Figure 1. The park with market. Source: G. Damiani, C. Moretti, 2020.

ALIMENTAR EL BARRIO: FARMERS' MARKET, A NEW OPPORTUNITY TO DRIVE CHANGE

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In Barcelona, food markets have always been a symbol of the city. In recent decades, by adapting to new forms of consumption, they have conformed to large-scale distribution, selling only a small percentage of local farmers' products. Through the project described below—"Alimentar el Barrio"—actions have been undertaken to support farmers, by improving the current market system with low-impact micro-interventions. The research describes a way to create a new "system" of market making to promote local culture and products, thus regenerating the urban space, driving communities towards responsible food consumption, and spreading best practices. This paper shows how design and communication can provide farmers with an adequate physical and culture-driven infrastructure, to increase their competitiveness and decrease inequalities of the large-scale distribution.

farmers' market / urban regeneration / systemic approach / behaviour change/ co-design

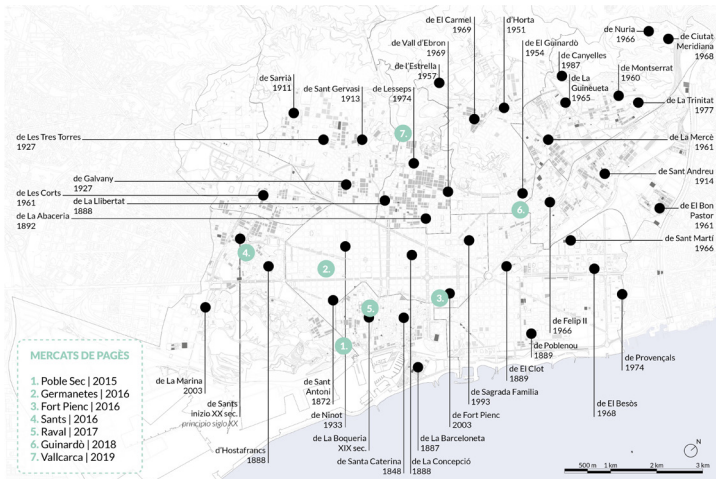

Figure 2. Municipal and farmers' markets in Barcelona. Source: G. Damiani, C. Moretti, 2019.

The food sector contributes the 30,0% of total energy consumption and is responsible for the 20,0% of greenhouse gas emissions worldwide (FAO 2011a, p. III). While a significant environmental impact in this sector occurs from the production phases, people contribute to it through dietary choices and by generating waste (UN 2015, SDGs 12); indeed, one-third of food gets lost or wasted globally (FAO 2011b, p. 4). To respond to this linear economic model a change is needed—a sort of "paradigm shift" as Thomas Kuhn defined it— through a series of achievements shared by a community to define problems and solutions (Kuhn 1962): little daily actions, such as the establishment of ethical purchasing groups and the opening of urban gardens. In considering this, the paper focuses on Barcelona as a city with several realities linked to the local food system and one of the European pioneers emerging as a "sustainable food city". This especially relates to the engagement of city authorities with different food actors through a horizontal decision-making process, in order to observe the system of water-energy-food as a crucial driver for sustainability (Covarrubias, Boas 2019, p. 4). In this context, the 39 food markets of the city stand out for their relevance, and for being a symbol of the city (Soler 2013, pp. 31–34). The first market dates back to the tenth century, yet it was during the twentieth century that the number grew considerably (Soler 2013, pp. 24–25). However, according to a City Council study (Ajuntament de Barcelona 2009, p. 11),

Figure 3. Installation set up for the participatory laboratory. Source: G. Damiani, 2019.

in recent decades the municipal markets have conformed to the large-scale distribution to adapting to new forms of consumption: 42,0% of the volume comes from "Mercabarna", the food polygon management company, and only 7,0% directly from farmers. In recent years, a parallel phenomenon has been emerging: the Mercat de pagès (Fig. 2), a new network of farmers markets for distributing proximity products, managed by local associations and taking place on a weekly basis. As spontaneous initiatives, they are often "at risk" because of a reduced participation and a lack of services.

MERCAT DE PAGÈS AND THE "PARC DE LES TRES XEMENEIES"

Barcelona counts seven farmer's markets[1], which have the ability to revitalise—using low-cost equipment—the urban spaces in which they stand, both in central and peripheral areas. However, they are usually lowly attended due to social degradation and mismanagement of public space. By buying at these markets, citizens can support local agriculture while, indirectly, reducing carbon emissions (Maulèon 2011, p. 56), and thus could contribute towards emerging scenarios for a low-carbon city: Barcelona, indeed, has been recently launching the plan to fight climate change, the Pla Clima 2018–2030 (Ajuntament de Barcelona 2018), which includes

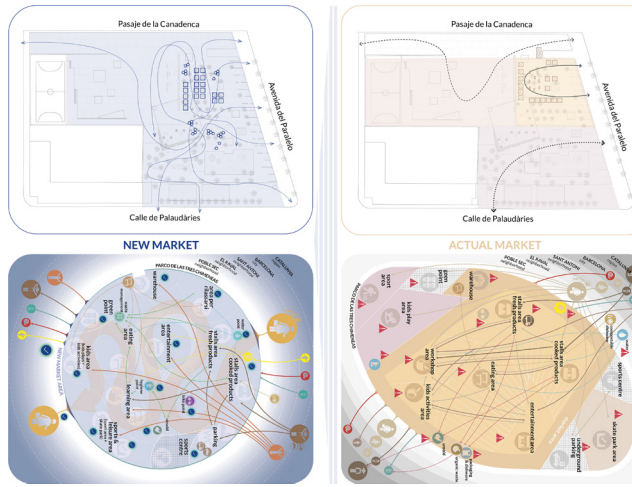

Figure 4. Architectural and systemic schemes. Source: G. Damiani, C. Moretti, 2019.

the Super-Blocks programme. This programme fosters physical and digital urban spaces where local networks interact for building a better place to live[2].
Considering these scenarios, we developed the research project "Alimentar el Barrio" in collaboration with ELISAVA School of Design and Engineering, joining the platform Design for City Making[3], started in 2017 to launch projects for the sustainable transformation of the city (Elisava 2019), and focusing on the Super-Blocks topic (Manzini 2019). The project area consisted of the "Parc de les Tres Xemeneies" in the Poble Sec neighbourhood, a place characterised by a strong historical identity linked to the old power station La Canadenca, subject to repeated restoration works4, yet little perceived by the local community. Every Saturday it hosts the Slow Food Mercat de la Terra (market n. 1, showed in Fig.2). During the market event the park is fully exploited, remaining instead in a state of decay during the rest of the week (Fig. 1).

ALIMENTAR EL BARRIO

The case study investigation, resulting from a six-month residence in the Catalan city under the scholarship "Premio Barcellona[5], is based on the acquired research data, the analysis of the city's commitment towards eco-transition and the devel-

Figure 5. Experimental market organised on 1 February 2020. Source: G. Damiani, C. Moretti, 2020.

opment of a participative process. The project goals consisted in improving the urban spaces for a better interaction between farmers and consumers, orienting communities towards a more responsible consumption as well as spreading best practices on resources management, such as guided recycling or public water consumption. We experimented on a pilot farmers market, collaborating with Slow Food Barcelona and local farmers. A participatory workshop (Fig. 3) was organised over three Saturdays by placing a stand in the middle of the market area. Users were invited to express an opinion by using a model to design their ideal market and by leaving suggestions on post-it. Even if the market was recognised as a key point for buying local and healthy food, certain critical points were highlighted: unaware consumers, low participation during the activities, deteriorated infrastructures, lack of connection in-between the different areas of the park and with the surrounding neighbourhood.

Two approaches were applied for the project intervention (Fig. 4):

1. "Architectural", for the spatial regeneration and the design of new furniture. As a result of re-organising the stalls setup, the market can integrate with the other existing areas in the park (see Fig. 4), avoiding visual barriers and creat-

ing a single integrated space. In addition, the project includes a primary analysis, with a performance requirements summary, for the future construction of new modular, removable, and self-built furniture dedicated to an educational path about responsible consumption.

2. "Systemic", for the reformulation of the market service. It concerns new paths for the flow of people and materials in accordance with a re-distribution of stalls and activities. This intervention is necessary to exploit the potential of each area in the park, and to encourage ecological behaviours by using communication tools (i.e. posters explaining the programme of activities). A new market management was designed for a more collaborative network, in which each territorial actor makes its own contribution: local associations, market's staff, and citizens, with their behaviours, can contribute to the market success.

According to the project guidelines, the experimental market was organised on 1 February 2020. On this occasion, the following actions were put into practice: spatial re-arrangement of stalls and relax areas by designing a new grid, info-point, five reference points (water, bathroom, hand washing, bike, recycling), connection to the municipal electricity (instead of using petrol generator), agreement with local parking to store farmers' vans and use the toilets, as well as with associations to held environmental activities (creative recycle, reusing scraps to new recipes and wasted oil to produce soap).

CONCLUSION

In line with the United Nations SDGs, agreed by 193 countries in 2015, the systemic market responds to "Goal 12: Ensure sustainable consumption and production patterns", by promoting local and seasonal products, drastically reducing the use of non-renewable fossil energy for goods transport, and protecting biodiversity. Proximity agriculture combined with a well-designed and oriented service can become, indeed, a responsible alternative. For this reason, the Mercat de Pagès will be a key place for the sustainable future of the city, not only to promote healthy food consumption, but also to trigger economic opportunities for local trade and farmers, strengthening the fight against climate change. As such, it is necessary to provide farmers with the right tools to become real levers for change. This is particular relevant also in view of Barcelona becoming World Capital of Sustainable Food[6], around the topic "Growing resilience: sustainable food societies to cope with the climate emergency" (Ajuntament de Barcelona 2020). Finally, the presented research identifies possible future scenarios for upscaling to a system

of market making to the whole city of Barcelona, by considering the expansion of the Super Block city programme.

FOOTNOTES

1 For the list and descriptions of the farmers markets: Ajuntament de Barcelona (n.d.) Mercats de pagès. Política alimentària. Available on line at: https://ajuntament.barcelona.cat/economia-social-solidaria/ca/politica-alimentaria-mercats-de-pages. [Accessed 20.07.2019].

2 See: Ajuntament de Barcelona (n.d.) Presentació. Superilles. Available on line at: https://ajuntament.barcelona.cat/superilles/ca/presentacio. [Accessed 23.08.2019].

3 A programme of design initiatives driven by Elisava, in collaboration with different partners and coordinated by the Director Prof. Albert Fuster, Prof. Roger Paez and Prof. Ezio Manzini (Politecnico di Milano).

4 See the history and the redevelopment process of the park by the Les Tres Xemeneies per al barri (n.d.), available at this link: http://les3xemeneies.cat/historia/

5 The scholarship was offered by the Italian Ministry of Foreign Affairs and the Ministry of Cultural Heritage and Activities, represented on the Catalan territory by the Instituto Italiano de Cultura de Barcelona (Premio Barcellona 2019).

6 Since 2015 Barcelona takes part in the Milan Food Policy Pact, an international pact supported by FAO and signed by 210 cities from all over the world to develop sustainable, fair, and healthy agri-food models.

BIBLIOGRAPHY

Ajuntament de Barcelona (2020) Servei De Premsa, Barcelona Serà La Capital Mundial Per A L'Alimentació Sostenible El 2021. Available on line at: https://ajuntament.barcelona.cat/premsa/2019/10/09/barcelona-sera-la-capital-mundial-per-a-lalimentacio-sostenible-el-2021/. [Accessed 26.11.2019].

Ajuntament de Barcelona (2018) Servei de Premsa, El millor Pla Clima de les grans ciutats europees. Available on line at: https://ajuntament.barcelona.cat/premsa/2018/10/10/el-pla-clima-de-barcelona-rep-el-reconeixement-com-a-millor-pla-de-les-grans-ciutats-europees/. [Accessed 10.07.2019].

Ajuntament de Barcelona (2009) Impacte Econòmic directe de la Xarxa de Mercats Municipals de Barcelona, p. 11.

Covarrubias M., Boas I. (2019) "The making of a sustainable food city in Barcelona: insights from the water, energy, and food urban nexus". In: Journal of Integrative Environmental Sciences, p. 4.

Elisava (2019) Design for City Making. Available on line at: https://www.elisava.net/en/news/design-city-making-0. [Accessed 12.09.2019].

Food and Agriculture Organization (FAO) (2011a) Energy-Smart food for people and climate. Rome, FAO.

Food and Agriculture Organization (FAO) (2011b) Global food losses and food waste – Extent, causes and prevention. Rome, FAO.

Istituto Italiano di Cultura di Barcellona (2019) Premio Barcellona. Available on line at: https://iicbarcellona.esteri.it/iic_barcellona/it/avvisi/amministrazione-trasparente/premio-barcellona.html. [Accessed 30.06.2019].

Kuhn T. (1962) The Structure of Scientific Revolutions. Chicago, University of Chicago Press.

Les Tres Xemeneies per al barri (n.d.) Història. Available on line at: http://les3xemeneies.cat/historia/. [Accessed 03.10.2019].

Manzini E. (2019) DxCM/3 ELISAVA, Draft 1, Super Block Scenario (SBS) Barcelona, Introductory thoughts. Internal notes. Unpublished.

Maulèon J. R. (2011) "Mercados de Agricultores en España: diagnóstico y propuesta de actuación". In: Revista de Estudios sobre Despoblación y Desarrollo Rural 13. Saragozza, pp. 53–84.

Milan Urban Food Policy Pact (2015). Available on line at: http://www.milanurbanfoodpolicypact.org. [Accessed 22.07.2019].

Premio Barcellona I Edizione, Alimentar El Barrio (2019). [Exhibition]. Institut Italià de Cultura de Barcelona. 19 December 2019 – 7 February 2020.

Soler Novàs C. (2013) Mercat Municipals. Una eina de potenciaciò del camp?. Barcelona, Revista Soberanía Alimentaria, Biodiversidad y Culturas.

United Nations (2015) Obiettivo 12: Garantire modelli sostenibili di produzione e di consumo. Available on line at: https://unric.org/it/obiettivo-12-garantire-modelli-sostenibili-di-produzione-e-di-consumo/. [Accessed 24.06.2020].