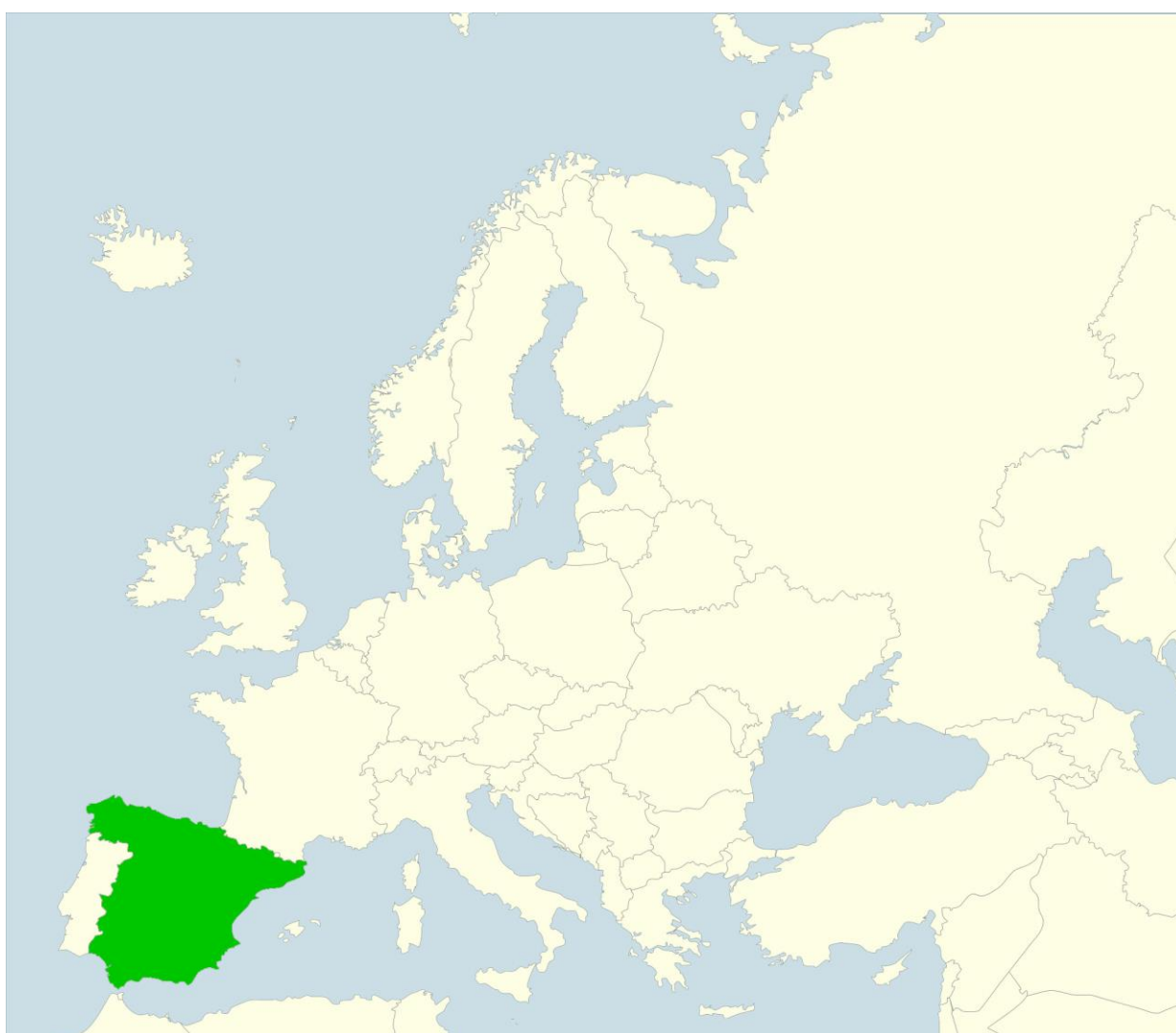


SOCIAL RETURN AND ECONOMIC VIABILITY OF SOCIAL FARMING IN CATALONIA: A CASE-STUDY ANALYSIS

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Abstract: In Europe, Social Farming (SF) and agritourism are multifunctional agriculture activities that arise when agricultural land is abandoned in rural and peri-urban areas; it is difficult to develop commercial agriculture if it is not intensive. In our research, we studied SF in Catalonia, carrying out a census and classification of 161 initiatives and a more in-depth analysis of 10 projects (or 9 in some cases), identifying their viability and the economic, social, and environmental return on investment (SROI) for the resources used in each case. The methodology included questionnaires, in-depth interviews, and Canvas and SROI analyses. Although SF has developed in many European countries, it is incipient in the Iberian Peninsula. The projects in Catalonia combine agrarian activity, socio-health care and social policies, with the aim of offering innovative solutions to the needs of different groups at risk of social exclusion.

Key Words: Ecological Agriculture, Canvas, Catalonia, Multifunctional Agriculture, Periurban Areas, Social Exclusion, Social Farming, Social Return of Investment (SROI)

Resum: *Retorn social i viabilitat econòmica de l'Agricultura Social a Catalunya: Una anàlisi d'estudi de casos.* A Europa l'agricultura social (AS) i l'agroturisme, són activitats de l'agricultura multifuncional a Europa que sorgeixen quan s'abandona l'espai agrari a les àrees rurals i el periurbà, on és difícil desenvolupar l'agricultura comercial si no és intensiva. En la nostra investigació hem estudiat l'AS a Catalunya, fent un cens i classificació de 161 iniciatives, i amb una anàlisi més profunda de 10 projectes (o 9 en alguna anàlisi), buscant la seva viabilitat, així com el retorn econòmic, social i ambiental de les inversions (SROI) en relació als recursos emprats en cada cas. La metodologia utilitzada inclou qüestionaris, entrevistes en profunditat, i les anàlisis del Canvas i l'SROI. L'AS s'ha desenvolupat en molts països d'Europa encara que és incipient a la Península Ibèrica. Aquests projectes combinen l'activitat agrària, l'atenció sociosanitària i les polítiques socials amb l'objectiu d'oferir solucions innovadores a les necessitats de diferents col·lectius en risc d'exclusió social.

Paraules clau: Agricultura ecològica, Agricultura multifuncional, Agricultura social, Àrees periurbanes, Canvas, Catalunya, Exclusió social, Retorn social de les inversions (SROI)

1. Introduction

Social Farming (SF) is defined broadly as a process of social inclusion and empowerment of groups at risk of social exclusion (RSE) through their employment in agricultural activities. These activities add new meanings (beyond production) to agricultural practice, providing a specific social function that improves quality of life for vulnerable populations. It offers an employment opportunity for at-risk groups that incorporates them into the agricultural workforce and social structure of the community, while also improving physical and mental health, autonomy, self-confidence, economic independence, and interpersonal relations, among other aspects of life. These processes of inclusion of RSE groups in SF are based on job creation, education and training, therapy, and / or community engagement.

Generally, SF is a phenomenon in the agricultural space of rural and peri-urban areas of Europe and North America (Hassink, 2006), although it is beginning to expand in core urban areas through projects such as community gardens, social gardens, or recovery of abandoned land for household gardens (Lohrberg, 2016; Pölling, 2017). In rural areas, SF projects benefit communities by improving social and health services, favouring value-added transformation and commercialization of agri-food products, increasing social cohesion, and contributing to a local economy that puts people at the centre and promotes the common good (Guirado, 2014).

The SF phenomenon is quite heterogeneous because of the characteristics of the entities involved, the legal structure of the projects, public-private financing and collaborations, and the applicable social policies (Tulla, 2014). The multiple forms of SF throughout Europe reflect differences between countries in models of implementation, socio-health care systems, the type of actors/agencies involved, the social welfare context, and project financing and management. All of these elements also contribute to local and regional configurations of the sector (Esping-Andersen, 1996; Di Iacovo, 2009; O'Connor, 2010; Guirado, 2013). In this article, we will refer briefly to the origins of the SF concept and to its development in Catalonia, but we focus on analysing its economic and social viability and the social return on investment (SROI) through the study of 10 selected cases.

2. Conceptualization of Social Farming

For decades, the agricultural space has been experiencing profound transformations (Marsden, 1990; Hoggart, 2001; Woods, 2005). The industrialization of agriculture after World War II led to significant changes in traditional farms in order to maximize production (Bowler, 1992; Lockwood, 1999), marginalizing "noncompetitive" performers and relegating them to abandonment. In the 1980s, the productivist transition lost influence and the transition toward a new stage –agricultural postproductivism– began with the incorporation of new functions in agriculture that would diversify the rural economy within the third social sector (TSS), giving rise to multifunctional agriculture such as SF initiatives (Ilbery, 1998; Armesto, 2005) that would diversify the rural economy. These projects are mainly developed by TSS agents such as cooperatives, associations, private foundations, health centres, and charities (O'Connor, 2010).

The SF phenomenon is extensive and well consolidated in Europe, where agrarian activity, socio-health care, and social policies come together to provide innovative responses to the needs of at-risk groups (Guirado, 2018). However, as Di Iacovo points out (2010), there is a clear differentiation, both in the stage of SF development and the typology of the initiatives, between the models implemented in central and northern Europe and those of southern Europe. In the former, the government plays a predominant role in developing and regulating SF, depending on the nature and state of maturity of the phenomenon (Di Iacovo, 2010; Guirado, 2013; Tulla, 2015). The state sets clear guidelines for SF activity, encourages the creation of institutions to support its development, establishes specific budget lines for sponsors and for the entities that provide socio-health care, and provides public subsidy programs for the population served. On the other hand, in the southern countries where SF is an emerging phenomenon, the state occupies a subsidiary position – except in the case of Italy, where a specific law was passed in 2015² – and it falls to the TSS and other entities to promote the sector and establish support networks, as in Spain (Guirado, 2014; Guirado, 2018), Portugal (Firmino, 2011; Da Silva, 2015), and Greece (Galiakis, 2014). Thus, the same activity can take on various forms depending on the territorial context, at the same time creating multiple concepts that shape a complex and heterogeneous phenomenon (Hassink, 2003; Hassink, 2006; Hine, 2008; Di Iacovo, 2009; Sempik, 2010).

The *Green care* (GC) concept, for example, covers a wide group of activities that use natural elements to promote and sustain physical, mental, social and educational well-being (Haubenhofer, 2010; Sempik, 2010). *Green care in agriculture* (GCA) is the term used for agrarian work, on agricultural land, with an element of physical and mental health promotion among the participants. This includes therapeutic and rehabilitation services, as well as health promotion and socio-health care, with a wide spectrum of social groups but focused on the most at-risk groups (Dessein, 2013). Quality of environmental landscape is an important condition for these approaches (Pallarès-Blanch, 2014).

Care farming (CF) began in the United Kingdom (UK) in the 21st Century, taking on the name that was being used in The Netherlands (Leck, 2014). It is defined as the use of conventional farms and agricultural landscapes as key elements of physical and mental health promotion

² Gazzetta Ufficiale de la Repubblica Italiana, Legge 18 August 2015, n. 141. Available at: <http://www.gazzettaufficiale.it/eli/id/2015/09/8/15G00155/sg>

(Hine, 2008). The main CF emphasis is therapeutic, although some initiatives focus on education, occupational therapy, or social integration (Hassink, 2006). The objective is to create personal development and rehabilitation opportunities for vulnerable individuals (Sempik, 2010), including those with a physical disability or a mental disorder, addiction, or learning disability, or school drop-outs, homeless individuals, or those who have served time in prison. A differentiating characteristic of CF is that a traditional farm setting provides the socio-health services; the users receive integrated care and carry out activities specific to farm work, land management, and maintenance of the property (Leck, 2014). Users pay to access the services provided by these centres. According to Dessin (2013), the public health system sometimes takes responsibility for their funding, or costs may be paid by private health insurance. Di Iacovo and O'Connor (2009) noted that CF users receive the needed care from qualified personnel, in order to ensure satisfactory progress. Leck (2014) emphasizes that, in the UK, the *care farmers* are professionals with specialized training and experience in socio-health care, which they combine with farm work for personal and/or professional reasons.

Finally, *Social Farming* (SF) has been defined by various authors. In generic terms, SF comprises activities and services related to therapy, inclusion, rehabilitation, education and training, and workforce participation using agricultural resources to promote health, mainly in rural and peri-urban areas (Di Iacovo, 2009). According to other definitions, SF is the use of conventional farms and agroforest landscape to promote individual's mental and physical well-being (Hassink, 2003 and 2006; Hine, 2008), offering people at RSE important benefits in many areas -health, social, educational, and employment- through agriculture (Sempik, 2010). Finoula and Pascale (2008) have contributed new elements, considering that SF is comprised of a group of practices that combine direct care for socially vulnerable groups with agricultural work. These groups are characterized by a need for personal dignity or freedom, a key element of the SF concept that frames the type of farm work that is done and emphasizes the empowerment of individuals who feel marginalized.

An analysis of the different terminology used shows evidence that certain boundaries can be established, even though the concepts are all very closely related. First, we note that health promotion is a key element of both GCA and CF, occurs in the farm context, and provides socio-health care. On the other hand, SF initiatives have objectives such as social employment, therapy, or education of RSE groups and focus more on high quality food products, with the goal of creating economically viable businesses. A key element of SF projects is the empowerment of these at-risk individuals, improving their quality of life and advancing their skills, self-confidence, and participation in social, economic and political life. In most cases, empowerment is achieved by social employment, whether in agriculture or a related sector. In some situations, SF provides not only a job opportunity but also the opportunity to be part of a group project, participating in business-related decision-making. This activity makes an important contribution to independence and self-esteem.

Other differences between these types of initiatives are found in the mechanisms and characteristics of access to services. In CF or GCA projects, those who benefit pay for the care and services they receive, either in full or in part, based on the health system in each country and the individual's personal situation. In most cases, those who benefit are not part of the organization; they receive services during a specific period of time and then depart. In contrast, in SF projects the work with at-risk groups continues for a longer time, with more integrated care and paying attention to multiple aspects of daily life, not only to the health care needs that are to be met. In most cases, SF beneficiaries are paid for their work.

The similarities between these concepts are evident, despite a lack of clear consensus about the differences between the terms and the limits of their applicability. Some authors have observed that these concepts refer to the same phenomenon but reflect different adaptations of terminology based on each territorial context (Dessein, 2013; Leck, 2014; Guirado, 2017). For the present study, a new definition of SF was compiled from the literature: *a series of experiences that utilize local agricultural and/or natural resources to improve the health, education, social employment and empowerment of groups at risk of social exclusion*. The main beneficiaries are individuals with specific workplace needs due to disability, long-term unemployment, poverty, or a prison sentence and/or a need for treatment or rehabilitation

services (Guirado, 2014). These needs may be related to some type of addiction, domestic violence, mental disorder, post-traumatic stress, a learning disorder or other specific educational need at any age (children, young adults, older people) or other reasons for at-risk status (homelessness, recent immigration, etc.). Another important factor, in addition to improving the participants' quality of life, is the territorial relevance of SF (Tulla, 2017), given that the practices contribute to the creation of new strategies of local development, new alliances between agriculture and socio-health care, and new models of care and general well-being. In addition, SF inspires new services may become available to the rural population, where they may be much less available than in urban areas, and supports proximity agriculture that is high in quality and ecological, with the added value of social justice (Di Iacovo, 2013).

3. Social Farming in Catalonia

Catalonia has a population of 7,477,131 (2017 data), of which 3,183,900 (42.6%) individuals are actively employed, 50,800 (1.6%) of them in the agricultural sector (IDESCAT, 2017). The agricultural land use, including pastures and cultivated areas, has decreased from 1,869,203 ha (1997) to 1,125,268 ha (2013). The number of farms and livestock operations has also decreased, from 68,944 (1997) to 59,097 (2013), with small farms disappearing while the largest expanded. This situation contrasts with the agrarian multifunctionality of some rural and peri-urban areas, where local agro-ecological development, social innovation, and the development of quality products are promoted. A database designed by our research team contains records for 206 SF and garden centre projects. Most of the 161 SF projects are engaged solely or partially in small-scale agriculture; the remaining 45 initiatives are mainly garden centres (Figure 1). Only SF projects were analysed in this study.

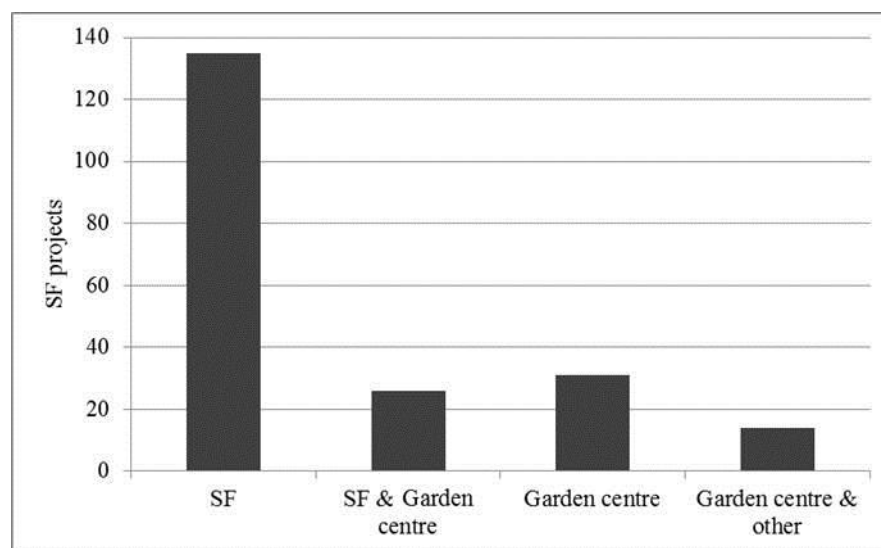


Fig 1. Distribution of types of social farming (SF) and garden centre projects in Catalonia, by primary activity (n=206). Source: Own development

A statistical and cartographic analysis of the data produced an “x-ray” of the SF sector in Catalonia, based on seven key factors: type of services, specific activities, beneficiary groups, legal structure, and type of RSE group engagement, ecological production criteria, and change in the number of the entities over time, based on the year each project was established.

A map of these entities shows that garden centres are concentrated in the Barcelona Metropolitan Area (indicated by green areas, Figure 2). This area also has a greater number of vulnerable individuals, better resource availability, and proximity to potential consumers. However, SF projects are present throughout Catalonia, mainly located in peri-urban and rural areas (Sempere, 2008), with the exception of the more peripheral rural areas such as the Alt Pirineu and Aran and the Terres de l'Ebre. A garden centre has land to grow flowers and grass basically for the urban landscape. Meanwhile, SF centres grow fruits and/or vegetables. SF centres, with a complex organization, integrate more people at RSE than garden centres which

are more orientated to gardening services, private or public, with a simple structure of the enterprise.

Considering the type of services (Figure 3), SF focuses on social and occupational engagement (46%), which allows new job opportunities for RSE groups. The social gardens (45%) phenomenon is currently expanding in Catalonia, in response to the social precariousness and emergency situations due to the economic crisis that began in 2008. This typology resulted from the efforts of social movements, citizen initiatives, or local administrations to support individuals or families facing precarious situations. The less-frequent service areas are therapy or rehabilitation (5%), often working with people who have some type of addiction, and education and training (4%), usually preparing young people who left school prematurely to enter the workforce.

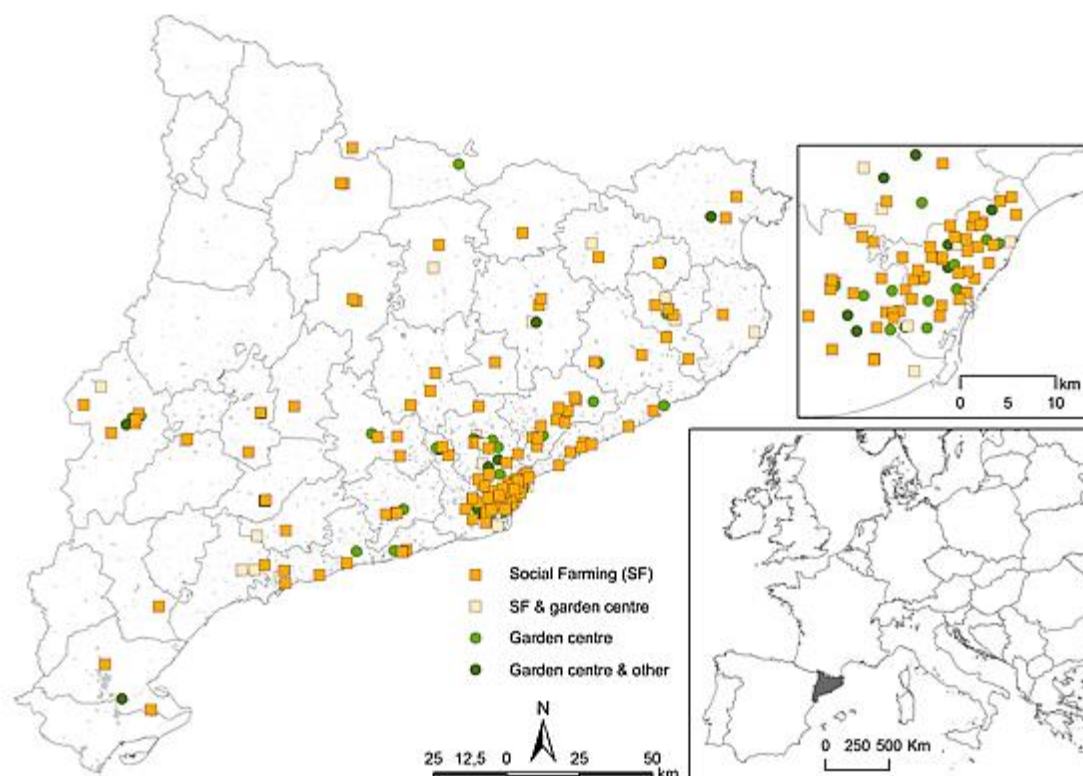


Fig 2. Territorial distribution of SF and garden centre projects in Catalonia, by activity. Source: Own development, based on information from Institut Cartogràfic i Geològic de Catalunya (ICGC)

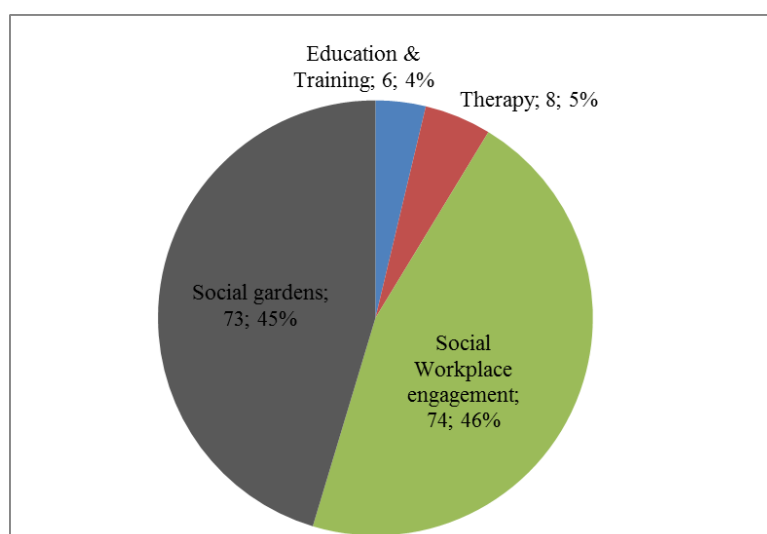


Fig 3. Distribution of Social Farming initiatives according to scope of action. Source: Own development

As shown in Figure 4, a large number of SF projects have agriculture as the main activity (77%), usually horticultural initiatives, although some cultivate olive trees, vineyards, or mushrooms. Value-added agri-food initiatives (8%) include projects that make jams and preserves, artisan beer, or dairy products such as yoghurt or cheese. Some projects provide work in forestry and forest management (7%); others work in the services sector (6%), such as short-circuit marketing of agricultural products (e.g., Farm to Table). Finally, some are focused on craft activities (1%) or the livestock sector (1%).

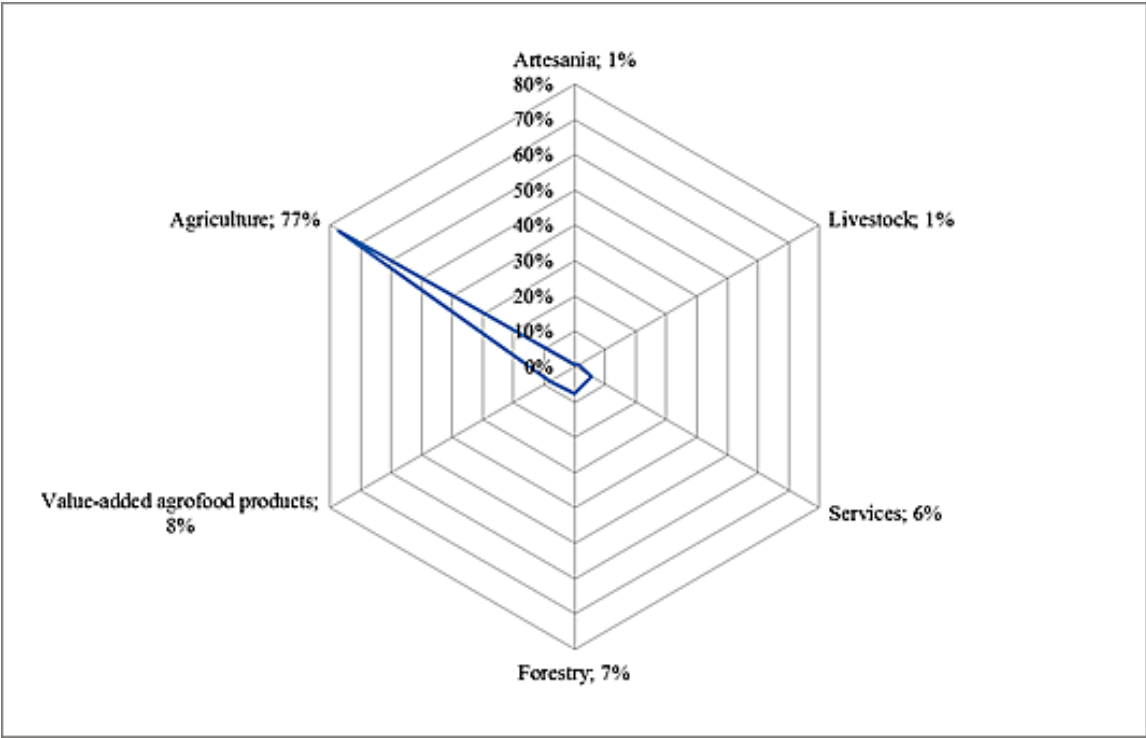


Fig 4. Distribution of Social Farming projects, by activity. Source: Own development

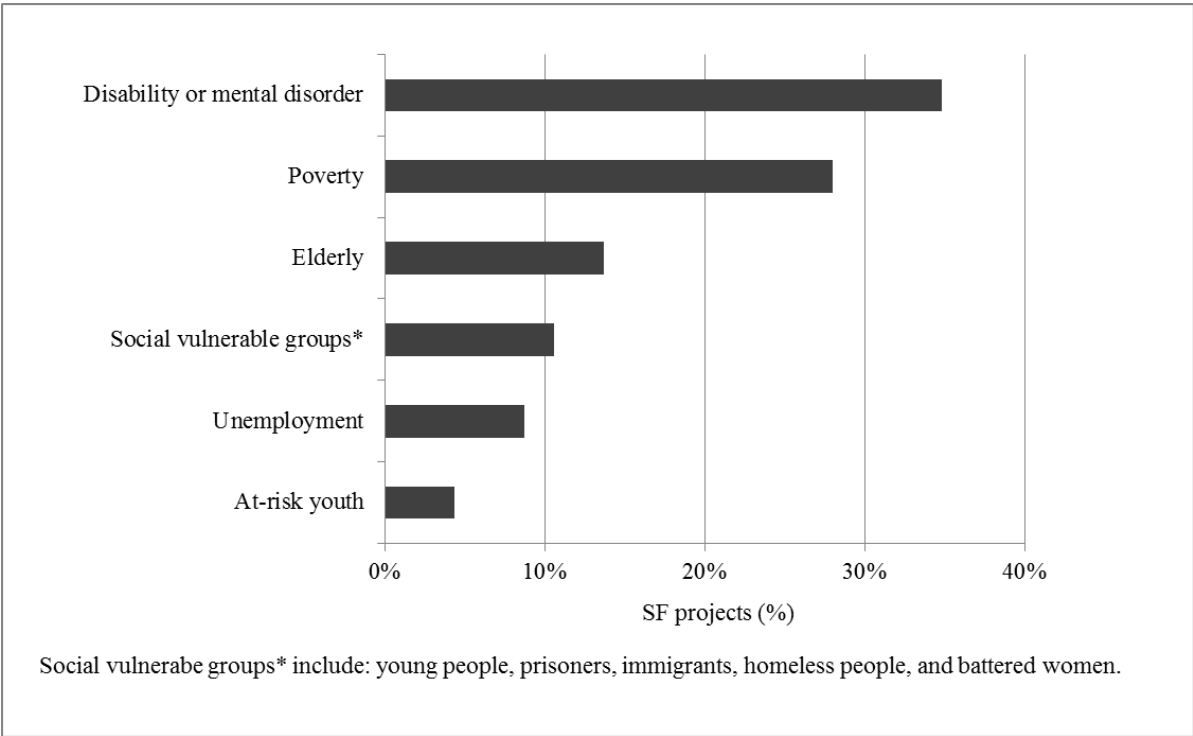


Fig 5. Distribution of Social Farming projects, by type of beneficiary group. Source: Own development

Until the financial crisis began in 2008, people with disabilities and/or mental disorders were most often the group that benefited from SF initiatives in Catalonia (now 35%; Figure 5). In the past decade, other RSE groups began to appear that were previously represented poorly or not at all, such as people in poverty (28%) or unemployed (9%). This reflects efforts to promote options for finding employment through agricultural work or being able to grow one's own food. The older population is another new group (14%), due to recent legislation that facilitated the creation of garden plots for retirees, mainly in metropolitan areas (Faus, 2012). Other socially vulnerable groups receiving SF services include young people, prisoners, immigrants, homeless people, and battered women (11%).

The largest cluster of legal entities (Figure 6) is non-profit organizations, either foundations (14%) or associations (23%). In addition, private institutions of the TSS that have a clear social and welfare function may be structured as private companies (14%) or cooperatives (12%). A third group consists of agencies supported by a public administration (37%), which lately have taken a more active role in implementing SF initiatives at the local level; the creation of social gardens is a clear example. Most of these projects involve collaboration between the public and private sectors, promoting social cohesion, the solidarity economy, and resilient, sustainable, local development (Estela, 2015).

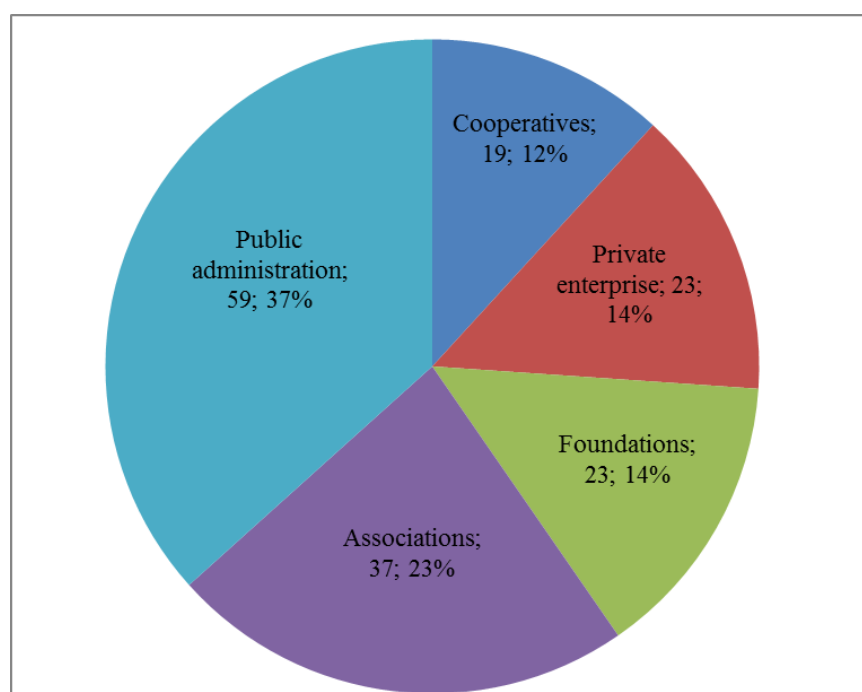


Fig 6. Distribution of Social Farming projects, by legal structure. Source: Own development

Figure 7 shows the diversity of the social inclusion models used by SF projects. Reflecting the heterogeneity of the SF sector, the modality depends on the groups benefiting from each project and the applicable legislation. The largest model (31%), Special Employment Centres (in Catalan, *Centre Especials de Treball* [CET])³, provides paid work for people with disabilities, guaranteeing their integration into a protected work environment. These ad hoc entities are created for people with physical, intellectual, or sensory disabilities, and can be public or private. Second (13%), we find Protected Worksites (in Catalan, *Empresa d'Inserció* [EI]), which prioritize the socio-workplace integration of people with RSE, preparing them for the labour market or other processes. Other models, such as Occupational Therapy Services (2%) or Occupational Centres (CO), are intended to facilitate entry into the ordinary labour market for people with difficulties.

³ Special Work Centres, or *Centres Especials de Treball* (CET) in Catalan, are regulated by 1985 Royal Decrees of the Spanish government (2273/1985, 4 December, and 1368/1985, 17 July), available at: <http://bit.ly/2cLh6S6>

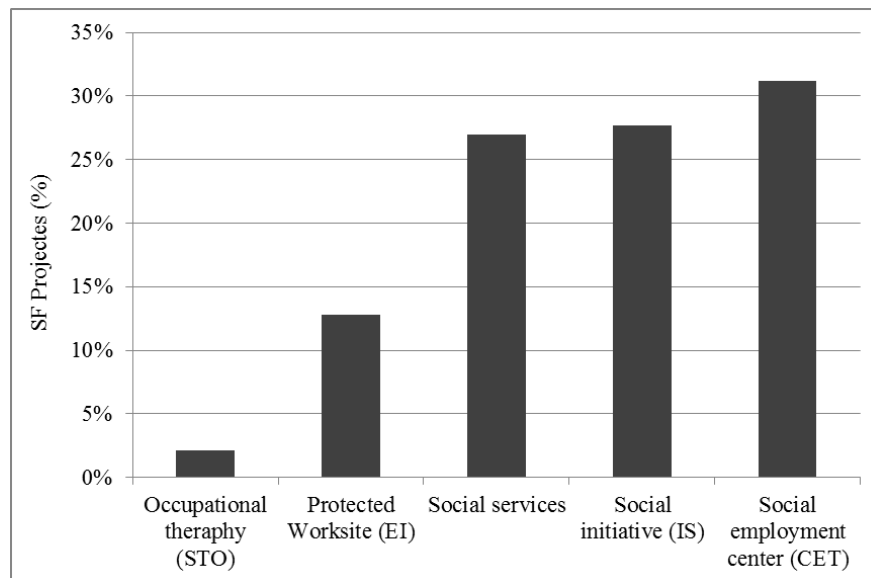


Fig 7. Distribution of Social Farming projects, by social inclusion model. Source: Own development

Other models, with their own legal frameworks, seek to solve situations of social emergency in the local context using an informal approach (27%). Some of these social initiatives have appeared within the SF framework, based on mutual support and collective action to offer opportunities to at-risk groups. Examples include the creation of gardens to allow people to grow their own food or agricultural cooperatives to promote the self-employment of people experiencing long-term unemployment (Pölling, 2017). Finally, Social Services projects (27%) established by local public administrations have linked the employment of groups to social gardening. Although these projects have no specific legal status, they are very relevant because, in addition to creating their own projects, they can collaborate and coordinate with other SF projects to provide social services and job opportunities that improve the situation of at-risk groups.

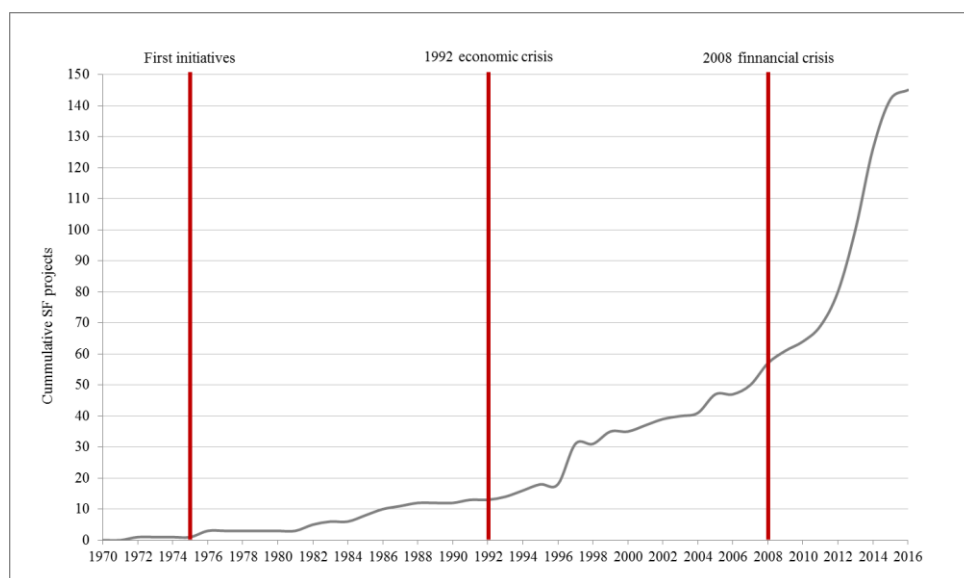


Fig 8. Progression in the number of Social Farming projects in Catalonia (1970–2016). Source: Own development from research database.

It is also important to emphasize that most of the SF projects analysed (61%) apply ecological criteria in their agricultural activities, which represents a strength for the sector. The remainder are sensitive to ecological production but have not achieved certification (33%) or engaged in activities such as forestry work that have no such certification. All of the projects prioritize environmental quality and quality of life of the populations served.

The first SF initiatives in Catalonia, such as *L'Olivera Cooperativa*⁴ or *La Fageda*⁵, appeared in the 1970s. The sector continued to grow until the mid-1990s, when the number of SF projects increased significantly (Figure 8). This coincided with a socioeconomic context that fostered the emergence of voluntarism in Catalonia and a concern for the rights of at-risk groups that had lacked social visibility (Marbán, 2006). The economic recovery after the 1993 crisis allowed public administrations to include social action programs in their budget, along with public subsidies that favoured SF initiatives.

After the 2008 financial crisis, groups with potential RSE increased alarmingly. In the ensuing years, the creation of SF projects increased at an unprecedented rate as numerous civic initiatives, particularly by TSS organizations, attempted to address the individual and collective needs of those most affected by the crisis.

4. Methodology: Surveys, in-depth interviews, Canvas and SROI analysis

The aim was to evaluate the socioeconomic impact of SF entities, based on a study of economic viability and Social Return of Investment (SROI) [1]. A sample of 10 cases was selected, according to three criteria: a) active in the agricultural sector or product transformation; b) a degree of urban dependence in peri-urban and rural areas; and c) representative of the projects in our team's SF database for Catalonia.

The methodology had four phases: (1) Literature review to define the concepts of SF and other related issues such as Social and Solidarity Economy or Sustainable Local Development; review of our team's database, created with a 2014 census of SF projects in Catalonia, updated through 2017; (2) Economic analysis of two types of information for 2015, a Balance Sheet (a snapshot of each entity's group of assets, rights and obligations) and a Profit and Loss Account (income and expenses for that year) to determine whether the result of the analysis shows a surplus or losses; (3) Business Model Canvas (BMC) to analyse and visualize a profitable and sustainable business model for the SF entity, using the Osterwalder (2010) definition of the value proposition for client segments that allows us to decide how this value is generated, and how to reach customers in a simple visual scheme of 9 key elements; and (4) SROI analysis, a methodology to measure the impact of non-profit agencies and social enterprises that was developed in 1997 by the Roberts Enterprise Development Fund (REDF)⁶, a TSS entity in the United States. In 2004, the European SRO Network was created to establish standards to measure the value of social return; it is now known as Social Value International⁷ (Nicholls, 2012).

The SROI methodology can be applied retrospectively to actual results (*outputs*) or prospectively, in an attempt to predict the future social value if anticipated results are achieved. We applied a retrospective analysis based on 2015 data from the 10 selected SF entities. SROI is not just a result; it is also a tool that provides an "x-ray" view of the organization analysed and can help to plan future actions to improve the entity's development and social impact. The strengths and weaknesses of this approach can be summarized as follows: (1) It supports strategic planning, helping to direct resources toward the activities with a greater social impact; (2) as a qualitative tool, SROI must be understood as a process of generating change through

⁴ *L'Olivera Cooperativa* is a social project that was initiated in 1974 at Vallbona de les Monges (Lleida). This rural cooperative offers employment to people with intellectual disability. The farm work includes cultivation of vineyards and olive grove and producing wine and olive oil. Workers have access to support services such as a group home, occupational training, and health and social services professionals: <http://www.olivera.org>.

⁵ *La Fageda* is a dairy cooperative founded in 1982 at Convent del Carme (Olot, Girona), providing occupation for individuals referred from psychiatric care. Initially, the entity had 100 dairy cows and sold milk under contract to Nestle. In 1985, a residence and occupational therapy program were added. By 1993, they had 320 dairy cows and were transforming their raw milk to yoghurt products, selling 50,000 yoghurts/week directly to the general public, supermarkets, and large dining facilities. In 1997, they created a Foundation and expanded their range of dairy products. In 2015, they had 256 employees (50% with certified disability) and produced more than 60 million yoghurts (5% market share in Catalonia). More information: <http://www.fageda.com/ca>

⁶ For more information: <http://redf.org/>

⁷ For more information: <http://socialvalueint.org/>

a specific activity, and it helps people comprehend and communicate the social value generated by that activity; (3) it makes a dialogue possible between various stakeholders as they participate throughout the SROI process, and improves the capacity of social actors to communicate with the rest of the society; (4) SROI is useful to determine not only the effectiveness but also the efficiency of different actors in generating social and environmental value; (5) SROI may facilitate social investment in SF projects because it shows both public and private investors the social impact of their investments; and (6) a critical limitation of the SROI approach is that results cannot be compared between different entities. The methodology differs in each case because the actors involved and the changes that occur also differ, and there is a certain degree of subjectivity in its application. At present, an attempt is underway to standardize the indicators and financial proxies, making it possible to compare the ratios obtained for different entities.

5. Typology and main project characteristics of the cases studied

The 10 entities chosen are representative of the different types of SF projects in Catalonia: 3 cases are located in the peri-urban space (Sempere, 2008) of the Barcelona Metropolitan Area (L'Ortiga, Masia Can Calopa, l'Heura), 3 in rural communities (Casa Dalmases, Riu Verd, Aprodisca), and 4 in rural settings but close to cities and therefore dependent on urban areas (La Klosca, Sambucus, Aprodisca, Bolet Ben Fet, Delícies del Berguedà). The main characteristics of these entities are summarized in Tables 1 and 2.

***Masia Can Calopa de Dalt (L'Olivera Cooperative)*⁸**

L'Olivera (Olive Tree) Cooperative was founded in 1974 by a group of young urban residents who moved to Vallbona de les Monges, a rural area that was being abandoned, to build a communitarian lifestyle that would be connected to a return to the soil and offer opportunities for socially vulnerable individuals to live and work in community. They worked to recover fields, grow crops, and produce wine and olive oil that is highly value-added because of the quality and social contribution of their products. This was one of the first SF initiatives to connect care for socially vulnerable individuals with agricultural work. In 2015, *L'Olivera* employed more than 45 people (50% with some type of intellectual or mental disability) and produced 100,000 bottles of wine and 7,000 litres of olive oil.

In 2010, the Cooperative began a new SF project in the Serra de Collserola Natural Park, where they took on the management of Can Calopa de Dalt, a property belonging to the City of Barcelona. City administrators had attempted to start a winery project in 2003, planting three hectares of vineyard, with grape varieties representing the biodiversity of the Mediterranean: Syrah (France), Agiorgitiko (Greece), Aglianico (Southern Italy), Sangiovese (Tuscany) and Garnatxa (Catalonia). The project experienced dubious success until *L'Olivera* began to manage the vineyards and produce two products in the cellars of Can Calopa de Dalt: *Vi de Barcelona* (Wine of Barcelona) specifically for events hosted by the city government and *Vi de Collserola* (Wine of Collserola) for sale by *L'Olivera*. Sale of the 10,000 bottles of Collserola wine produced annually has improved the viability and economic self-sufficiency of the original project. In addition, Can Calopa de Dalt is a large traditional *masia*, or country house, that permits *L'Olivera* to replicate the social project in Vallbona de les Monges, establishing a residential home and CET for their workers with disabilities.

At present, the cooperative manages 9 hectares of vineyard (3 ha at Can Calopa de Dalt), Sabadell (2.5 ha in the Sabadell Agricultural Park) and Sant Llorenç Savall (3.5 ha at La Muntada estate), in addition to 20 ha at Vallbona de les Monges. They produce 3,000 bottles of "Vinyes del Parc Agrari de Sabadell" wines each year in Sabadell, and 1,500 bottles of "5 quarteres" (5 quarters) at La Muntada, located in the Sant Llorenç (Munt i l'Obac Natural Park). The latter project is made possible by an agreement with the local administration

⁸ http://www.olivera.org/php/09_barcelona_01_barcelona.php

(Diputació de Barcelona)⁹. They also provide contract services for other vineyards and farms, catering services, and holiday gift baskets.

The project mainly receives public financing. The management agreement between L'Olivera and Barcelona city government designates an annual budget for maintenance of municipal property and the vineyard project at Can Calopa de Dalt. The project also receives grants from the Generalitat de Catalunya to run the residential facility for RSE people and maintain the protected employment of the CET. In addition to the residential areas, the *masia* has all of the characteristics of a 16th century building and great historical value. The project has reclaimed the wine cellar, a tasting room, a large meeting room on the upper floor, a patio, and an "agro-shop".

Tab 1. Structural characteristics of the SF projects studied in Catalonia. Source: own design; *Non-profit company; **Special employment centre (Centre especial de treball, CET)

Name entity	Year set up & place	Juridical status	Promoters	Hosting entity
Can Calopa de Dalt	2010, Collserola NP (Barcelona)	Cooperative *	Barcelona City Council & L'Olivera Cooperative	L'Olivera Cooperative
L'Ortiga	2014, Can Monmany (St Cugat del Vallès)	Cooperative *, Private Ltd Company*	Sant Cugat City Council & A group of technicians	n/a
Horts de Can Salas (L'Heura)	2013, Torrebonica (Terrassa)	Private Ltd Company*, CET**	Terrassa City Council & L'Heura SLL	L'Heura SLL (CET**)
Casa Dalmases	2009, Cervera	Foundation, Private Ltd Company*	Casa Dalmases Foundation & L'Espigol Occupational C	Alba Association
Bolet Ben Fet	2007, St. Antoni de Vilamajor	CET**, TEB as a trust of cooperatives*	Taller Escola Barcelona (TEB) Verd	TEB
Sambucus	2011, Manlleu	Cooperative*, Labour insertion Ltd Co.*	Local government & a group of technicians	Nobody
La Klosca	2009, Mataró	Private Ltd Company*	Mataró City Council & Centre of training and foresight (CFP Foundation)	La Klosca – CET**
Aprodisca Ambiental i Ecològica	2007, Montblanc	Labour insertion Ltd Company*	Aprodisca Association & Generalitat de Catalunya	Aprodisca Association
Delícies del Berguedà	2011, Cercs (Berguedà)	Labour insertion Ltd Company* (Portal Berguedà Ltd Co.*)	Amalgama Foundation & El Portal Foundation	El Portal Berguedà Foundation
Riu Verd	2014, Solsona	Cooperative*	L'Afrau Association & Generalitat de Catalunya	L'Afrau Association

⁹ The web page for "5 quarteres" wine from "La Muntada" is available at: <http://www.5quarteres.cat/>



Fig 9. (Can Calopa de Dalt) and Fig 10. (L'Ortiga). Source: Research team

L'Ortiga¹⁰

L'Ortiga (Nettles) Ecological Products, Limited (SL) works to encourage and disseminate social and sustainable agriculture at Valldoreix, a town in the area surrounding Sant Cugat del Vallès and the Serra de Collserola. The entity has been engaged in ecological production at the Can Monmany estate and training in agro-ecological and SF activities since 2014. Permission to use the Can Monmany estate for 20 years was obtained by an agreement with the City Council of Sant Cugat del Vallès in 2017. The Council also provides a shared office space and a workspace to develop the Can Possible social inclusion garden project. At “the House of Possible” there are 500 m² of public plots. The Ortiga project is responsible for coordinating the use of the land and the activities of the group served, providing training and technical advice to enable them to maintain their vegetable gardens and grow their own food.

L'Ortiga has two branches, production/marketing and the educational/social cooperative that is geared towards training and offering practical resources to people interested in ecological and social agriculture. Their ecological products are marketed along with those of other nearby farmers in produce baskets, distributed to restaurants and by home delivery through consumer groups.

L'Ortiga serves four distinct user groups: (a) workshops and training programs within the municipal Educational Action Plan (650 students in 2015); (b) workforce insertion for people at RSE, coordinated with the Social Services agency, that includes a training program in ecological farming (14 trainees in 2014) and attention to their socio-occupational needs in a vegetable garden at Can Possible (27 people in 2016); (c) L'Ortiga offers 180 hours annually of educational modules on Insertion and Training Programs and on Transition to the Work; and (d) training courses for trainers, educators, and interested adults on organic farming, sustainability, grow-your-own food and good food choices, and how to develop school gardens.

L'Ortiga is supported by the sale of its agricultural products, produce baskets, and contract services, mainly in support of the City of Sant Cugat's social services department, which administers a social inclusion project for socially vulnerable individuals. Other subsidies are provided by the private sector or social entrepreneurship programs. The long-term goal is to make Can Monmany a centre of reference for ecological farming.

Horts de Can Salas (L'Heura)¹¹

L'Heura SLL (The Ivy) is a CET in Terrassa dedicated to gardening, nurseries, and maintenance of green spaces. It was founded in 1994 as a non-profit organization with the mission to provide psychosocial guidance and collaborate in the social and occupational insertion of people with special difficulties, psychological disability, and / or mental disorder. When the economic crisis of 2008 reduced the number of public contracts available, the mission was directed towards ecological farming with a SF project to maintain job opportunities and

¹⁰ <http://www.lortiga.cat>

¹¹ <http://www.heura-cet.cat>

the social welfare function as well as to diversify the sources of income available to the organization. At present, they combine SF and a garden centre.

Since 2013, L'Heura has cultivated the abandoned fields surrounding Can Salas, a farmhouse near Torrebonica (outside of Terrassa). The fields were prepared to meet the criteria for ecological farming, following the "*parades en cresta*" (organic layer) method to create educational gardens. The garden project, *Horts de Can Salas*, has three components: (a) school visits that introduce students to ecological farming, responsible consumption, proximity consumption based on knowledge of the nearby environment, and the value of small conservation actions to protect the planet; (b) cultivation of 4 hectares of land using ecological criteria and with the relevant certification, destined for the restaurant sector and retail establishments in the Vallès region, offering a high-quality, seasonal, proximity product; and (c) sales in the agro-store. Since 2016, L'Heura has taken orders and prepared baskets from the EcoMola consumer group containing products from their own gardens and from other ecological producers of proximity goods.



Fig 11. (L'Heura) and Fig 12. (Casa Dalmases). Source: Research team

The project's other users are mainly schools, families, and individuals who participate in training courses and school programs. In 2015, the training and education cooperative served 592 people, 500 (84.4%) of them students who visited the gardens and the remainder (15.6%) families and other adults who attended the various training courses.

The basic funding for L'Heura comes from the sale of farm products and the provision of services, such as the school visits and training courses. As a CET, public subsidies are received for protected jobs, to contract staff (in Catalan, Unitats de Suport a l'Activitat Professional -- or Support Units for Professional Activity), and to pay Social Security quotas for protected workers. At Can Salas, L'Heura has its own facilities, including offices, storage for equipment and tools, the agro-store and the educational gardens used for school visits and training courses. Since 2016, it has also leased properties for a garden centre and production tasks, as in the case of the Torrebonica estate.

Tab 2. Activity, funding, and people involved in the SF projects studied in Catalonia. Source: Own design; *In addition to the income from the sale of products and services; **Participants face social exclusion

Name entity	Funding	Main activity	Population served	IFSE**	Staff number
Can Calopa de Dalt	Public	Wine and oil production	Young people at risk of social exclusion	17 long-term users (80% men)	8 women and 4 men
L'Ortiga	Self-supporting	Agroecology; Ecological horticulture and labour-force training	People at risk of social exclusion	43 long-term users and 1,900 temporarily	7 women and 13 men; some volunteers and students
Horts de Can Salas	Private/public	Ecological horticulture, labour training and school activities	People with disabilities and mental disorder	4 long-term users (75% men)	3 women and 3 men
Casa Dalmases	Private	Craft beer and chocolate production	People with intellectual disability	1 long-term users & 8 part-time (50%)	1 woman and 1 man; 5 & 6 volunteers
Bolet Ben Fet	Private/public	Ecological mushroom production	People with intellectual disability	6 long-term users (80% men)	4 women and 4 men; 4 men & 1 woman volunteers
Sambucus	Private/public	Ecological horticulture, aromatic plants, restaurant and catering	People at risk of social exclusion	11 long-term users (55% men)	4 women and 1 man; some students
La Klosca	Private/public	Ecological egg production	People with a severe mental disorder	8 long-term users (50%)	2 women and 1 man
Aprodisca Ambiental i Ecològica	Private/public	Ecological horticulture and agro-food production	People at risk of social exclusion	7 long-term men users	2 women and 1 man; some volunteers
Delícies del Berguedà	Private/public	Production of cow milk derivatives	Young people with dual pathology	2 long-term men users	3 men and 2 volunteers
Riu Verd	Public	Agricultural training, ecological horticulture and agro-food production	Young people at risk of social exclusion	6 long-term users (67% men)	3 men

Casa Dalmases Foundation¹²

This project was born in 2009 when the palace of the Dalmases family, Casa Dalmases, was awarded by inheritance to a foundation. This historical building from the 17th and 18th centuries is located in the old town centre of Cervera. The Casa Dalmases Foundation is a non-profit organization with the aim of improving the quality of life of people with intellectual disabilities, mental illness and/or any other disability. It serves young people or adults residing in the Segarra region through programs of social and labour insertion, and also offers family and social services. In addition, the architectural heritage of the palace will be open to the public through an agreement with the City Council, which will provide specific funding for that purpose.

¹² <http://casadalmases.org>

The main activity of the entity is craft beer production, carried out in the lower floors of Casa Dalmases. The project values local cereals and contributes to the economic and commercial dynamics of the city of Cervera and its surroundings.

The entity also operates the Espígol store, which opened in 2012. Local products with social value are offered in collaboration with other social entities, such as the groups that manage the store, the Alba Association and the Espígol Occupational Centre, and Rural Emaus, a social project that participates in local craft beer fairs.

Blonde (Rossa) and red (Vermella) beers from Casa Dalmases are sold throughout Catalonia, but mainly in the immediate area. In addition to participating in craft beer fairs, collaboration with other social entities (many of them included among our case studies) has led to the creation of the "Vogadors" brand¹³. The group includes products like El Rosal biscuits or L'Olivera wines and oil, and all entities benefit from a joint marketing platform to reach potential consumers more efficiently.

This project has received "in-kind" assistance from L'Olivera Cooperative, which donated 1,500 bottles (75 cl) and from a company that annually contributes 30,000 beer bottle caps. Another contribution from Gustum, a member of the Leader Consortium that promotes agri-food projects that add territorial value, such as the Artisan Beer Route in the province of Lleida. Among the beneficiaries of the Casa Dalmases Foundation are 8 employees (5 women and 3 men) with special needs (5 from the Alba Association and 3 from Rural Emaus) who are learning about the services sector by assisting customers in the Espígol store or participating in the craft beer fairs.

The main funding for this project comes from craft beer sales, and more recently from La Vall d'Or (Golden Valley) chocolate products that had been initiated by another social enterprise, but there are other sources of private origin, such as a € 25,000 subsidy for the brewery provided in 2015 by the corporate responsibility unit of "La Caixa" (CaixaBank). The entity also has the support of its 9-member Board of Trustees, who make monthly personal and monetary contributions. In addition, a microloan was received from Verkami in 2012 to launch the project and public funds have been provided by the Generalitat de Catalunya through its social entrepreneurship initiative, EmprenSocial.

Casa Dalmases intends to expand its brewery production capacity, and has already doubled weekly output from 250 litres in 2015 to 500 litres (26,000 litres per year) in 2016. Increased production allows the entity to incorporate more people into their insertion program, with the support of the Youth Guarantee program that began in 2016, and improve salary and working conditions for staff.

Bolet Ben Fet¹⁴

Bolet Ben Fet (the Well-Made Mushroom), established in 2007, emerged from a meeting between an entrepreneur and Taller Escola Barcelona (TEB), a cooperative "school-workshop". TEB has 45 years' experience with socially vulnerable groups, providing more than 600 jobs (450 to individuals with intellectual disabilities) in 2015. Their employees work in diverse sectors such as gardening, industrial assembly, electronics, and services. "Green TEB", a branch dedicated to environmental management and the maintenance of green spaces, became linked with the Bolet Ben Fet project. Importantly, the current Green TEB manager previously worked with mushroom cultivation.

The SF objective was to create employment in the agricultural sector for socially vulnerable groups that is socially just and environmentally sustainable and to offer a quality product (ecologically produced *shiitake* and *maitake*). In 2014, the project produced 13.6 tons of fresh mushrooms (10 of *shiitake* and 3.6 of *maitake*) and sold them to specialized restaurants and shops that constitute a gourmet market segment, such as Japanese restaurants, that will pay

¹³ Vogadors is a platform of 6 SF entities (Delícies del Berguedà, l'Olivera, Casa Dalmases, Sambucus, Bolet Ben Fet & Espígoladors) for trade strategies since 2015.

¹⁴ <http://www.boletbenfet.com/>

well for a high-quality product. A secondary product is the bags inoculated with mushroom spores, which become compost for ecological farms and gardens. The project makes its own *shiitake* and *maitake* grow-bags and also sells them to other mushroom farms, marketing them in collaboration with other entities. There are plans to expand business capacity and thus be able to offer more job opportunities to people with disabilities.

Bolet Ben Fet is mainly funded by public subsidies, such as CET support from the Generalitat de Catalunya's Department of Business and Employment. The entity is located in a former snail farm located in Sant Antoni de Vilamajor, which has been remodelled to accommodate mushroom cultivation and build rooms to prepare, sterilize, and inoculate the mushroom bags, as well as offices, shipping areas, and warehouse space.



Fig 13. (Bolet Ben Fet) and Fig 14. (Sambucus). Source: Research team

The project receives business management support from the TEB cooperative group through its TEB Management branch. The entire management and administrative team are concentrated in this group, which is in charge of finance, administration, and human resources services for all of the group's cooperatives. Another of the cooperatives, TEB Habitatge, helps families find solutions to housing problems experienced by people with intellectual disabilities served by the cooperative group. To date, this initiative has created 88 residential spaces, some for people who require a permanent home, some with support services for those who are more autonomous and for families who need such services.

Participation in the Momentum Project, sponsored by BBVA (Bank entity), can be considered a strategic benefit to development of the mushroom-farm project. In 2015, Bolet Ben Fet was one of the 10 initiatives selected from about 100 applicants to receive a loan of € 105,000, to be repaid in 7 years. The funding was requested in order to create more jobs at the current mushroom farm. The BBVA program aims to promote entrepreneurship initiatives throughout Spain. In the first stage, entities receive training as they work on their business proposal and business model. In the second phase, the project is presented to private investors, who decide which of the initiatives should receive financing.

Bolet Ben Fet is also part of the social cooperative "2147 Mans", a platform for the sale of SF products. Joint marketing has facilitated the presence of these products in supermarkets and specialized stores, although producers have faced difficulties in adjusting production to the demand cycle and to be able to meet the demands of large chains.

Sambucus¹⁵

The Sambucus project began in 2011 in Manlleu (Osona) as a workers' cooperative and non-profit workforce insertion company. The aim was to offer job opportunities to people with social and workforce difficulties so that they could become autonomous and gain access to the labour market under conditions of equality. This need was identified by local governments (the Lluçanès consortium and the Manlleu City Council). At the time, the financial crisis that

¹⁵ <http://www.sambucus.cat/>

began in 2008 was generating a process of social exclusion at the local level that made it necessary to advocate for job opportunities for at-risk groups. To generate new opportunities, the idea was to develop programs related to the agricultural and gastronomic field that would combine work, training, and needed support services. At first, there was a contest to choose a restaurant concept for the new town marketplace in Manlleu, and Sambucus was chosen to carry it out.

In 2015, the project added ecological farming to offer proximity cuisine and high-quality products. This led to six lines of work: (1) restaurant services in the Manlleu Municipal Market, with a seating capacity of 35, provided by at-risk young people; (2) catering for events; (3) management of group kitchens, including a residence in Manlleu for 30 individuals with mental illness and a nursery school in Roda de Ter with 25 children; (4) ecological cultivation and drying of aromatic and medicinal plants on a farm in Sant Pere de Torelló; (5) production of 7 varieties of organic potatoes, of all sizes and shapes, on two farms, located in Manlleu and Santa Cecília de Voltregà; and (6) a work and training program for boys and girls who leave school to look for work, but can benefit from a joint training and work experience that allows them to return to the educational setting or to start a job search. The project works with people at RSE, young people who have left school and have not found work, immigrant women, and people experiencing long-term unemployment.



Fig 15. (*La Klosca*) and Fig 16. (*Aprodisca Ambientals i Ecològica*); Source: Research team

At the farm in Sant Pere de Torelló (called Mas Vinyoles), Sambucus has 2 ha for the cultivation of aromatic herbs, expandable up to 5 ha. The potato fields occupy 1.5 ha, and there is a vegetable garden plot (100 m²) for the project's own use. The entity has the equipment needed to dry aromatic plants for use in making infusions and condiments. The project aims to improve their crop planning, reduce the number of varieties, and select those that can best withstand the climatic variability of the site, in order to minimize the risks of crop loss.

Project funding comes from the sale of products and services and from public and private sources. Three key partners should be noted: ASCA, a Foundation in Solidarity against Unemployment; the Catalunya-La Pedrera Foundation (C-LPF)¹⁶, and GICoop, a group that invests in cooperatives. In 2015, the C-LPF made a contribution to hire a staff member for joint commercial tasks with Vogadors¹². In addition, as an EI Sambucus receives the usual public subsidy for workers' wages and Social Security contributions, and was funded to hire a production technician.

***La Klosca-CET*¹⁷**

The Klosca-CET is a non-profit Limited Sole Proprietor Society (*Societat Limitada Unipersonal*, SLU), born in 2009, promoted by the Training and Prevention Centre Association (CFP) in 1970. It had nurseries of aromatic and ornamental plants, and as a secondary activity set aside a space to grow gardens and raise chickens and other animals. The Klosca is constituted as

¹⁶ <http://www.fundaciocatalunya-lapedrera.com/ca/content/xarxa-agrosocial>

¹⁷ <https://www.laklosca.cat>

a CET with 3 promotional partners, the CFP being the only founding partner. It is aimed at the agri-food sector, producing ecological eggs of proximity, respecting the environment and the social commitment to occupy people with mental disorders. Workforce insertion of these groups is based on a model of equal opportunities.

Egg production involves chickens fed with organic and non-transgenic feed and without additives, promoting a healthy and calm life for animals, respecting natural breeding cycles, and following the certification rules of the Catalan Council of Ecological Agricultural Production (CCPAE). They are located on the estate of Sant Miquel de Mata, loaned by the Mataró Town Hall, to the edge of Montnegre-Corridor Natural Park, where they manage 2 hectares, and the Klosca is rehabilitating both the house and the environment, a degraded space. They have 4 sheds with 1,772 laying hens (2015), producing 2,250 dozen eggs per month.

Project funding comes from the sale of organic eggs, as well as from public administration. As a CET, the Social Security quotas are covered. The C-LPF awarded a soft credit (2013), to return in 8 years. In addition, the CFP Association acts as a parent entity, providing support in order to guarantee good economic performance by the entity. The Klosca-CET became a member of the Agrosocial Network, promoted by the Foundation, and participated in creating the “2147 Hands” cooperative, which markets products of the network members under a joint brand. Currently, however, they have preferred direct trade. One of the challenges of the future is that Klosca users who wish to do so may gain access to the mainstream world of trained people, and not stay within the entity as they have until now.

***Aprodisca. Ambientals i Ecològics*¹⁸**

Aprodisca Environmental and Ecological is an EI constituted in 2005 as a SLU (Unipersonal Limited Company) with a parent entity, the Aprodisca Association of Montblanc. Currently, Aprodisca SLU has more than 350 beneficiaries and 100 workers and volunteers. The non-profit parent association was founded in 1986 to promote the social and workforce integration of children with intellectual disabilities and reduce their social stigmatization. After nearly 20 years, their scope was expanded to include mental disorders, at the request of families and to optimize their infrastructure. The Catalan government, the *Generalitat* of Catalonia, created a team of psychologists that worked to adapt services within the centres working with people with disabilities to the needs of people with mental illness, creating pre-employment services for both groups. In 2006, Aprodisca became one of 8 pilot centres in Catalonia for the residential treatment of mental illness. Residents were employed in the automotive sector until 2007, when one of the participating companies was relocated to South Africa. Aprodisca then created an agrarian project with the same professional team. They developed gardens and a workshop to transform the produce into value-added food items, and thus guarantee stable employment for workers with disabilities.

In 2005, the Generalitat's Department of Social Welfare suggested that Aprodisca work with groups experiencing social and economic exclusion, offering the use of Can Mas Fàbregas, a modernist country house in Constantí. The association agreed, and initiated Aprodisca Environmental and Ecological. The contract for the transfer of the property to the EI is 25 years and use of the land for cultivation can be extended every two years by the EI for the production of certified ecological garden produce on 3 of the 5 available hectares. A portion of their production also supplies the parent entity's kitchen.

The sale of farm produce and value-added products provides the SLU's basic income, although part of the EI funding comes from the public administration as subsidies to maintain protected jobs or to help in hiring workforce insertion specialists and production technicians. The parent company, Aprodisca, will guarantee the smooth running of the EI until it has stabilized.

Project viability requires a combination of two very different elements: maintaining *stable* employment for workers at risk of exclusion, and agricultural work, a *totally seasonal* activity. To be able to achieve this, an agronomist and some EI managers made a feasibility plan in 2016,

¹⁸ <http://www.aprodisca.org>

planning the crops to be planted and the destination for this production, considering variable employment of workers, in order to guarantee itineraries of worker insertion along with the economic profitability of the entity.



Fig 17. (*Delícies del Berguedà*) and Fig 18. (*Riu Verd*); Sources: Research team

Delícies del Berguedà (El Portal Berguedà)¹⁹

Portal Berguedà S.L. (Cercs, Berguedà)²⁰ is a workforce insertion company that produces dairy products, marketed under the brand *Delícies del Berguedà* (Delicacies from Berguedà). It was founded by the Portal (in English, grand entrance or gateway) Foundation, which supports young people with dual pathologies and their families. The entity works with the young people to achieve greater autonomy and empowerment through work at the production facility, where they acquire work habits and the necessary skills to be able to integrate into mainstream companies.

The Portal Foundation was created by family members of children at the Amalgama centres, which specialize in preventive, educational, and therapeutic work with children and adolescents and in support of their families. At present, the corporate objective of Portal Berguedà SL is the employment of young people who have finished a treatment process. The Amalgama Foundation provides advisory support, since some of the young people have come from the foundation's Rural Specialized Therapeutic Centre in Valldaura (Berguedà).

Delícies del Berguedà produces various types of organic natural yoghurts, some of them with a locally produced artisan jam, *Casabella Natura*²¹, and a seal of ecological production. The products are made with milk from the local *Cal Gris* livestock farm²² that guarantees animal welfare and the quality of their product. This link with the territory is a feature of the company, which, apart from its social project, aims to promote the products and producers of Berguedà. The headquarters of the company and the factory (2011) are located in the Cercs Business Incubator, a space for entrepreneurs who want to start a business in a favourable environment for the development and consolidation of their activity. The sponsor is the Berguedà Development Agency, which aims to facilitate business activity in the region by providing complementary services to tenants, adapted to the needs of their companies and offered at below-market prices.

El Portal Berguedà has a small technical team that includes a company manager, a production technician who oversees the entire dairy products operation and provides social support for the young workers, and three part-time employees (two labourers and a distributor). In 2015, average weekly production at El Portal Berguedà was 6,000 yoghurts, sold in the area between Berga and Barcelona. They plan to expand the range of products and begin production of cheeses and other fresh dairy derivatives. They also propose to create an agrarian farm where young people from the Amalgama Association can be responsible for work in the agricultural

¹⁹ <http://www.deliciesdelbergueda.cat>

²⁰ <http://www.fundacioportal.org/qui.htm>

²¹ <http://casabellannatura.eu/>

²² <http://www.lalleriadecalgris.com/>

sector and value-added agri-food production. El Portal Berguedà is a member of the Agrosocial Network (Fundació Catalunya-La Pedrera)¹⁵, which promotes the “2147 Hands”²³ cooperative that markets the network’s products under a joint brand name. They have received financial support to expand their economic and social activity from the Ship2B Foundation, a collaborator with the Social Entrepreneurship Program of Catalonia.

Riu Verd²⁴

The *Riu Verd* (Green River) project was born in Solsona (2014) and it is the answer to social needs detected by the Shared School Unit (Unitat d’Escolarització Compartida) of the Solsonès, managed by the Valley Association of Educational, Cultural, Social, Labour and Leisure Services (L’Associació l’Afrau). The objective is to educate students from vulnerable social environments who have certain learning difficulties that inhibit completion of their compulsory secondary education. The Riu Verd project was created to facilitate workforce participation by at-risk young people from the UEC’s service area living in unstable family settings with few resources. The technical team consists of the working partners: a social educator with experience in organic farming and value-added agri-food products, a cook who is responsible for the processing of agri-food products, and a professional gardener. The beneficiaries are 6 young people at RSE referred from Social Services of Solsona. Some have a record of juvenile delinquency, problems of violence associated with mental disorders and the use of toxic substances, or behavioural problems that interfere with normal academic training, and some are living at the poverty threshold.

Riu Verd is a non-profit cooperative, a social initiative dedicated to the social and workforce training and integration of people at RSE, prioritizing the empowerment of young people along the path of insertion into the everyday working world. The entity provides a specific training itinerary adapted to each individual case. The cooperative’s economic activities involve horticultural crops, cultivation of aromatic herbs, production of agri-food products, and the preparation of preserves, jams and other products from the garden surplus and seasonal produce. They carry out other activities such as kitchen service in collective dining rooms (e.g., at schools in the region), and gardening and maintenance tasks. They also provide training and orientation for other groups, such as UEC students. The Catalan government’s Program of Support for Social Entrepreneurship has provided advice on the business model and the economic viability of the project.

The entity is funded by selling what they produce, as well as support from the Valley Association’s “Youth Guarantee Program” for training activities and for infrastructure improvement. They have also received subsidies from the Generalitat de Catalunya to incorporate professionals in workforce insertion into their team.

Riu Verd cultivates 1 hectare of vegetables and fruit trees, with space for future expansion. It also has a greenhouse and production space for their vegetable and fruit preserves, a small workshop, and a storage building for tools and equipment that also serve as a space for the preparation of “Farm to Table” produce baskets. It is a growing entity that looks for network alliances to further consolidate its future. One of these collaborative projects, Biolord²⁵, involves two entities: Arada (Creativitat Social, SCCL), a cooperative of social initiative projects, and Biolord Cooperative, SCCL, an agricultural initiative dedicated to “mountain apple trees.” Riu Verd is also part of the Agrotreball project in Solsonès (2016), which promotes agricultural employment and social agriculture.

²³ <http://www.2147mans.coop/>

²⁴ <http://www.riuverd.cat>

²⁵ More information in: <http://pomademuntanyabiold.com/>

6. Economic viability and Social Return on Investment (SROI) analysis

Among the SF entities studied, 58% of total income came from the sale of their products and services (Table 3).

The remaining portion came from *stakeholders* such as local government or private foundations. In many cases, the *hosting entity* (Table 1) provided the initial funding required implementing the project, without expecting to achieve a positive net benefit. This made it possible for many of the SF projects to become established and maintain continuity. In Table 3, column four, there are some contributions from the *hosting entities* which modifies the net income. Some of the figures are in negative because of returns of previous loans. The net outcome (column 5) is equal to total income (column 1) minus expenses (column 3) and adding loan balance with their *hosting entity* (column 4).

One of the criteria for selecting our sample of 10 cases²⁶ was to be part of the agricultural sector and to have a degree of urban dependence in peri-urban and rural areas. We also observed that profitability on assets was very low, while liquidity and cash flow ratios were positive, indicating that the resources available were not sufficiently used. There was an excess of liquidity and treasury, which should be applied to the SF entity's activities.

Tab 3. Economic viability of the cases studied. Source: own design; (1) Net outcome related to assets; (2) Assets related to liabilities; (3) Sales + cash on hand related to liabilities

Entities	Total Income (10 ³ €)	Sale Income (10 ³ €)	Expenses (10 ³ €)	Hosting entity loan (10 ³ €)	Net Outcome (10 ³ €)	Ratio (1) of Profitability on assets (%)	Ratio of Liquidity (%) (2)	Ratio of Treasury (%) (3)
Can Calopa de Dalt	529.1	123.8	522.3	- 0.1	6.7	0.03	6.25	6.25
L'Ortiga	53.8	53.8	41.6	- 6.1	6.1	0.15	12.02	12.02
Horts de Can Salas	70.1	70.1	110.2	0.0	- 40.1	- 0.04	14.50	14.48
Casa Dalmases	29.2	12.1	33.6	- 1.9	- 6.3	- 0.02	138.75	90.22
Sambucus	299.9	247.3	301.5	- 23.1	- 24.7	- 0.01	1.09	0.92
La Kloska	97.9	81.0	92.7	0.0	5.2	- 0.06	1.58	1.57
Aprodisca A & E	103.7	48.6	111.8	- 6.4	- 14.5	- 0.05	5.79	5.76
Delícies del Berguedà	184.2	162.8	185.8	5.0	- 6.6	- 0.01	6.24	5.33
Riu Verd	64.9	31.9	56.9	- 0.1	7.9	0.31	0.88	0.81
Average	159.2	92.4	161.8	- 4.8	- 7.4	0.05	21.58	15.36

The SROI methodology (The SROI Network, 2012) served to measure and quantifies the concept of value, incorporating social, environmental, and economic costs and benefits and quantifying the changes important to the beneficiaries or entities that were generated by the activity of one or more organizations. It allowed us to calculate the value of these changes based on the investments made, arriving at a ratio that reflects the social return for each euro invested in a project. For example, a ratio of 3:1 indicates that 3 euros are generated in social, economic or environmental value for every euro invested. In general, our aim was to evaluate the socioeconomic impact of the SF entities based on their economic viability and Social Return of Investment (SROI), following Figure 19 methodology.

²⁶ In the SROI & Canvas Analysis only there are 9 cases because Bolet Ben Fet didn't provide all the data required.

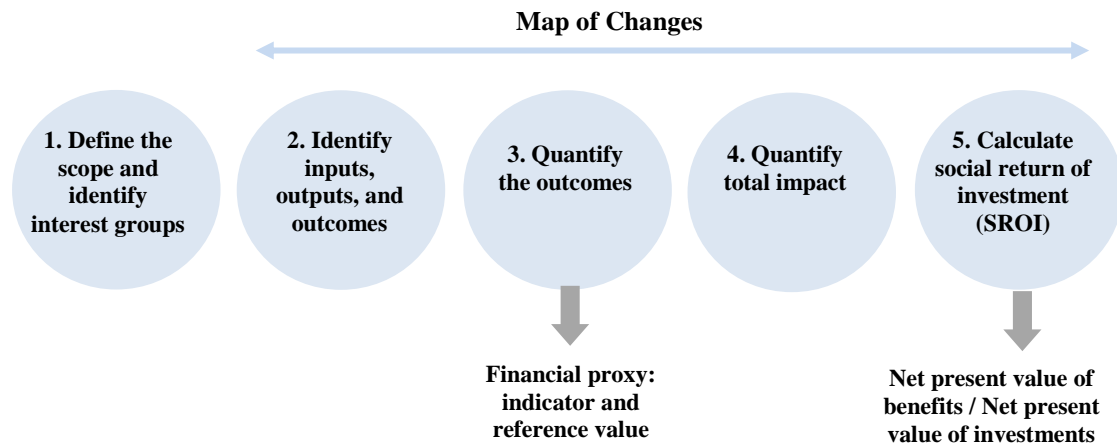


Fig 19. Methodology of SROI calculation. Source: Own development

It is important to note that the SROI calculation consists of 5 phases that measure and communicate the social, environmental, and economic values created by a given SF action:

Phase 1: Establish the scope of the analysis and identify stakeholders. It is essential to define who will participate in the process and how, determine the timeframe for analysis, and select the stakeholders that are most relevant to the study. For each stakeholder selected, we identified and quantified the investment (inputs) and the contribution to the entity, specifying the result (outputs) obtained. The total investment made was considered as the sum of the investment each stakeholder contributed (in euros). The results (outputs) were considered to be the activities carried out by the entity according to the investment made, the number of people at RSE the entity served, the number of family members and volunteers involved, etc. Our analysis considered the following *stakeholders* (Table 4).

Phase 2: Prepare the impact map, the objective of which is to understand and articulate the theory of change in order to explain how the organization creates value through its use of resources. After determining the value contributed by each stakeholder, the changes (outcomes) are identified for each entity, whether these are social, economic and / or environmental changes that result from the activities carried out by the SF entity. The main SF objective is to improve the personal autonomy of people at RSE. Therefore, the change of interest is the number of people who have achieved an improvement. Some of the changes that identified are difficult to measure, either because specific studies would be needed or because needed information was not available.

Phase 3: Provide evidence of results (outputs) and value. For the changes (outcomes) that were identified, indicators were established that explain the impact achieved and quantify the units of change obtained, as well as their duration over time. A specific monetary estimation (financial proxy) was applied to the indicators identified, which allows the monetary value of the changes achieved to be quantified.

Phase 4: Measure the total impact for each of the changes. The impact of the investment was quantified in relation to the value of the results obtained, and then adjusted for changes (outcomes) that were not produced by the entity analysed, correcting for *dead weight, attribution and deterioration*, and for changes lasting more than or less than one year.

Phase 5: Calculate the SROI. In this phase, the benefits are added, negatives are subtracted, and the result obtained is compared with the investment made. The final important methodological step is to communicate the SROI results to the previously identified stakeholders, providing them the information needed to compare and verify the results obtained. The SROI impact on the various stakeholders of each SF studied is shown in Table 5.

Finally, we observed that one of the cases has great monetary volume, 3 cases were around the average and 5 entities had lower impact. In general, the stakeholders that benefited the most were the local community and surroundings (25.7%) and the public administration

(21%), followed by the technical team (19.9%), and users (16.6%). Family members (12.3%) and volunteers (3.3%) also benefited. The differences observed between the entities may be related to greater or lesser involvement of the local administration compared to the greater or lesser volume of users involved. The monetary impact on each stakeholder group for the set of entities studied is presented graphically in Figure 20.

*Tab 4. Stakeholders' analysis and justification. Source: own design; *Existing Stakeholders in the 10 selected case studies*

Stakeholders	Description of the stakeholders and the characteristics that explain their role in the entity	Explanation of the reasons for including this stakeholder in the present study.
Beneficiaries: Workers facing social exclusion	Persons who are users in the SF entity and frequently also have a job contract	The main subject in the SF entities are the groups at risk of social exclusion (RSE)
Technical/Professional team	Professionals (agrarian production, social services) with a variety of skills, acquired before or during SF participation.	Responsible for leading and managing the project: to be a productive social enterprise in support of RSE.
Volunteers or interns	Voluntary hours of work, yielding satisfaction and new skills, and improving social relationships.	Essential to SF entities, supporting the technical team and improving the entities' social capital.
Family members	Those closest to the beneficiaries/ users/ workers, who experience positive changes such as emotional and material well-being.	The entity's activity provides emotional support and relieves a burden for family members responsible for RSE.
Clients of the entity	Entities or individuals who value the quality of the SF products and services offered.	Clients contribute part of the needed funding by purchasing products and services.
Providers	These entities provide the inputs needed to develop SF products.	Description of key providers.
Associations, foundations, ...	Organizations that provide economic or other support to nurture the entity.	Sponsors of the SF project, or organizations that provide funding, etc.
Public administration	Subsidies and grants to support protected workplaces and help the entity succeed. Local administration as a promoter.	The inclusion of this important stakeholder is justified by the changes (outputs) received and the investments (inputs) provided.
Local community and surroundings	This is the territory where the entity's activity may have an impact or generate change.	The community and surroundings experience the impact of the entity's activity through economic development and added value assigned to local products.

Tab 5. SROI impact in the case studies and its distribution among stakeholders. Source: Own data

Entities	Total SROI Impact (10 ³ €)	% users	% family members	% technical team	% volunteers	% public administration	% local community and region	% others
Can Calopa de Dalt	1,225.1	10.1	18.3	20.1	3.0	24.5	22.0	2.0
L'Ortiga	139.1	22.7	8.1	25.8	5.5	10.9	27.0	0.0
Horts de Can Salas	314.5	20.4	17.9	21.4	0.0	22.7	17.5	0.1
Casa Dalmases	57.8	32.2	0.7	11.3	22.7	8.2	24.9	0.0
Sambucus	371.4	17.3	4.2	20.9	3.1	15.0	38.5	1.0
La Kloska	188.0	22.1	8.2	18.1	1.9	16.5	31.4	1.8
Aprodisca A & E	186.7	25.7	7.9	19.1	3.7	20.1	23.5	0.0
Delícies del Berguedà	275.2	16.2	2.4	18.7	5.9	16.8	38.5	1.5
Riu Verd	146.1	30.8	7.7	16.6	0.0	32.7	12.2	0.0
Average	322.7	16.6	12.3	19.9	3.3	21.0	25.7	1.2

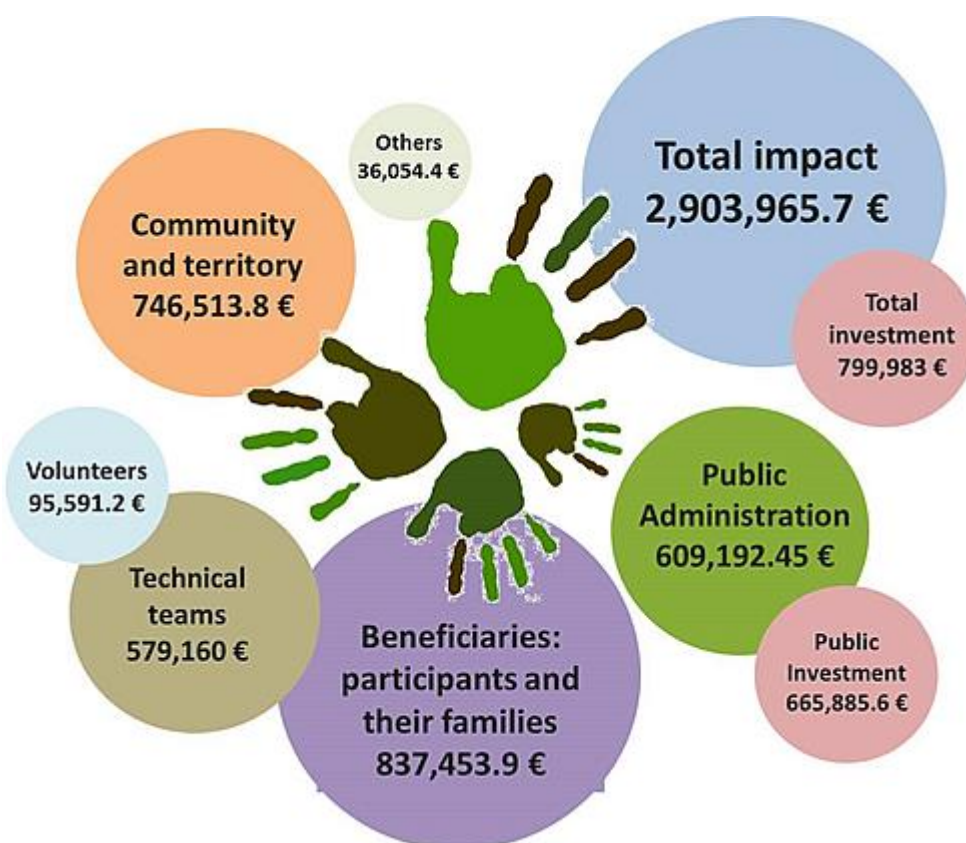


Fig 20. Distribution of total SROI impact, of the 9 case studies, among the stakeholders. Source: Own design

The relationship between the total impact of each SF entity and the total of inputs used results in the SROI, which represents the final return of each entity's activity (Table 6). This value was between 2.5 and 3 in most cases, with an exceptional case of 6.01 due to the high number of users and the support of the local administration, and a pair of cases between 2 and 2.5 due to fewer users or large debt because of a lack of funding from public or private entities.

Tab 6. SROI value ratios* in the studied entities. Source: Own design; *Total stakeholder impacts related to total inputs; (i.d.) incomplete data

Entity	SROI Value	Total Impact	Total Inputs
L'Ortiga	6.01 €	139,135.83 €	22,465.08 €
L'Heura	2.96 €	314,511.46 €	103,190.00 €
Aprodisca	2.87 €	186,717.22 €	63,151.04 €
Can Calopa	2.75 €	1,225,084.52 €	432,645.59 €
La Klosca	2.74 €	188,043.00 €	66,521.31 €
Casa Dalmases	2.72 €	57,833.02 €	20,652.16 €
Riu Verd	2.69 €	146,051.58 €	63,763.29 €
Delícies del Berguedà	2.38 €	275,230.40 €	112,550.01 €
Sambucus	2.02 €	371,358.74 €	178,109.23 €
AVERAGE	3.02 €	32,662.86 €	118,116.41 €
SROI Ratio Set	2.73 €	2,903,965.77 €	1,063,047.71 €

7. Results and discussion

SF in Catalonia is related, on the one hand, with urban agriculture in continuous growth (Lohrberg, F. et al., 2016) but also, on the other hand, with Green Care (Haubenhofer, DK et al., 2010). However, the SF proposes an organization with three basic elements: agrarian activity, collectives in RSE and TSS entities, where users can become project members and not only clients (Guirado, C. et al., 2017). On the other hand, urban agriculture is a phenomenon more related to local agriculture (Halvell, B., 2002) and energy saving or environmental preservation (Walker, B. et al., 2006), while Green Care focuses on therapy in contact with nature, treating users as clients (Hine, R. et al., 2008). We can conclude that SF includes practices that combine farm work with direct attention to socially vulnerable groups, with the objective, among others, of empowering them (Finuola, R. et al., 2008). The range of people in RSE is much broader in the SF than in the other categories, and it can also be said that, in general, SF projects seek economic viability, help sustainable rural development and give a social, economic and environmental return to the Society (Llanfranchi, M. et al., 2014, SoFar project, 2009).

7.1 Economic analysis of the SF entities

There was a tendency for the entities to have excessive assets, including liquid assets, which make them less profitable. Project viability must be a goal regardless of the availability of support from private funders or a parent entity. The long-term objective must be the sustainability of the project itself, unless the financial support of parent entities is short-term or arises due to a specific circumstance. Otherwise, the project may fail.

In order to assess project feasibility, SF entities should carry their accounts separate from the parent entity; this is the only way they can exercise strict control, observe the project evolution, and be able to compare data. In addition, the accounting should be accompanied by meaningful analysis of economic ratios and values to improve project management.

Due to the type of activity carried out by these entities, they will usually receive subsidies or aid. For some of the entities analysed, these subsidies are essential to day-to-day social welfare or workforce insertion activities. For the rest, a strategic approach is necessary to meet a future

objective of profitability and sustainability of the ordinary activity of the project without external funding.

A dual objective must be considered: firstly, to achieve the social impact for which the TSS entities in general and the SF project in particular were created, and secondly, to achieve economic and financial profitability. Planning for sustainability cannot be neglected, although social projects tend to show low profitability.

7.2 Analysis of the business model used by the cases studied

The entities tend to establish a strategic objective of developing a wide range of customer segments to be addressed, in order to be able to achieve more sales and more revenues. This approach may be counterproductive at times, as the resources available to the entity for attracting customers (marketing, communication, etc.) are always limited. In this sense, it is important to focus and prioritize the types of clients to be addressed in order to be more effective with the available resources. This may also involve prioritizing some of the most profitable business products and lines.

The SF entity must have a consolidated team that can accommodate volunteers, as their presence can be crucial in the organization. However, it is not advisable to consider the volunteer as a figure that replaces the salaried worker with the aim of reducing staff costs. This may be a valid approach in the initial stages, but not as a long-term strategy. The participation of a large number of volunteers can skew the economic results of the entity, as these will not reflect the reality of staffing costs and can lead to confusion in subsequent economic analyses.

All the entities analysed differentiate the product(s) and/or service(s) they offer with respect to their competition. One way to differentiate is to look for elements of innovation that clients perceive as an added value. Introducing innovative elements on a regular basis can help to constantly maintain elements of differentiation from the competition. In the SF context, the social value of products and their high quality are both innovative and differentiating elements.

The trend toward direct sales, in order to maintain affordable prices, eliminates the need for intermediaries in commercial channels. Half of the entities studied use direct marketing channels or have few intermediaries, but this should be the general trend. The development of joint platforms for marketing and sales will strengthen the presence of SF in the market. In the event that an entity is not driven by an experienced parent company or sponsor, it should be supported by external experts (e.g., an advisory board). During the first years of activity, these experts should be mentor figures, until the entity acquires the needed experience and know-how. In the SF projects this advice can be done by the hosting entity.

Experts are needed in key areas to improve the daily management of SF projects. When employees have special needs, it is recommended that a social worker be in charge of managing human resources. A specialist in agriculture (e.g., an agronomist) should be responsible for the management of production and an expert with some business management knowledge should oversee the entity's economic and financial situation. These three figures may be in the entity as permanent contractors or as external consultants, part-time, depending on the size of the entity or project.

7.3 Use of SROI methodology to analyse Social Farming projects

It would be advisable to carry out a detailed analysis of a larger number of SF entities in order to determine their social impact and disseminate the important work they do, not only related to their beneficiaries at RSE but also to crosscutting aspects such as environmental management, agro-ecological dynamics, responsible consumption, savings in public expenditures, etc. A joint SROI of the entire SF sector in Catalonia could also be informative.

It is advisable to use SROI as a tool to contrast the objectives of an entity with the actual social impact generated. The SROI methodology is a relevant approach to evaluating the degree to which an entity meets its objectives and assess their relationship to the impact generated by

the activity. Individual SF entities can use the SROI as a tool to review the development of their project, the direction they are headed, and the appropriateness of their focus. The SROI can also be used prospectively, as part of the strategic planning process, setting out goals and processes and uniting values and mission with a business vision to work toward achieving a greater social impact.

It is also necessary to communicate the social impact generated and the return of investments to society and to public administrators. It is important to make the work of SF entities more visible, showing how their activity contributes to improvements in the social, economic, and environmental spheres. Finally, recognition of the SF sector's contribution to improving the efficiency of public resources use is also crucial, as the subsidies received are used to generate social change and improve the situation of socially vulnerable groups.

8. Conclusions

The present analysis, based on a research database of SF entities in Catalonia (2014–2017), showed that SF projects can be economically and socially viable, offering a social return for the investments made. The business models, economic viability, and social return of 10 selected entities were assessed using the "Business Model Canvas" and "Social Return on Investment" methodologies.

We found that SF is an emerging sector in Catalonia, with a growing impetus but limited visibility. Three major periods can be observed: before 1995 there were few SF entities (only two in 1970–79); between 1995 and 2007, there was moderate growth, predominantly involving people with a disability and / or mental disorder, and rapid growth has occurred since the financial crisis that began in 2008. In 2014, 42 SF entities were registered and by 2017 there were 161, with more groups at RSE, expanded in the direction of economic disadvantage. People living in poverty and long-term unemployment have seen their most basic needs go unmet.

Challenges remain, especially in terms of organizing the sector and establishing synergies between SF initiatives. The sector is very heterogeneous, with internal dynamics that hinder alliances and a collaborative search for resources. Although this diversity gives the sector a great deal of versatility, it demands greater specialization in the professional teams because of each group's very specific needs in the areas of employment, social integration, education and therapeutic treatments.

The SF projects in Catalonia focus mainly on horticulture, especially after the incorporation of social gardens. We also found that value-added agri-food products and forestry are of significant importance, while sectors such as livestock and crafts are less well represented. Many SF projects develop their products using ecological criteria, thereby helping to forge a more sustainable production model and promote economic development that is more just, ethical, and solidary. They strive to offer a product of quality, proximity and social value that is distributed directly and through short circuits of commercialization, which helps them to communicate about the work they do with at-risk members of society.

An eminently peri-urban phenomenon, SF offers an opportunity to recover and give value to agricultural areas that have been abandoned or neglected due to the pressure of urbanization. The development of SF favours the greening of urban territorial systems and contributes to environmental management, reducing erosion in agro-forest areas, increasing biodiversity, and minimizing the risk of fire. In more rural areas, in addition to the environmental benefits, SF projects contribute to sustainable local development, linking local resources, activities, and actors to generate innovative practices and products with high added value that reinvigorate the territory and create new opportunities.

The value proposition of SF entities is mainly based on quality: offering products that stand out in the market because of their appeal to the senses and to the health-conscious; 7 of the 10 entities studied opt for ecological production criteria in order to provide healthy and environmentally friendly products. This also stood out in customer opinions as the main selling point and the main loyalty factor, ahead of other elements including social activism. In addition,

the relationship with customers is personal, close, and direct and SF products are commercialized through short circuits and local agri-food networks, avoiding intermediaries.

Half of the entities studied have a balance sheet of more than € 300,000, with sales being the most important source of income (75% of the total) and the remainder coming from subsidies, membership fees, service provision, etc. In general, the SF entities had low dependence on public aid. In economic terms, most entities (75%) had excess liquid assets and may be losing profitability, as that surplus could be invested in existing business lines or new projects to achieve greater profit, with the aim of expanding and / or generating new opportunities for groups at RSE. Analysis of the social impact of the 10 selected entities in 2015 showed an average return of € 3 for each euro invested, a total impact of nearly 3 million euros (2,903,965.77 €). Of this impact, 28% accrued to the users and their personal networks, mainly their families; 22% benefited the public administration, returning virtually all the subsidies, grants, and investments they had provided to SF entities; 20% benefited project managers and staff, specifically for employment and the acquisition of skills in a particularly innovative sector; and finally, 25% benefited the local territory and the community, attributable to the SF contribution to local development, environmental management, and – mainly in peri-urban areas- the recovery of abandoned agricultural spaces.

We observed that the SF entities studied would benefit from better availability of specialized technical and professional staff and a specific training and development plan, especially in the field of agriculture but also in healthcare fields that support the at-risk groups with which they work. More in-depth business management training from a non-profit perspective is also needed to help the entities be economically viable without losing the social values that motivate the SF sector. There is a need to promote synergies and exchange of experiences and reflections among the promoters of SF entities and other key agents in the sector, such as public administration, educational centres, Third Sector Social entities, and farmer organizations. Finally, measures should be established to promote SF in Catalonia. Specific legislation could be helpful, as it has been in other European territories such as Italy, which passed a law in 2015 promoting SF and allocating resources to promote its practice. Other initiatives that could be considered include the creation of a support platform and best practices guidelines, social clauses in Public Administration for the procurement of goods and services, or the creation of a stamp certifying the social value of the products marketed by SF entities.

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