat products; and fruits and vegetables.

With respect to the establishments that sell fish and seafood, we can summarise the situation by saying that market traders defined as local produce the smaller species that some called the "seasonal catch". This term refers to the natural cycles of the appearance or of these species or of their entry into the fishing grounds near the Mediterranean coast, and includes hake, Merluccius merluccius; red mullet, Mullus surmuletus; prawns, Aristeus antennatus; and mantis shrimp, Squilla mantis. In general, they also used the names of fishing ports where the catch is landed as geographical references to limit what can be considered local: Palamós, Sant Carles de la Ràpita, Blanes, Roses, Tarragona or Benicarló. All except for the last of these are on the coast of Catalonia. As an example of how complex the identification of marine products sometimes is, with respect to the framework of territorial identity, we can cite the use of "local" when used to refer to the clam known in Barcelona as "rosellones" (Chamelea gallina). It is a common and popular shellfish in this area, where it is often caught in the Gulf of Lion: in French waters. However, this trader differentiated these clams from the equivalent catch in neighbouring Italian waters, in the Gulf of Genoa, which were not considered to be local. In the stallholder's words: "we could generally say that chirlas are local produce, they come from the Gulf of Lion; what happens is that there are times when the distributor at Mercabarna only has them from Italy". Therefore, in both cases, the origin was outside Catalonia and even Spain. However, as a result of the traditional shared use of neighbouring fishing areas between ports in the north of Catalonia and the south of France, there is a genuine sentiment that produce from the latter is still local.

The responses of those running butcher's stalls tended to use a variety of scales when referring to products as being of local origin. They often included regions that were some distance from the point of sale. In this way, the beef that was sold in these establishments and considered to be local ranged from a distance of just over thirty kilometres away at its closest (the town of Granollers and the Alt Penedès area were explicitly mentioned) all the way to the region of Navarre. So, as we have already said, conceptual differences were more than evident (see Fig. 3).

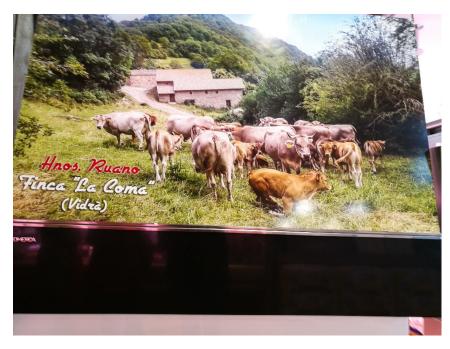


Figure 3: Sign in a market stall identifying the origin of livestock in the village of Vidrà, 105 km from Barcelona. (Source: Image by the authors.)

In the case of lamb, the situation was somewhat different. Here, no specific Catalan towns or areas were included in the responses. When stallholders mentioned local produce, they generally referred to places outside Catalonia, with relatively frequent remarks concerning Aragon: a region that borders on Catalonia. Only occasionally did generic responses mention Catalonia. There may be several factors that explain this difference. One would be the lack of a tradition of eating the local sheep breeds in Barcelona. Another is the preference for other Spanish breeds of lamb that are popular in their places of origin and are requested by clients originally from those regions who moved to Barcelona many years ago. Finally, there has been a tendency for sheep and goat farming to be substituted by beef farming throughout all the northern mountain ranges of Spain over the last century or so.

When considering goat meat, the origin was almost never classified as local: only one informant considered Almería (about 550 km from Barcelona) as local. The reasons given for this are similar to those in the case of lamb but are even more pronounced. There is only one breed of goat native to Catalonia, the Rasquera White, which is found in mountainous areas in the south of Catalonia and is currently endangered [11]. Moreover, in the city of Barcelona the consumption of goat meat has always been limited. Finally, regarding fresh pork, we can only say that the interviewees offered few responses referring to local produce, with the province of Girona being the most common response.

With regard to greengrocers and fruit stalls, we note that this is the commercial sector in which the respondents suggested the narrowest range for "local". Most focused on the proximity of the products in the regions surrounding the city of Barcelona, frequently mentioning Maresme (see Fig. 4), Baix Llobregat and Vallès Occidental. The names of towns within the Barcelona metropolitan area where some horticultural and fruit produce has a very good reputation among consumers were also mentioned frequently: artichokes from El Prat de Llobregat or cherries from Sant Climent de Llobregat, for examples. At a farer scale, other place names were also mentioned, especially the neighbouring provinces of Lleida and Girona; these references were almost always limited to fruit (particularly apples and pears). For citrus fruit, the limit increased to the south of the province of Tarragona and the north of the province of Castellón, immediately south of Catalonia. We should say that normally the origin of this type of produce is not displayed at the market stalls, and it is only if the customer asks the stallholder that they can know where it is from.



Figure 4: Tomatoes in a market stall with identified origin in Mataró municipality, 35 km from Barcelona. (Source: Image of the authors.)

As we mentioned above, some of the interviewees told us that they had they own farms or plots in neighbouring areas, and they commercialised their produce through their own stalls. In this case, the traditional horticultural zones in the Barcelonan conurbation delimited perfectly the area of production: the delta of the River Llobregat, the coastal plains and foothills of the coastal mountain range in the Maresme, and the plains of the Vallès basin.

# 4.3 The pros and cons of local produce and of short supply chains for traders

In the last part of the interview, we asked stallholders for their opinion of local produce. For this, the interviewees were required to list local produce and to comment on the advantages and disadvantages they thought it had, if they so wished. Broadly speaking, and without distinguishing between types of produce, the advantage that was without a doubt most commonly mentioned was that local produce is fresher. In contrast, the most common negative concept was its elevated price. We should also note in terms of a general overview that almost a third of the interviewees did not mention any inconvenience at all when talking about local produce.

By category of establishments, fishmongers placed emphasis on a concept that is always closely related to the world of fishing and fish: freshness. This can therefore be seen as an indispensable quality when it comes to assessing the quality of fish and seafood. At the opposite end of the scale we had the higher prices paid for products from local Catalan fishers; some respondents said that it was twice the price of the completion.

For the butchers, the most commonly cited advantages of local produce referred to the quality of the meat. For many of them, local meat is of higher quality and that has an indirect impact on precisely what was considered the most common negative aspect: the higher price of this type of produce. They positively assessed the fact that closer production reduces the time that the different meat products need to be in refrigerated facilities. Thus, making the supply chain shorter had a positive effect on the quality of the produce and this resulted in consumer safety and satisfaction.

Among fruit and vegetable traders, there was a widespread idea that the freshness of local produce is the most important positive factor that singles it out. One of the interviewees referred to this in the following terms: "... the quality of the fruit we sell here [referring to their own stall] cannot be compared with that of fruit sold in supermarkets, which undergoes many more processes of manipulation after leaving the orchard or field; the fruit we have at the stall is fresher, we treat it better". Many of the stallholders also mentioned the element of trust that local produce generates in their customers, who generally associate local fruit and vegetables with increased quality. On the downside, these traders talked of insufficient quantity of some products to cover the growing demand for them, and also the seasonal variability of some.

# 5 CONCLUSIONS

In broad terms, from this work we can conclude that, after going through difficulties at the end of the last century, Barcelona's municipal markets seem to have found their place within the city's complex commercial fabric. To reach this point, over recent years different City Council institutions have designed a series of strategies for the markets. These include differentiation of the products on offer, through promoting both proximity to the consumer of businesses and traders, and local food, which has experienced different degrees of acceptance and commercial success among both traders and consumers.

Analysis of this last issue shows how the concepts used by traders to refer to what constitutes local produce are varied and involve a degree of complexity that on occasion is rooted in aspects as personal as one's individual political beliefs (which were mentioned by some of the respondents) or one's philosophical outlook on life. The allusions to models of sustainability or the use of inclusive and exclusive distance scales, as well as specific place names, offer good proof of this. The concept of short food supply chain is not used much; in fact, all the interviewees referred to the issue as concerning proximity or local produce. However, delimitation of a short food supply chain turns out to be less problematic than setting a numerical or administrative distance limit on what counts as "local".

The type of product we are dealing with influences to a great extent, not only the geographical range, but also the very conception that traders have of what counts as local produce. Within the commercial spheres of fishing and of fruit and vegetables, many different references are made to what is local. In contrast, meat stallholders seem to adopt reference scales that corresponded more closely with formal provinces or regions that can be easily identified by most of the population. It could also be inferred from the interviews that a short supply chain is more easily differentiated in the case of meat and fruit and vegetable products.

We can conclude that for most stallholders, local produce is synonymous with fresh products. For the typical trader, the most commonly accepted meaning of "quality" involves precisely products being as fresh as possible and also being accepted by the customers. Thus, local produce would be high quality fresh products. Despite this general consideration, some



different opinions were also expressed to justify the use of products from places that may be much further away, and always with very high standards. In these cases, however, the products were popular and sought out by clients, especially in meat establishments when referring to certain types of meat, and also in the case of fishmongers, very clearly referring to shellfish.

## **ACKNOWLEDGEMENTS**

This research took place within the framework of the Spanish Programme for Research, Development and Innovation (Programa Estatal de Investigación, Desarrollo e Innovación) addressing social challenges, as laid out by the Spanish Ministry of Economy, Industry and Competitiveness (Ministerio de Economía, Industria y Competitividad), with reference number CSO2017-88935-R; and the Grup de Recerca Consolidat 2017-SGR-25 of the Generalitat de Catalunya.

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