Type of the Paper (Article)

Sustainable development in Portuguese Social Economy entities: The environmental responsibility of Private Social Solidarity Institutions

Graça Azevedo [1,*], Denise Curi[2], Alberto J. Costa[3], Ana Maria Bandeira[4], Augusta Ferreira[5], Brízida Tomé[6], Carla Joaquim[7], Carlos Santos[8], Cristina Góis[9], Deolinda Meira[10], Helena Inácio[11], Mafalda Jesus[12], Maria Goreti Teixeira[13], Patrícia Monteiro[14], Ruben Duarte[15], and Rui Pedro Marques[16]

[1] ISCA-UA – University of Aveiro – CICF; graca.azevedo@ua.pt
[2] University of Aveiro; denpec11@gmail.com
[3] ISCA-UA – University of Aveiro – GOVCOPP; alberto.costa@ua.pt
[4] Polytechnic of Porto (ISCAP:PP) – CEOS.PP; bandeira@iscap.ipp.pt
[5] ISCA-UA – University of Aveiro – CICF; augusta.ferreira@ua.pt
[6] Polytechnic of Porto (ISCAP.PP) – CEOS.PP; brizida.tome@gmail.com
[7] Polytechnic Institute of Tomar; carlamfreitas@live.ua.pt
[8] ISCA-UA – University of Aveiro – CICF; carlos.santos@ua.pt
[9] Polytechnic of Coimbra (ISCAC); cgois@iscac.pt
[10] Polytechnic of Porto (ISCAP.PP) – CEOS.PP; meira@iscap.ipp.pt
[11] ISCA-UA – University of Aveiro – GOVCOPP; Helena.inacio@ua.pt
[12] CNIS; mj.tecnico@cnis.pt
[13] CNIS; maria.goreti.teixeira.1@gmail.com
[14] CNIS; pm.tecnico@cnis.pt
[15] University of Aveiro; rubenduarte@ua.pt
[16] ISCA-UA – University of Aveiro – ISTTOS; ruimarques@ua.pt
* Correspondence: graca.azevedo@ua.pt; Tel.: 00351 234 380110

Abstract: Social Economy institutions seek to provide answers to social problems, given that they naturally have a socially responsible mission. This study aims to answer the research question: how sustainable practices, namely environmental behaviour, have been adopted by Portuguese Private Social Solidarity Institutions (IPSS) with the purpose of contributing to Sustainable Development? To achieve this objective, qualitative research was carried out in 31 IPSS, which was framed within the scope of the TFA project (Theoretical framework for promotion of accountability in the social economy sector: the IPSS case). Semi-structured interviews were conducted, with a script based on the literature review, from May to July 2019, with those responsible for the management of these entities. A content analysis was conducted, using the NVivo12 Version 12.6.0 software, which enables data to be coded and categorised, reducing any researcher bias. The results indicate that most entities carry out activities of an environmental nature, related to the reuse of materials, the recycling of waste, the sale of materials for recycling and user awareness. Several entities expressed financial limitations to the implementation of Environmental Management Systems and their accomplishment. However, the objections presented are not impossible to overcome, according to studies presented in other countries.

Keywords: Social Economy; Social Solidarity Institutions; Sustainable Development; Corporate Social Responsibility; Environmental Responsibility.

1. Introduction

The association between the concept of Social Economy (SE) and general interest mandatorily links SE entities (SEE) to the adoption of socially responsible behaviours (Meira, 2011). SE presents a driving capacity, because it has the potential to lead a transition to a more humanised economy that can be attentive to local and global sustainability (Gismondi et al. 2016). Therefore, SE is strategic for sustainability.

The strong social nature of SEE, rather than the achievement of profit, gives them an added responsibility in attaining sustainable behaviour. In this context, the concepts of Sustainable Development (SD), Corporate Sustainability (CS) and Corporate Social Responsibility (CSR) not only can but should be applied, with the necessary adaptations, to the reality of the SE.

However, the environmental behaviour and performance of non-profit organisations have not been widely studied (Papaspyropoulos et al. 2012). Nevertheless, it is known that Third Sector organisations make valuable contributions to Sustainable Development, particularly with regard to waste management and resource recovery in many areas of Europe (Williams et al. 2012). This is often not perceived due to the nature of SEE; their value creation or generated impact is not quantified, reported and disseminated and thus their contribution to local, national and international regions in terms of supporting civil society, reducing poverty and recovering resource value is not properly recognised or appreciated (Williams et al. 2012).

Another point to be taken into consideration is the growing interest of the business sector in environmental responsibility. This has resulted in the search for the establishment of intersectoral collaborations that make more effective use of the knowledge and capabilities of all parties, enabling the creation of new opportunities to achieve greater corporate profitability and greater environmental protection (Rondinelli and London 2003). In light of the complementary resources that non-profit organisations may offer, there has been an increased interest from some companies and non-governmental organisations to reconsider traditional controversial relationships, generating new forms of cooperation (Rondinelli and London 2003; Crucke and Decramer 2016).

This article aims to understand how sustainable practices, namely environmental behaviour, have been adopted by IPSS, with the purpose of contributing to Sustainable Development.

The research results will be presented in this article, which is structured as follows: in the second chapter, a literature review was conducted with the objective not only to clarifying some concepts but also to identifying sustainability practices adopted by entities in this sector. The third chapter shows the methodology used for data collection. The fourth chapter presents the data analysis and in the fifth chapter the final considerations are drawn up. Finally, the sixth chapter presents the bibliographical references used in this study.

2. Literature review

2.1 Sustainable Development

The term 'sustainable development' (SD) was first used in 1980 in a document entitled ‘World conservation strategy: living resource conservation for sustainable development’ (IUCN et al. 1980). According to this document, "to be sustainable, development must take into account social, ecological and economic factors; living and non-living resources; and the advantages of alternative action in the long and short term" (Linda 1990, p. 9). However, the term only came into force in political circles after the publication of the Brundtland Commission's report, commissioned by the World Commission on Environment and Development (WCED) on global environment and development, in 1987, known as 'Our Common Future' or the 'Brundtland Report' (Elliott 2012).

According to the Brundtland report, SD is "a development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (Brundtland et al. 1987, p. 6). SD is a development model that seeks to reconcile meeting the social and economic needs of human beings with the needs for environmental protection, so as to ensure the sustainability of life on Earth for present and future generations (Brundtland et al. 1987). Like many other concepts, SD clearly places intra-generational equity alongside concern for the future, as inseparable integrant of SD (Dovers and Handmer 1992). However, the terms 'intragenerational', 'boundaries' and 'needs' generate a number of discussions as they can have different meanings depending on who interprets

Preprints (www.preprints.org) | NOT PEER-REVIEWED | Posted: 22 December 2021 doi:10.20944/preprints202112.0367.v1

them and can also vary over time (Elliott 2012). Thus, in the context of sustainable development, we emphasize that the United Nations (UN) has been establishing a set of goals to be achieved, namely the current Agenda 2030 and Agenda 2050, which has already begun to be discussed.

SEE, as an inherent part of the community, are covered by these goals. In fact, as stated by Williams et al. (2012), SEE make valuable contributions to Sustainable Development, namely regarding waste management and resource recovery in many areas of Europe. Often, this is not perceived due to the nature of SEE; their value creation and generated impact is not quantified, reported and disseminated and thus their contribution to local, national and international regions in terms of civil society support, poverty reduction and resource value recovery is not properly recognised or appreciated (Williams et al. 2012).

2.2 Sustainability in Social Economy Entities (SEE)

In the same way that the productive sector has found its role as a facilitating agent for SD, by designing a Corporate Sustainability (CS) model, which recognises that the responsibility of the private sector is not only restricted to the generation of wealth, but also extends to the generation of positive results in the social and environmental dimensions of its activities, the SEE have also realised the importance of their activities in promoting SD. Michael (2003) lists the similarities between second sector organisations (business sector) and those in the third sector:

1. Represent civil society - they seek to influence policy formulation without being part of government or strongly linked to the industrial business sector;
2. Fulfil an educational function - informing consumers, businesses and politicians; and
3. Generally, work in collaboration with government and/or business.

Sustainability in the organisational environment (second and third sector) should be understood in three dimensions, which jointly promote economic and social development without harming the environment, i.e., the Triple Bottom Line (TBL) (Elkington 1999). The TBL "captures the essence of sustainability by measuring the impact of an organisation's activities on the world including both its profitability, shareholder values and its social, human and environmental capital" (Savitz 2013, p. 6). The difficulty in measuring the TBL has resulted, however, in criticism regarding its applicability. In any case, although the difficulty in measuring intangible elements generates much criticism, the TBL is still globally recognised as the best way to introduce the three elements of sustainability into the organisation.

Thus, CS, through objective actions, is directly linked to development (Munck and Souza 2011) and comprises much more than issues related to pollution control (Hart and Milstein 1999); it also considers the situation in which society finds itself and its trends. Since there is a great prospect of deteriorating social and environmental scenarios for the coming years, CS helps to "radically define new views on the meaning of social equity, environmental justice and business ethics" (Elkington 1999, p. 142) and so reverse this situation. CS will require a better understanding not only of the financial and physical dimensions of capital, but also of social, human and natural capital.

The three pillars of SD, from the perspective of CS, can be understood as follows (Bansal 2005):

- Environmental pillar: can be achieved by the environmental management of companies, which can range from a more reactive to a more proactive performance. Environmental management refers to corporate environmental policies regarding energy efficiency, greenhouse gas emissions (GHGs), environmental litigation risk and renewable energy, when applicable (Gompers et al. 2003) being therefore more related to the company's production processes.
- Social pillar: can be obtained by means of corporate social responsibility (CSR). Thus, from the perspective of sustainability, CSR is composed of three elements:
    a) Environmental analysis: refers to the company's concern with environmental causes in a general context;

Preprints (www.preprints.org) | NOT PEER-REVIEWED | Posted: 22 December 2021 doi:10.20944/preprints202112.0367.v1

b) Management with the community: this is how the company deals with causes related to the society where it operates. Corporate Social Responsibility translates into an appropriate integration of the company in its local environment, contributing to the life of local communities in terms of employment, remuneration, benefits and taxes (CCE 2001).
c) Stakeholder management: the way in which the organisation manages relationships with its stakeholders, namely customers, suppliers, employees, similar institutions and the State.

- Economic pillar: can be achieved through value creation. Companies create value through the goods and services they produce. By increasing the efficiency of goods and services, companies increase the value created for consumers, for shareholders (dividends and capital) and for workers (better wages and working conditions).

The sustainability debate has been interpreted by organisations through the integration of environmental, social and governance factors into their strategies and operations (Shrivastava and Addas 2014). Comprehensive issues such as business ethics, through value chains, human rights, bribery and corruption and climate change are among the discussions in the business world, which integrate CS (Elkington 2006). Governance factors include the independence and dedication of the governing body, compensation policies, procurement defences and the strength of internal audit and control mechanisms (Gompers et al. 2003).

CS in SEE is often confused with the entity itself (Esgaio 2018). This is because the strength of the social mission in many SEEs can be so embedded in the corporate ethos that attention to internal matters is neglected (Cornelius et al. 2008; Esgaio 2018). Weerawardena, McDonald, and Mort (2010) argue that sustainability for SEE is critical if they are to continue to serve the interests of all their stakeholders.

This group of stakeholders depends on SE to meet their needs and rely on the promise of its mission to be fulfilled. From a macroeconomic perspective, the sustainability of SE means that important social needs will be met and frees the business and government sectors to fulfil their own commitments (Weerawardena et al. 2010). Thus, sustainability is an ongoing process, rather than an end to be achieved, and involves interaction between various parts of the non-profit organisational environment (Ceptureanu et al. 2017).

In a study of four SEE in Australia, Lyth et al. (2017) noted that those entities under review delivered social impacts through partnerships with other agencies and contributed to the development of networking relationships within and beyond the third sector.

In another study with the French organisation 'A Essor - Assoc de Solidariedade Internacional', the authors identified a similar behaviour regarding interaction with society (Silva et al. 2011, p. 85).

The clear application of strong and explicit organisational values to external customer groups, however, may be inconsistent with the human resources strategy within SEE (Foote 2001; Esgaio 2018). Social policies apply to employee turnover rates, employee training, workforce satisfaction and community involvement (Gompers et al. 2003).

As for the environmental analysis, SEE play an important role, for example, in the reuse of furniture and appliances (Curran et al. 2007; Bovea et al. 2016; Lopes and Leal 2017). Considering bulky items sold or privately donated, which is informal reuse, it is estimated that 15% of discarded bulky items in England are reused by SEE (Curran et al. 2007). In this sense, some SEE are willing to remove such items from households, even alleviating the role of governments in managing this type of material (Williams et al. 2012).

In Portugal, the Quinta do Anjo Social Centre is promoting an energy transition by using photovoltaic panels to reduce energy costs. This same entity also collects and distributes clothes and furniture to disadvantaged families, as well as recycles paper as a way to raise funds, which are initiatives that act to reduce waste and reduce pressure on public agencies (Lopes and Leal 2017).

2.3 *Corporate Social Responsibility*

The concept of Corporate Social Responsibility (CSR) emerged in the 1950s with the seminal work of Bowen (1953) and has expanded over the decades with contributions from various researchers and practitioners. The author argued that companies not only produce goods and services, but also conditions in the workplace and highlighted the economic rationale of investing in Social Responsibility to improve employee well-being. Bowen (1953) defined a specific set of principles for organisations to fulfil their social responsibilities. In his opinion, CSR extends across different levels, from the individual (entrepreneur) to the organisation and the state; it combines economic discipline with social ideals and mixes pure reformism with a deep sense of democracy (Acquier et al. 2011).

CSR is a management concept whereby organisations integrate social and environmental concerns into their operations and interactions with their stakeholders (UN 2020; Blowfield 2005; UE 2001), and is "typically understood as policies and practices that business owners employ to ensure that society, or stakeholders, who do not own the organisation, are considered and protected in their strategies and operations" (Carroll 2016, p. 2). Over the past few years, dozens of definitions of CSR have been identified and analysed (Dahlsrud 2008; Tilly and Wood 2020). According to Parmar et al. (2010), there are a variety of concepts that fall under the CSR umbrella.

Carroll (1979) presented the first unifying definition of CSR: "Business social responsibility encompasses the economic, legal, ethical and discretionary expectations that society has of organisations at a given time" (Carroll 1979, p. 500). According to Carrol (1979, 1991, 1999), society has four expectations of the organisation: economic, legal, ethical and discretionary (philanthropic). Thus, CSR must respond to these expectations at a given time through a set of four liabilities:

- Economic responsibility: organisations must be able to sustain themselves (Carroll 2016).
- Legal responsibility: society sets the fundamental rules by which organisations are expected to operate and perform.
- Ethical responsibility: society expects organisations to operate and conduct their affairs ethically.
- Philanthropic responsibility: covers the voluntary or discretionary activities of organisations that are guided by their desire to participate in voluntary social activities, not required by law, and generally not expected of business. Society expects organisations to be good corporate citizens (as a legal person).

These responsibilities are empirically interrelated, but conceptually independent, (Carroll 1979, 1991, 1999; Carroll and Shabana 2010) and help delineate the nature of CSR. In 1991, Carroll presented the Pyramid of Social Responsibility. CSR does not see economic and social objectives as incompatible trade-offs, but rather as integral parts of the total picture (Lee 2008). Another concept that emerges with Carroll's Pyramid is that of 'corporate citizenship' which is an extension to a lineage of work to conceptualise the role of organisations in society and in management literature, a lineage most notably dominated by the notion of CSR (Crane and Matten 2005; Matten and Moon 2008).

Wood (1991) defined three dimensions of CSR:

- The principles of CSR: which include legitimacy (institutional level), public accountability (organisational level) and managerial discretion (individual level).
- The CSR processes: such as environmental assessment, stakeholder management and issues management.
- The outcomes of corporate behaviour: as social impacts, social programmes and social policies.

By incorporating in its definition, the purpose of contributing to a fairer society and a cleaner environment, the CSR concept highlights social and environmental aspects, although now seen from an organizational point of view (Meira 2011). This change in the business paradigm - the company open to its external environment - implies the need for convergence of transparent, responsible and ethical attitudes, beyond shareholder profit.

When extrapolated to the environment of SEE, it can be observed that cooperation activities between this type of institution and second sector companies have promoted positive results. One can mention, as an example, IKEA's partnership with some SEE in England to develop and provide a solution for the reuse and recycling of mattresses, packaging and large household appliances collected by the company through its national 'Take Back' service when delivering new products to customers' homes (Williams et al. 2012).

In a study conducted with 37 SEE in Portugal, Esgaio (2018) found that organisations identified the two traditional CSR dimensions: the internal dimension, i.e., responsibilities towards employees, and the external dimension, related to responsibilities towards external actors and society in general. In this study, the author concluded that the most referred dimension was that related to the client-system, while responsibilities towards the organisation were also identified, namely in the relationship established with other professionals. As for the practice of CSR, most respondents believe that the practice of social responsibility is related to the company (second sector) (Esgaio 2018).

The CSR objectives, outlined in the European Union's social policy (CCE 2020), are based on a strategy to support sustainable development and respect for European values, i.e.:

1. Human rights and labour protection;
2. Continuous learning and employability of workers with inclusion of disadvantaged groups;
3. Environmental protection;
4. Reduction of pollution;
5. Rational use of natural resources;
6. Social and environmental innovation; and
7. Improving public health.

In response to civil society demands, concepts such as ethics, social responsibility and SD, have assumed an increasingly important role in business strategies. Given the general increase in the importance of SE, in general, its representation in CSR discourse is reflective of this trend (Michael 2003).

In SEE, however, corporate sustainability and, consequently, social responsibility is often confused with social service practice, due to the social mission of the institution (Esgaio 2018). In her work, Esgaio (2018) draws attention to the lack of reflection about social responsibility within social service. According to the author, in SSE, CSR is associated with ethical conceptions, based on the principle of solidarity and a perspective of shared responsibility or oriented towards the common good: there is a tendency for a more global analysis by managers and a more pragmatic one by professionals (Esgaio 2018).

3. Research Methodology

The present work aims to answer the following research question: How have sustainable practices, namely environmental behaviour, been adopted by Portuguese Social Economy institutions (IPSS) in order to contribute to Sustainable Development?

To meet the objectives of this research and, consequently, answer the question posed, a study was conducted with 31 IPSS (sample selected according to the following description), using a qualitative methodology, based on the content analysis technique, given that the overall objective of our research positions us in an analysis of the behaviour and activity of people and organisations, the methodology should be qualitative (Sousa and Baptista 2011).

Qualitative research methods are inductive and descriptive, allowing us to extrapolate ideas and interpretations from the data collected, for the understanding of the results on our object of study (Sousa and Baptista 2011). These interpretative procedures favour

Preprints (www.preprints.org) | NOT PEER-REVIEWED | Posted: 22 December 2021 doi:10.20944/preprints202112.0367.v1

case or content analysis, which is why we consider it to be the appropriate method for our research.

Thus, for the development of the fieldwork, a script was established for conducting semi-structured interviews, based on the bibliographical review. The script for the interviews posed generic questions and is presented in Table 1:

Table 1. Semi-structured interview guide for the entities visited

Type of questions	Questions
Characterisation	1. the social mission of the entity; 2. the activities carried out in the entity; 3. the number of users reached by the activities; 4. the development of the entity; 5. the main transformations in the activity, if any, and what led to these transformations (form of consolidation of the entity: expansion/retraction).
Environmental Behaviour	1. What mechanisms does the entity have for: recycling of solid waste (non-contaminating)? 2. What mechanisms does the entity have for: disposal of contaminating solid waste? 3. Does the entity have some sort of mechanism to save water? 4. What kind of mechanism does the entity have for energy saving? 5. Does the entity carry out any environmental awareness campaigns with its stakeholders? 6. What are the environmental actions developed by the entity?

Fieldwork for qualitative studies is often used as a method of engagement with the phenomenon to collect information/data or to analyse practices in situ (Markham 2013). For fieldwork to be successful, a plan should be drawn up in advance, which should include the object and purpose of the research (Feldman 2019). Furthermore, it should also specify who will be investigated, what will be investigated, and how it will be investigated, which will involve structuring a script of questions (Jacob and Furgerson 2012). These stages, added to the definitions of approach method for the respondents, constitute the research protocol, presented in Table 2:

Table 2. Protocol for fieldwork

1. scheduling the meeting, for which initial contact was made by telephone;
2. formation of teams of two researchers;
3. sending e-mail to the manager of the entity confirming the appointment.;
4. quick search on the Internet to check if the entity had a website.
5. at the beginning of the meeting with the entity, the group adopted the following procedure:
    a. thank the entity for its availability;
    b. present the project, highlighting two points:
        i. outline the composition of the project team;
        ii. present the synopsis of the project mentioning its objectives.

It was necessary to define a sample given that field research considering the entire universe of IPSS population (5358 at the time) seemed not to be feasible. Thus, a representative sample of the study population was defined by following the appropriate statistical procedures. Consequently, to define the number of IPSS to be included in the sample, the Epi Info software, version 7.1.0.6 (Dean et al. 1991) was used, adopting a confidence

Preprints (www.preprints.org) | NOT PEER-REVIEWED | Posted: 22 December 2021 doi:10.20944/preprints202112.0367.v1

level of 90% and a margin of error of 5%, which resulted in a sample of 258 IPSSs to be interviewed. Notwithstanding this, the sample size was still considered too high and difficult to achieve, reason why the margin of error was increased to 10%, resulting in the number of IPSS to be interviewed being reduced to 67. However, depending on the availability of respondents and the holiday period of the entities, only 31 visits were carried out. The interviews were scheduled in the month of May 2019, and the visits took place in the months of June and July 2019.

As far as representativeness is concerned, several other aspects were considered, such as: legal nature; type of social services; dimension of the IPSS; geographical location; amongst others.

4. Data Analysis

The interviews were digitalized, and for the analysis of the fieldwork data, we adopted the methodology of Content Analysis (Bardin 2004), using the NVivo12 Version 12.6.0 software. The choice of this software is related to the possibility of coding and categorizing various data formats, minimizing the researcher's bias.

In the content analysis process, the main ideas of the interviews were identified, and grouped, by similarities, into five stages. In the first phase, respondents were coded: in order to preserve data confidentiality, the name of the IPSS was replaced by the acronym IPSS and numbered from 1 to 31. In the second stage, the Units of Analysis or Registration Units (RU) were identified. In the third stage, the RUs were grouped into categories, according to Table 3. In the fourth step, the categories were analysed, and in the fifth stage, they were interpreted.

Table 3. Identification of Categories

Registration Units (RU)	Categories
RU 1 - What are the environmental actions developed by the entity?	C1 – Environmental Actions
RU 2 – What mechanisms does the entity have for: recycling of solid waste (non-contaminating)?	C2 – Recycling
RU 3 – What mechanisms does the entity have for the disposal of contaminating solid waste?	C3 – Waste separation
RU 4 – Does the entity have some mechanism for saving water? RU 5 – Does the entity have some kind of mechanism for energy saving?	C4 – Internal Actions for Energy and Water Saving
RU 6 – Does the institution carry out any environmental education procedures with its stakeholders?	C5 – Environmental awareness and education

Most of the surveyed entities carry out some environmental activity, be it recycling waste, selling materials for recycling or educating users. However, they do not identify these activities as being "a sustainable activity". The exception is the use of photovoltaic cells for heating water. The answers to the questions in this subcategory can be found in the Appendix A.

4.1 Analysis of environmental data

From the interviewed entities, all 31 entities identified the practice of environmental actions (C1), but only 9 had these actions well outlined:

- IPSS 8: Reuse of didactic materials
- IPSS 10: It has an organic vegetable garden maintained by the users themselves
- IPSS 12: Has some concerns, and does some waste control

Preprints (www.preprints.org) | NOT PEER-REVIEWED | Posted: 22 December 2021 doi:10.20944/preprints202112.0367.v1

- IPSS 18: Produce handicrafts from recycled products
- IPSS 19: It has a proposal for decarbonisation that involves the purchase of land on which a tree will be planted per member
- IPSS 20: Reuses materials
- IPSS 22: Uses only reusable bottles
- IPSS26: It has a recycling bin and seeks to raise awareness among users to have recycling bin at home
- IPSS28: They maintain a goods and utilities bank, where they receive goods. They carry out a sorting process to separate the goods that are no longer useful, which are sold to a company that recycles these materials. Those that are in good condition are donated to the most disadvantaged people. "There is a lady who has gone into a new home and her house has been furnished with furniture donated by us".

Eighteen of the interviewed entities separate organic and inorganic waste (C3), and only 11 of the 31 entities interviewed recycle at their facilities (C2). IPSS 21 claims that:

"Here on a daily basis, there is not any. It has different bins (recycling bins), but most of the users, do not care and mix everything". "The institution has some serious problems in the building (headquarters), which we are trying to fix". "Studies are being made on energy improvement which will have a positive impact on the environmental level".

With regard to water and energy savings, we found that (C4):

- IPSS 3: has awareness-raising actions to reduce energy consumption
- IPSS 4: promote awareness-raising actions to reduce energy and water consumption
- IPSS 5: installed Photovoltaic Cells
- IPSS 8: uses solar panels for the swimming pools and carries out training sessions on energy consumption (use of the machines, bathing, etc.)
- IPSS 9: "We've already thought about developing a project, but we don't have the money"
- IPSS 13: "Energy efficiency, we are very conscientious, but we have an institution with a lot of lighting". They use rainwater to water the plants
- IPSS 15: solar heating ("the management would like to do it, but they haven't done it yet")
- IPSS 16: have solar panels. They don't have presence sensors because they believe that: "by having sensors you spend more than not having them (because of the movement of people). The sensor is not one of the best options". There are water timers in the bathrooms. They have an automatic system for running the boilers. "The solar panels are tuned to the activities, and they turn off automatically. The savings in gas and electricity are around 25%."
- IPSS 17: The facilities have their own wastewater treatment plant. They also have an energy microgeneration system
- IPSS 27: photovoltaic system for electricity production

As for environmental education (C5) only 6 IPSS stated that they have activities, which are oriented towards children. IPSS 9 claims lack of funds to start such a project and IPSS 29 believes that "this is a project that should be started with some urgency".

The entities IPSS 1, IPSS 2, IPSS 6, IPSS 7, IPSS 11, IPSS 14, IPSS 21, IPSS 23, IPSS 24, IPSS 25, IPSS 30 and IPSS 31 did not mention any actions for the conservation or preservation of the environment.

5. Discussion and final considerations

The grouping of the registration units (RU) into categories (C) enabled the conclusion that, despite the advantages of acting more proactively in relation to environmental practices, most IPSS do not act in the sense of developing: Environmental actions (C1); Recycling (C2); Actions to Save Water and Energy (C4); and Environmental Education (C5). The exception is Waste Separation (C3). In this category it was identified that most of the IPSS surveyed adopt this practice. It is worth mentioning here that this is a practice widely adopted in the country, which has an adequate system for the collection of domestic waste

in which there is separation of waste into: organic; plastic and metals; glass; cardboard. Many retail chains also collect batteries, oils and other materials that can be recycled.

Thus, by responding to the objective of this research which is to understand how sustainable practices, namely environmental behaviour, have been adopted by Portuguese Social Economy institutions (IPSS) in order to contribute to Sustainable Development, we consider that 'there is even some intention' to implement better practices. However, this attempt is still far from actions that can be interpreted as sustainable practices. The actions adopted by IPSS are still quite incipient and there is much room for improvement.

The narratives of lack of funds to implement Environmental Management Systems are nothing more than objections that are easily defeated based on practical examples presented by institutions from other countries and shown throughout the text.

We consider that the IPSS are wasting potential gains that could result from:

- Cost reduction: energy and water consumption could be improved with the installation of photovoltaic panels, presence sensors, more environmental education in order to promote "consumption savings" in the institution itself. To save water it is possible to install water reducers on taps and capture rainwater for garden watering and backyard cleaning.
- Sale of products: many institutions have the opportunity to sell post-consumer products to cooperatives or industries that use various types of materials, namely plastic and paper.

Thus, in addition to generating financial benefits for the entity, the IPSS would also generate gains for the environment. Our analysis is in line with studies by Esgaio (2018) who suggests that this type of institutions' concerns, in the context of Social Responsibility, relate to social issues, leaving environmental issues in a marginal context.

In the contacts established with the IPSS, a concern with the provision of furniture for less favoured families was also identified. This concern could be overcome with the clear establishment of partnerships with second sector companies as suggested by Williams et al. (2012). In fact, these partnerships could even involve the recycling of products for other organizations.

Carroll (1979, 1991, 1999, 2016) in his works suggests that among the responsibilities of the organisation is those related to the economic sphere. We identified that the economic responsibility is not left in the second plan by IPSS. Thus, contrary to what Carroll (2016) suggests in relation to the 'equivalence between the importance of responsibilities' the philanthropic responsibility is the one that gains the greatest importance in Portuguese social economy entities.

Another point that deserves our attention is related to organic farming. It was realized that these activities have much more of a playful character than an economic one, which can be interesting. However, if the practice were seriously adopted, it could count on the support of family members for the fostering of community gardens, which would meet not only the needs of users, but also of other stakeholders in the community. It is particularly worth remembering that agriculture is one of the major concerns for the societies of the future.

Thus, it is understood that the results of this work contradict the reflections of Gismondi et al. (2016), since sustainability is not dealt with in a strategic approach by the investigated institutions.

Portugal faces a problem of ageing and population decrease in several areas of its territory. Therefore, we argue that if the IPSS worked on the three components of Sustainable Development (environmental, social and economic), there would be a greater contribution to the reduction of these effects on the community as a whole.

Points such as:

- greater education of the population in relation to environmental practices;
- better use of energy (Solar and Aeolic);
- revitalisation of planting areas;
- better architectural use of buildings;

- better internal distribution of furniture;
- buildings capable of generating their own energy;
- establishing partnerships with the private sector to leverage the circular economy;
- valuing the cultural heritage of communities;
- development of economic activities through cooperatives that value these heritages.

Among many other examples of good practices could contribute greatly to mitigate the effects of aging and low demographic occupation in some regions.

Finally, even single case ('single case') studies can be used to support variance-based theorising by comparing current data with insights from received theory (Eisenhardt and Graebner 2007), and tend to follow a positivist paradigm so that other researchers can assess the validity of theory and constructs by applying them to different empirical settings (Bansal et al. 2018).

Whereas a hypothetical deductive approach to theorising begins with prior theory, an inductive approach begins with the data or context-specific problem (Weick 1992). However, the propositions derived in this type of positivist analysis can extend prior work and stimulate future deductive work (Eisenhardt and Graebner 2007), although they do so in ways that offer potential jump-steps in theorising.

Therefore, we envisage new opportunities for future studies that will deepen our findings and broaden the sample to be researched. Furthermore, we believe that the greatest contribution to academia comes in the sense that we evaluate the application of different theories, so far adopted for the second sector, in the field of the social economy.

Funding: Please add: The European Regional Development Fund (FEDER), through Operational Competitiveness and Internationalisation Program (COMPETE 2020 - POCI), and the Foundation for Science and Technology (FCT) financed this research, with reference number POCI-01-0145-FEDER-030074.

Conflicts of Interest: The authors declare no conflict of interest.

Preprints (www.preprints.org) | NOT PEER-REVIEWED | Posted: 22 December 2021 doi:10.20944/preprints202112.0367.v1

Appendix A - Concerns with the Environment

IPSS	Environmental Actions	Recycling	Waste separation	Internal actions for energy and water saving	Environmental Education
IPSS1		Clothing, cardboard and plastic	Yes		Yes
IPSS2		Paper	Yes		
IPSS3				Awareness-raising actions to reduce energy consumption	
IPSS4		Oil, plastic, paper and cardboard	Yes	Awareness-raising actions to reduce energy and water consumption	
IPSS5		Paper	Yes	Photovoltaic cell	
IPSS6	No				
IPSS7		Cover/glass/leds	Yes		Yes
IPSS8	Reuse of didactic materials		Yes	Solar panels for swimming pools Training sessions on energy consumption (machine use, bathing)	Yes
IPSS9	We have already thought about developing a project, but we have no money.	Batteries	Yes		
IPSS10	Organic vegetable garden				
IPSS11			Yes		With children we have a series of activities to raise their awareness
IPSS12	The IPSS has a certain concern, and does some control of the waste				
IPSS13			Yes	Energy efficiency, we are very frugal. We have an institution with a lot of lighting. Using rainwater to water the plants	
IPSS14		Oil	Yes	Solar heating (the management would like to promote it, but they haven't done it yet)	
IPSS15			Yes	Solar panels It does not have presence sensors because they believe that: "by having sensors you spend more than not having them (because of the movement of people). The sensor is not one of the best options". There are water timers in the bathrooms. They have an automatic system for running the boilers. "The solar panels are tuned to the activities and	Children's education

Preprints (www.preprints.org) | NOT PEER-REVIEWED | Posted: 22 December 2021 doi:10.20944/preprints202112.0367.v1

IPSS	Environmental Actions	Recycling	Waste separation	Internal actions for energy and water saving	Environmental Education
				switch off automatically. The savings in gas and electricity are around 25%".	
IPSS16	We have no specific action				
IPSS17	They have no composting system			The facilities have their own wastewater treatment plant Microgeneration of energy	
IPSS18	They make handicrafts with recycled materials		They do not separate their waste. They only separate some waste (grease...)		
IPSS19	We have a proposal for decarbonisation that involves the purchase of land on which a tree will be planted per member.				
IPSS20	Recycling of materials		Yes		
IPSS21	Here, on a daily basis, there is none. It has different boxes (recycling bins), but most of the users, don't care and mix everything "The institution has some serious problems in the building (headquarters), which we are trying to fix". "Studies are being made on energy improvement which will have a positive impact on the environment.	At the administrative level we are particularly careful to separate the paper.	Yes		In day-care centres and kindergartens, we try to teach this to our users.
IPSS22	Reusable bottles				
IPSS25		The only action that is part of the technical staff concern is the separation for recycling the materials we use	Yes		
IPSS26	To raise people's awareness, we have an recycling bin here to make them aware of having an recycling bin at home				
IPSS27		Collect recycled products and donate them to the food bank	Yes	Photovoltaic system for electricity production	

Preprints (www.preprints.org) | NOT PEER-REVIEWED | Posted: 22 December 2021 doi:10.20944/preprints202112.0367.v1

IPSS	Environmental Actions	Recycling	Waste separation	Internal actions for energy and water saving	Environmental Education
IPSS28	Goods and utilities bank, where they receive goods, make a selection and the goods that do not fit go to the company to recycle and we receive a value. Those that are in good condition are donated to the most disadvantaged people. "There is a lady who went into a new home and the house was furnished with furniture donated by us."	Collecting bottle caps	Yes		
IPSS29	No. "It's a plan that I have urgency to start".				
IPSS30		Oil, potentially contaminated material, paper/cardboard, solar panels, led	Yes		
IPSS31	No				

References

(Acquier et al. 2011) Acquier, A., Gond, J.-P., and Pasquero, J. 2011. Rediscovering Howard R. Bowen's Legacy: The Unachieved Agenda and Continuing Relevance of Social Responsibilities of the Businessman. Business & Society, 50(4), pp. 607-646. https://doi.org/10.1177/0007650311419251.

(Bansal 2005) Bansal, P. 2005. Evolving Sustainably: A Longitudinal Study of Corporate Sustainable Development. Strategic Management Journal, 26(3), pp. 197-218.

(Bansal et al. 2018) Bansal, P., Smith, W. K., and Vaara, E. 2018. New ways of seeing through qualitative research. Academy of Management Journal, 61(4), pp. 1189-1195.

(Bardin 2004) Bardin, L. 2004. Análise de conteúdo 3a. Ed. Lisboa: Edições 70.

(Blowfield 2005) Blowfield, M. 2005. Corporate social responsibility-the failing discipline and why it matters for international relations. International Relations, 19(2), pp. 173-191.

(Bovea et al. 2016) Bovea, M. D., Ibáñez-Forés, V., Pérez-Belis, V., and Quemades-Beltrán, P. 2016. Potential reuse of small household waste electrical and electronic equipment: methodology and case study. Waste management, 53, pp. 204-217.

(Bowen 1953) Bowen, H. R. 1953. Social responsibilities and the businessman. New York: Harper.

(Brundtland et al. 1987) Brundtland, G. H., Khalid, M., Agnelli, S., Al-Athel, S. A., Chidzero, B. J., Fadika, L. M., . . . Ramphal, S. 1987. Our common future. New York: Oxford University Press.

(Carroll 1979) Carroll, A. B. 1979. A three-dimensional conceptual model of corporate social performance. Academy of Management Review, 4, pp. 497–505.

(Carroll 1991) Carroll, A. B. 1991. The pyramid of corporate social responsibility: Toward the moral management of organizational stakeholders. Business horizons, 34(4), pp. 39-48.

(Carroll 1999) Carroll, A. B. 1999. Corporate social responsibility: Evolution of a definitional construct. Business & Society, 38(3), pp. 268-295.

(Carroll 2016) Carroll, A. B. 2016. Carroll's pyramid of CSR: taking another look. International Journal of Corporate Social Responsibility, 1(3), pp. 2-8. DOI 10.1186/s40991-016-0004-6.

(Carroll and Shabana 2010) Carroll, A. B., and Shabana, K. M. 2010. The business case for corporate social responsibility: A review of concepts, research and practice. International journal of management reviews, 12(1), pp. 85-105.

(CCE 2001) CCE. 2001. Livro Verde: Fomentar um marco europeu para a responsabilidade social das empresas. Comissão das Comunidades Europeias, Bruxelas.

(CCE 2020) CCE. 2020. Responsabilidade social das empresas (RSE) Atividades a nível da UE e nacional destinadas a promover a RSE, melhoria das normas ambientais nas empresas. Obtido em outubro de 2020, de Comissão das Comunidades Europeias: https://ec.europa.eu/info/business-economy-euro/doing-business-eu/corporate-social-responsibility-csr_pt

(Ceptureanu 2017) Ceptureanu, S.-I., Ceptureanu, E.-G., Orzan, M. C., and Marin, I. 2017. Toward a Romanian NPOs sustainability model: Determinants of sustainability. Sustainability, 9(6), p. 966.

(Cornelius et al 2008) Cornelius, N., Todres, M., Janjuha-Jivraj, S., Woods, A., and Wallace, J. 2008. Corporate social responsibility and the social enterprise. Journal of Business Ethics, 812, pp. 355-370.

(Crane and Matten 2005) Crane, A., and Matten, D. 2005. Corporate citizenship: Missing the point or missing the boat? A reply to van Oosterhout. Academy of Management Review, 30(4), pp. 681-684.

(Crucke and Decramer 2016) Crucke, S., and Decramer, A. 2016. The development of a measurement instrument for the organizational performance of social enterprises. Sustainability, 8(2), p. 161 doi: 10.3390/su8020161.

(Curran 2007) Curran, A., Williams, I. D., and Heaven, S. 2007. Management of household bulky waste in England. Resources, conservation and recycling, 55(1), pp. 78-92.

(Dahlsrud 2008) Dahlsrud, A. 2008. How corporate social responsibility is defined: an analysis of 37 definitions. Corporate social responsibility and environmental management, 15(1), pp. 1-13.

(Dean et al. 1991) Dean, A. G., Dean, J. A., Burton, A. H., and Dicker, R. C. 1991. Epi Info: a general-purpose microcomputer program for public health information systems. American journal of preventive medicine, 7(3), 178-182. https://doi.org/10.1016/S0749-3797(18)30936-X.

(Dovers and Handmer 1992) Dovers, S. R., and Handmer, J. W. December de 1992. Uncertainty, sustainability and change. Global Environmental Change, 2(4), pp. 262-276.

(Eisenhardt et al 2007) Eisenhardt, K. M., Graebner Eisenhardt, K. M., and Graebner, M. E. (2007). Theory building from cases: Opportunities and challenges. Academy of Management Journal, 50(1), pp. 25-32.

(Elkington 1999) Elkington, J. 1999. Cannibals with Forks: Triple Bottom Line of 21st Century Business. London: John Wiley & Son Ltd.

(Elkington 2006) Elkington, J. 2006. Governance for sustainability. Corporate Governance: An International Review, 14(6), pp. 522-529. https://doi.org/10.1111/j.1467-8683.2006.00527.x.

(Elliott 2012) Elliott, J. 2012. An introduction to sustainable development. London: Routledge.

(Esgaio 2018) Esgaio, A. C. 2018. A responsabilidade social e a redescoberta da solidariedade Perceções de dirigentes e de profissionais de Serviço Social no contexto da economia social e solidária. Tese de doutoramento em Ciências Sociais, Especialidade de Serviço Social. Lisboa, Lisboa, Portugal: Instituto Superior de Ciências Sociais e Políticas da Universidade de Lisboa.

(Feldman 2019) Feldman, E. J. 2019. A practical guide to the conduct of field research in the social sciences. Routledge.

(Foote 2001) Foote, D. 2001. The question of ethical hypocrisy in human resource management in the UK and Irish charity sectors. Journal of Business Ethics, 34(1), pp. 25-38.

(Gismondi et al 2016) Gismondi, M. A., Connelly, S., Beckie, M., Markey, S. P., and Roseland, M. 2016. Scaling up: the convergence of social economy and sustainability. Edmonton, AB: AU Press.

(Gompers et al 2003) Gompers, P., Ishii, J., and Metrick, A. 2003. Corporate governance and equity prices. The quarterly journal of economics, 118(1), pp. 107-156.

(Hart and Milstein 1999) Hart, S. L., and Milstein, M. B. 1999. Global sustainability and the creative destruction of industries. MIT Sloan Management Review, 41(1), pp. 23-33.

(IUCN et al 1980) IUCN, WWF, and UNEP. 1980. World conservation strategy: living resource conservation for sustainable development. IUCN International Union for Conservation of Nature & WWF World Wildlife Fund. Gland, Switzerland: IUCN.

(Jacob and Furgerson 2012) Jacob, S. A., and Furgerson, P. S. 2012. Writing interview protocols and conducting interviews: tips for students new to the field of qualitative research. Qualitative Report, 17(6).

(Lee 2008) Lee, M. D. P. 2008. A review of the theories of corporate social responsibility: Its evolutionary path and the road ahead. International Journal of Management Reviews, 10(1), pp. 53–73.

(Linda 1990) Linda, S. 1990. Signs of hope: Working towards our common future. Oxford: Oxford University Press.

(Lopes and Leal 2017) Lopes, A., and Leal, S. 2017. Responsabilidade Social numa Organização de Economia Social: O Caso do Centro Social da Quinta do Anjo. Revista da UIIPS – Unidade de Investigação do Instituto Politécnico de Santarém, 5(2), pp. 15-30.

(Lyth 2017) Lyth, A., Baldwin, C., Davison, A., Fidelman, P., Booth, K., and Osborne, C. 2017. Valuing third sector sustainability organisations–qualitative contributions to systemic social transformation. Local Environment, 22(1), pp. 1-21.

(Markham 2013) Markham, A. N. 2013. Fieldwork in social media: What would Malinowski do? Qualitative Communication Research, 2(4), pp. 434-446.

(Matten and Moon 2008) Matten, D., and Moon, J. 2008. "Implicit" and "explicit" CSR: A conceptual framework for a comparative understanding of corporate social responsibility. Academy of management Review, 33(2), pp. 404-424.

(Meira 2011) Meira, D. M. 2011. A responsabilidade social da empresa cooperativa. Uma análise jurídica e intercultural. Diálogos interculturais: os novos rumos da viagem, pp. 293-305.

(Michael 2003) Michael, B. 2003. Corporate social responsibility in international development: an overview and critique. Corporate Social Responsibility and Environmental Management, 10(3), pp. 115-128.

(Munck and Souza 2011) Munck, L., and Souza, R. B. 2011. O ecletismo do paradigma da sustentabilidade: construção e análise a partir dos estudos organizacionais. Ciencias da Administração, 13(29), pp. 202-242.

(Papaspyropoulos at al. 2012) Papaspyropoulos, K. G., Blioumis, V., Christodoulou, A. S., Birtsas, P. K., and Skordasc, K. E. 2012. Challenges in implementing environmental management accounting tools: the case of a nonprofit forestry organization. Journal of Cleaner Production, 29, pp. 132-143. https://doi.org/10.1016/j.jclepro.2012.02.004.

(Parmar et al. 2010) Parmar, B. L., Freeman, R. E., Harrison, J. S., Wicks, A. C., Purnell, L., and De Colle, S. 2010. Stakeholder theory: The state of the art. Academy of Management Annals, 4(1), pp. 403-445.

(Rondinelli and London 2003) Rondinelli, D. A., and London, T. 2003. How corporations and environmental groups cooperate: Assessing cross-sector alliances and collaborations. Academy of Management Perspectives, 17(1), pp. 61-76.

(Savitz 2013) Savitz, A. 2013. The triple bottom line: how today's best-run companies are achieving economic, social and environmental success-and how you can too. John Wiley & Sons.

(Shrivastava and Addas 2014) Shrivastava, P., and Addas, A. 2014. The impact of corporate governance on sustainability performance. Journal of Sustainable Finance & Investment, 4(1), pp. 21-37, DOI: 10.1080/20430795.2014.887346.

(Silva et al. 2011) Silva, M. E., Costa, A. C., and Gómez, C. P. 2011. Sustentabilidade no Terceiro Setor: O desafio de harmonizar as dimensões da sustentabilidade em uma ONG.". Revista Reuna, 16(3), pp. 75-92.

(Sousa and Baptista 2011) Sousa, M. J. & Baptista, C. S. (2011). *Como fazer investigação, dissertações, teses e relatórios*. (4ª Edição). Lisboa: Pactor – Edições de ciências sociais e política contemporânea.

(Tilly and Wood 2020) Tilly, C., and Wood, L. J. 2020. Social Movements, 1768–2008. Routledge.

(UE 2001) UE. 18 de July de 2001. Livro Verde- Promover um quadro europeu para a responsabilidade social das empresas. Obtido em July de 2002, de União Europeia: https://eur-lex.europa.eu/legal-content/PT/TXT/PDF/?uri=CELEX:52001DC0366&qid=1594032570512&from=PT

(UN 2020) UN. 2020. What is CSR? Obtido em July de 2020, de United Nation: https://www.unido.org/our-focus/advancing-economic-competitiveness/competitive-trade-capacities-and-corporate-responsibility/corporate-social-responsibility-market-integration/what-csr

(Weerawardena et al. 2010) Weerawardena, J., McDonald, R. E., and Mort, G. S. 2010. Sustainability of nonprofit organizations: An empirical investigation. Journal of World Business, 45(4), pp. 346-356.

(Weick 1992) Weick, K. E. 1992. Agenda setting in organizational behavior: A theory-focused approach. Journal of Management Inquiry, 1(3), pp. 171-182.

(Williams et al. 2012) Williams, I. D., Curran, T., and Schneider, F. 2012. The role and contribution of the third sector in terms of waste management and resource recovery. Waste Management, 32(10), pp. 1739-1741.

(Wood 1991) Wood, D. J. 1991. Corporate social performance revisited. Academy of management review, 16(4), pp. 691-718.