



## Implementation of the SDGs by social economy enterprises in the agrifood sector

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### Abstract

**Purpose** – Achieving the Sustainable Development Goals (SDGs) is a global initiative that is becoming increasingly important in the industrial and service sectors. This paper analyses how the SDGs are being implemented in the agrifood supply chain by social economy enterprises.

**Methodology** – Case study methodology was used to understand how companies implement the SDGs. Semi-structured interviews were conducted with managers from two cooperatives in the agrifood sector.

**Findings** – ~~This paper presents the SDG approach as an alternative that can be applied by social economy enterprises from the food sector supply chain to achieve sustainability. The cooperative legal entity structure is the main enabler of SDG implementation by social economy enterprises involved in the agrifood supply chain. There are no differences in the way that the SDGs are implemented by social economy enterprises involved in the food sector supply chain. Therefore, the SDG approach is an alternative that can be applied by food sector supply chain companies to achieve the sustainability favoured by the cooperative model.~~

**Originality** – The value of the present study lies in its analysis of the sustainability of the agrifood supply chain from an SDG-based approach that is more comprehensive than other commonly cited approaches in the academic literature.

**Keywords:** Sustainable Development Goals (SDGs), supply chain, social economy, cooperatives, case studies.

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### 1. Introduction

Achieving the Sustainable Development Goals (SDGs) is a global initiative that is becoming increasingly important in the industrial and service sectors (Baht et al., 2020). The 2020 United Nations report encourages companies to step up their efforts to achieve the SDGs by adopting innovative solutions (Gupta et al., 2021).

The food sector has been criticised for being responsible for global sustainability issues related to its environmental impact. Examples include greenhouse gas (GHG) emissions, water and soil contamination, biodiversity loss and deforestation (De Bernardi and Azucar, 2020). It has also been blamed for social problems such as poor pay and precarious working conditions amongst supply chain actors, as well as public health problems such as obesity, diabetes and chronic illness due to excessive consumption of processed foods that are high in saturated fats, salt and added sugar (Bocken and Short, 2021). Finally, there is the issue of food waste due to overproduction, poor transport connections and a lack of supply chain coordination (Espósito et al., 2007).

The considerable negative impact of food production and consumption on environmental, social and economic sustainability justifies the implementation of the SDGs in the food

sector (Pizzi et al., 2020). The SDGs have thus become a guide for the development of sustainable and responsible business practices. However, the potential of the SDGs to transform the dominant governance approaches towards sustainability remains unclear (Zimon et al., 2020). The supply chain plays a decisive role in the successful implementation of the SDGs, provided that these goals are understood as a process in which all elements interact with each other (Sudusinghe et al., 2018).

The implementation of the SDGs is a complex process that requires a combination of approaches and strategies such as collaboration between sectors and the active participation of all stakeholders, from producers to consumers (Fritz et al., 2021; Mohtar, 2022; Zimon et al., 2020). In the agrifood sector, companies focus on areas such as reducing food waste, promoting sustainable agricultural practices and improving food security. However, there are still many challenges ahead. Examples include addressing inequality in the food supply chain, improving energy efficiency (Chien, 2022) and reducing the environmental impact of food production. Despite measures proposed to improve sustainability and reduce the environmental and social impact of food production and distribution (Jacob-John et al., 2021), little attention has been paid to other aspects of the supply chain such as transport, warehousing and distribution, as well as the evaluation of the impacts of the SDGs on companies within the supply chain. This lack of attention on the supply chain is addressed from an SDG approach by reflecting on the following research question: How do companies involved in the food sector supply chain implement the SDGs?

Case study methodology was used to answer this research question (Yin, 1994). In line with this methodology, a semi-structured interview process was designed to collect data from two food sector supply chain companies. The cases analysed in this paper were two social economy enterprises involved in the food sector supply chain: Anecoop S. Coop (ANECOOP) and Consum (CONSUM) Representatives from these companies were questioned about their implementation of the 17 SDGs, the enablers and barriers that they face, and the evaluation of their impact. The cases analysed in this paper were two social economy enterprises involved in the food sector supply chain: Anecoop S. Coop (ANECOOP) and Consum (CONSUM). This choice of social economy enterprises is justified by the fact that such companies account for a large proportion of business activities in the Spanish agrifood sector. In 2020, they had a combined revenue of 34,186 million Euros and created 119,700 direct jobs. Moreover, export revenues increased by more than 82% between 2011 and 2020 (Cooperativas Agroalimentarias de España, 2021).

The findings reveal that there are no differences in the way that the SDGs are implemented by the two analysed companies involved in the food sector supply chain. From the study, it can be concluded that the SDG approach is an alternative that can be applied by food sector supply chain companies to achieve the sustainability favoured by the cooperative model. Finally, the main contributions of this paper include the fact that the food sector and the cooperative legal form are key factors for the implementation of SDGs in social economy companies. Also, collaboration networks are important for social economy companies that lack the necessary resources to implement the SDGs.

~~The cases analysed in this paper were two social economy enterprises involved in the food sector supply chain: Anecoop S. Coop (ANECOOP) and Consum (CONSUM). In the context of the food supply chain, ANECOOP is a Spanish cooperative that purchases vegetables, fruit and wine from producers (growers) and sells them to distributors such as CONSUM. In turn, CONSUM is a Spanish cooperative that purchases vegetables, fruit~~

~~and wine from intermediaries such as ANECOOP or directly from growers. It then resells these products to end consumers. This choice of social economy enterprises is justified by the fact that such companies account for a large proportion of business activities in the Spanish agrifood sector. In 2020, they had a combined revenue of 34,186 million Euros and created 119,700 direct jobs. Moreover, export revenues increased by more than 82% between 2011 and 2020 (Cooperativas Agroalimentarias de España, 2021).~~

The article has the following structure. After this introduction, Section 2 reviews the literature on the SDGs. The method is described in Section 3, followed by a description of the cases. Section 4 outlines the main findings. Finally, Section 5 presents the conclusions, managerial implications, limitations and future lines of research.

## 2. Literature review: SDGs in the food sector

The relationship between food businesses and SDGs is an important research topic around the world (Pizzi et al., 2020). Moggi et al. (2018) analysed how food companies can contribute to meeting the SDGs through corporate social responsibility (CSR) practices and sustainability strategies. Borge-Diez et al. (2022) reviewed the methods, tools and examples of management of the water-energy-food nexus. They sought to identify gaps, aims and future developments that arise when modelling goods management problems to design a sustainable development framework. Filho et al. (2022) analysed the link between different parts of the supply chain (production, food processing, food transport and storage, food retail, and disposal of food waste), climate change and other SDGs, advocating a holistic approach to address the challenges that arise. Mainali et al. (2018) analysed the synergies and exchanges between all SDGs.

The implementation of SDGs in the food industry to achieve sustainable change and improve social and environmental well-being has been the subject of research (Yeh et al., 2022). Green knowledge management strengthens organisational capabilities for firms to achieve green innovation (Wong et al., 2022) and the SDGs (Wang et al., 2022). Dovgotko et al. (2022) analysed the relationship between innovation and sustainability in the food industry and studied how the implementation of the SDGs can be an effective strategy to improve business competitiveness. Bogers et al. (2019) and Venturelli et al. (2022) showed that a sustainability-related challenge can be effectively tackled through open innovation in collaboration with complementary partners. Aibar-Guzmán et al. (2022) found that sustainable food product innovation depends on the ownership and capital structure of firms and the financial decisions of the ownership structure. Jacob-John et al. (2021) evaluated the impact of the implementation of the SDGs in the food industry supply chain, proposing measures to improve sustainability and reduce the environmental and social impact of food production and distribution. Herrero-Luna et al. (2022) presented the circular economy as a sustainable solution that contributes to companies' implementation of the SDGs, especially in the food sector. Finally, CSR has also been reported as a dominant practice to achieve the SDGs (Bargava et al., 2022; Godivan, 2022; Meseguer-Sanchez et al., 2021).

Collaboration between the private sector, government actors and civil society is crucial to ensure a sustainable future (Uncken et al., 2020). It should be considered when analysing the role of food companies in the implementation of the SDGs (Mohtar, 2022). Collaborative relationships between firms and stakeholders are essential for the transition towards more sustainable and more circular supply chains (Bogers et al., 2020; Mohtar, 2022). For instance, Jacob-John (2018) studied customer relations, concluding that

consumer pressure for sustainability can positively influence the entire supply chain. Dora (2020) explored how growers manage relations with supply chain stakeholders to reduce food waste. Dabbous and Tarhini (2021) advocated the sharing economy for sustainable development, and Calic and Mosakowski (2016) proposed the collaborative economy as a new model of interaction and financing for sustainable projects between firms with scarce access to traditional sources of capital, as is the case of small and medium-sized growers. At the macro level, collaboration between companies within the food supply chain, government actors and policymakers primarily centres on tax incentives (Pazienza and de Lucia, 2020; Zhu et al., 2019).

Industry 4.0 technologies have revolutionary potential and could lead to achieving 70% of the 169 targets of the SDGs (Gupta et al., 2021). The Internet of things is useful to reduce food waste in domestic settings (Nasir et al., 2018), restaurants (Wen et al., 2018), the food supply chain (Manavalan and Jayakrishna, 2019) and the wider food industry (Jagtap and Rahimifard, 2019; Jagtap et al., 2019). In addition to the Internet of things, other technologies such as 3D printing, artificial intelligence and machine learning can help improve sustainable practices (Burke-Shyne et al., 2021; Chopra et al., 2022; De Bernardi and Azucar, 2020; Scholz and Kulko, 2021). Likewise, blockchain technology contributes to the SDGs in different ways. It supports sustainable supply chains (Aslam et al., 2021), improves energy efficiency and encourages the creation of safe cities (Parmentola et al., 2021; Rana et al., 2021). Digital technologies can also stimulate connections between different stakeholders through digital platforms (De Bernardi et al., 2021). The food supply chain and innovative marketing strategies using social media have also been affected by digitalisation (De Bernardi et al., 2021). Annosi et al. (2021) studied the implementation of digital technology in the supply chain, analysing the institutional enablers and barriers detected by supply chain actors. Sutinen and Närvänen (2021) noted that social media can raise social awareness of the problem of food waste.

The question of how to evaluate and measure the impact of SDGs is one of the biggest challenges facing the food industry. Most studies have used traditional life-cycle evaluation tools to assess primarily the environmental impact of products, processes and production (De Bernardi et al., 2020). Other studies have used alternative tools such as energy analysis (Spagnolo et al., 2020) and material flow analysis (Amicarelli et al., 2021). Using a dynamic systems model, Kazancoglu et al. (2021) confirmed that reverse logistics activities in a food supply chain can significantly minimise food loss and waste. Abou Taleb and Al Farooque (2021) developed an accounting model to address economic, social and environmental performance in circular economy contexts. Finally, the relationship between companies' sustainability practices and financial performance has attracted considerable scholarly attention (Lee and Suh, 2022; Muhmad and Muhamad, 2021). Galeazzo et al. (2023) found that the financial performance of firms generally only improves when they commit to the full set of SDGs or to a specific subset of the SDGs that are most frequently cited.

### 3. Research method

This paper examines the implementation of the SDGs in two Spanish social economy enterprises in the agrifood supply chain. The research question addressed by this study is as follows: How do companies involved in the food sector supply chain apply an SDG focus? To respond to this research question, the following hypothesis was formulated:

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2  
3 The SDG approach is an alternative that can be applied by companies in the food sector  
4 supply chain to ensure sustainability.  
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6 Case study methodology (Yin, 1994) is most suitable when seeking to respond to a  
7 research question that asks “how” about a series of current events, over which researchers  
8 have little or no control (Scuotto et al., 2016). It also uncovers latent variables that provide  
9 a better understanding of how leading actors perceive their environment (Henn et al.,  
10 2009). It thus offers opportunities for further development of existing theory. Although  
11 this methodology has weaknesses in terms of statistical significance and selection bias, it  
12 also has strengths. For instance, it enables in-depth analysis, offers a high level of  
13 conceptual validity, enables comprehension of context and process, and encourages new  
14 hypotheses and research questions (Scuotto et al., 2016).  
15  
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17 This paper presents an approach based on a multiple case study of two cases (Yin, 2013).  
18 This approach enables comparative analysis between these two social economy  
19 enterprises with different roles in the food supply chain. In the context of the food  
20 industry, the implementation of the SDGs entails the adoption of sustainable and  
21 responsible food production, distribution and consumption practices. Therefore,  
22 companies were chosen to cover two links in the food sector supply chain between  
23 growers and consumers. ~~ANECOOP is a cooperative that acts as an intermediary between~~  
24 ~~growers and distributors, whereas CONSUM is a cooperative that distributes to end~~  
25 ~~consumers.~~ In the context of the food supply chain, ANECOOP is a Spanish cooperative  
26 that purchases vegetables, fruit and wine from producers (growers) and sells them to  
27 distributors such as CONSUM. In turn, CONSUM is a Spanish cooperative that purchases  
28 vegetables, fruit and wine from intermediaries such as ANECOOP or directly from  
29 growers. It then resells these products to end consumers. ANECOOP was chosen because  
30 of its position as the leading cooperative in exports (Cooperativas Agroalimentarias de  
31 España, 2021). CONSUM was chosen because it is the only cooperative in the Spanish  
32 distribution sector.  
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36 This study used exploratory surveys based on semi-structured interviews (Saunders et al.,  
37 2009). Following the indications of Gläser and Laudel (2010), a guided interview was  
38 used for two reasons. First, the content focused on the specific research objective, not the  
39 information provided by the interviewees. Second, unique and identifiable data were  
40 required. The core items were the implementation of the SDGs in these two chosen  
41 companies and the enablers and barriers they have faced, as well as the impact that the  
42 implemented SDGs have had. The study was exploratory, so the procedure followed  
43 deductive and inductive approaches, resulting in a general abductive approach  
44 (Czarniawska, 2014).  
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47 Interviews were conducted with the Director of External Relations of CONSUM and  
48 ANECOOP. A Systems and Organisation Executive from ANECOOP was also  
49 interviewed. Social economy cooperatives were chosen because of their economic and  
50 social impact in Spain, as explained earlier. Reliability was based on a detailed case study  
51 protocol that documented the schedule, interview procedures, recording, follow-ups,  
52 questions and summary data set (Pagani and Pardo, 2017).  
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### 56 **3.1. Data collection**

57 The main data source was the interviews (Arksey and Knight, 1999). Two semi-structured  
58 qualitative interviews were conducted, with an average duration of 1.5 hours each. In  
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3 these interviews, a brief description of the company was requested, along with an  
4 explanation of SDG implementation and the enablers and barriers faced in this regard.  
5 The interview questions were semi-structured to ensure that answers were as complete as  
6 possible. The interviews were transcribed, and qualitative data analysis was performed to  
7 arrange the content into themes (Miles and Huberman, 1984). Field notes on the reactions  
8 of the interviewees were also made. Transcriptions and field notes help ensure validity in  
9 qualitative research (Eisenhardt, 1989).

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12 The choice of respondents is critical to ensure a successful case study (Yin, 1994). The  
13 respondents were chosen based on the principle that the highest quality information is  
14 collected from the people who implement the SDGs in their company. The research team  
15 accessed confidential internal and external documents to triangulate the answers from  
16 respondents, as recommended in the literature (Yin, 1994). This process increased the  
17 validity and reliability of the study (Eisenhardt, 1989).

### 21 3.2. Case descriptions

22  
23 ANECOOP ([www.anecoop.com](http://www.anecoop.com)) is a second degree cooperative of first degree  
24 cooperatives (members) in the agrifood sector. It sells fruit, fresh vegetables and wine in  
25 Spain. Abroad, it sells its products through subsidiaries. It does not have associated  
26 foreign producers because it only works with Spanish produce. ANECOOP members  
27 develop production and packaging lines and gradually transform their processes.

28  
29 CONSUM ([www.consum.es](http://www.consum.es)) was founded in 1975 as a consumer cooperative. It has  
30 become the largest Spanish cooperative in terms of number of members. It is one of the  
31 leading companies in the food retail sector under its “CONSUM” brand supermarkets,  
32 “Charter” brand franchises and online shop. At the end of the 2021 financial year (31  
33 January 2022), it had 838 proprietary and franchised supermarkets throughout the  
34 southeast of Spain, employing 18,212 workers.

## 38 4. Findings

### 39 4.1. Case 1: Anecoop S. Coop

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41 ANECOOP meets all 17 SDGs, including SDG 14 (Life Below Water) and SDG 16  
42 (Peace, Justice and Strong Institutions), as explained by External Relations Director, José  
43 Balaguer (JB), and Organisation and Systems Department Executive, David Ruiz (DR):

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46 JB: When you look at the 17 SDGs and analyse them one by one, we are  
47 working on all (...) even on Life Below Water. We don't report SDG 14  
48 (Life Below Water), but we could because if you put waste (plastics and  
49 other materials) in a circular system, it's no longer affecting the underwater  
50 world, so you could say that you are also complying with SDG 14.  
51 ANECOOP uses only recyclable plastic packaging, or so-called RP  
52 (Revolution Protection), which is 100% recyclable. We have always had  
53 an impact on all of them, some more than others.

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56 DR: We also comply with SDG 16, but we don't report on it. We're in the  
57 AENOR Foundation for Quality and the Foundation for Justice and other  
58 institutions, but we're not very active.

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3 However, the managers of ANECOOP reported that [the implementation of some SDGs could cause greater difficulty because they are not directly related to food. However, they can contribute indirectly, as in the case of SDG 11, for example. The managers of ANECOOP also highlighted the difficulty in measuring the impact of the SDGs implementation in the company can still be improved:](#)

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10 JB: We have the SDGs, but we have to achieve them. You can't meet them  
11 100%, but you can meet some of them. Our strongest SDGs are the ones  
12 we document in the report ([www.anecoop.com](http://www.anecoop.com)). Others like SDG 11  
13 (Sustainable Cities and Communities) are harder for us, but we also  
14 participate through logistics, reverse logistics and last mile logistics.  
15 We've changed our fleet to hybrids. But we're already preparing in case  
16 they have to go electric. And we're preparing our photovoltaic stations to  
17 supply our vehicles with electricity. We're getting ahead of ourselves.

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20 DR: There's no indicator that tells you that you've met 100% of each SDG.  
21 You never achieve 100% in any of them. You always have to keep  
22 working. Some stand out more than others because of the business.  
23 Anyway, we try not just to do the minimum, but to go above and beyond  
24 because we believe in it. There's work to be done before 2030 and beyond.

25  
26 [The cooperative legal form of ANECOOP is helping it improve the implementation of the SDGs, as explained by the External Relations Director \(JB\) and the Organisation and Systems Department Executive \(DR\) when describing the cooperative philosophy. The achievement and improvement of the implementation of the SDGs in the case of ANECOOP has been enabled by its cooperative structure, its sector and its size, as well as its collaborations through partnerships and agreements \(SDG-17\) with other firms:](#)

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34 JB: We're always working on all of the SDGs, mainly because of our sector  
35 and because we are a social cooperative. We have no problem  
36 implementing the SDGs because, ultimately, what we're doing at  
37 ANECOOP is pulling together everything we were already doing and  
38 linking it to the SDGs. And all the other companies are doing the same  
39 thing. I suppose that, in the future, when we have to meet a specific SDG,  
40 it might become more difficult. Cooperatives are something of a pioneer  
41 in the implementation of SDGs such as SDG 17. If you look at how  
42 cooperatives work, a group of small growers group together to form a  
43 cooperative, and they can get a warehouse to produce their products more  
44 effectively because they couldn't do it on their own. These cooperatives  
45 then join a larger one like ANECOOP to sell in greater volume and  
46 improve coordination. That's the philosophy. If you group together with  
47 others, any project is going to have a greater impact and be stronger than  
48 if you do it on your own, even though you can still do it.

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51 [In addition to the cooperative legal form, the Organisation and Systems Department Executive \(DR\) added that ANECOOP's sector \(agrifood\) also contributes to meeting the SDGs and enhancing their implementation:](#)

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56 DR: Ultimately, it's because of the type of company we are – the sector too  
57 because we have an impact on the climate. Ours area is related to  
58 environmental sustainability. Cooperatives were already doing this. They  
59 couldn't reach a certain size, so if enough of them grouped together, it  
60 allowed them to undertake energy saving projects to improve efficiency.



In my opinion, it's our philosophy. We have to take advantage of everything around sustainability because it's our values, not just a fad.

The two executives of ANECOOP agreed that larger firms were more likely to be able to implement the SDGs because of their greater resources:

JB/DR: A big company has greater resources to be able to do more. The bigger you are, the more scope you have to make an impact, but everyone can do something.

Finally, both executives also highlighted the need for collaborations through partnerships and agreements with other firms (SDG 17) from the same sector or other sectors to enhance the implementation of the SDGs and even create ties between firms for knowledge sharing purposes:

JB: I believe that partnerships have a major positive impact, regardless of whether you partner with a company in your own sector or a company in a different sector. ANECOOP can partner with a company in the energy sector to make cleaner energy. In 2022, the Spanish Wooden Packaging Association wanted us to participate in a funded study on the carbon footprint of wooden packaging. We participated because we transport fruit in wooden packaging. It's just another collaboration.

DR: We have projects with manufacturers, distributors and even competitors because you have a common interest: to achieve something together that benefits everyone. Most of the projects we are involved in are multi-company partnerships in our sector or other sectors.

JB: Above all, networks let you transfer knowledge – areas you're not working on or aren't working on effectively. You can change the approach of what you're working on – other ways of looking at the same problem that might offer a solution that you hadn't thought of internally. Ultimately, there are a lot of advantages to networks and working on open projects. In the packaging project, even though it's not our business, it affects us as intermediaries, and all the plastic ends up in the sea. So, if I encourage my retailers to use recyclable packaging that won't cause problems because it's biodegradable, I'm helping meet SDG 14.

Although ANECOOP has enablers for the implementation of the SDGs, their representatives reported that it does not seek to generate direct profit from this process but rather to raise awareness of how it has always done business.

JB: If you work towards the SDGs for profit from the market or for your image, it's not going to turn out well. The benefit is there as soon as you start working towards them. We don't need someone to tell us to do it. We were already working towards the SDGs before there were formal guidelines. Now, all we're doing is making sure that actions that we were doing before are visible so that people are aware. We produce a social responsibility report, even though ANECOOP has always been socially responsible because of the type of company it is. The thing is that, instead of putting it in a financial report, we're showing it in a much more detailed report, describing the actions that we've always taken and that we're now putting in writing. Before, people didn't see our actions because they didn't know what the SDGs were. Now you're reporting it. Is it for your image? I don't

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2  
3 know, but it's not for profit. You do it so that people know that your  
4 company, in our case ANECOOP, is socially responsible. Particularly,  
5 with SDG 7 (Affordable and Clean Energy), most companies are installing  
6 photovoltaic stations. Are they doing it to achieve SDG 7 or because they  
7 really want to reduce their energy bills? Ultimately, all these companies  
8 will say that they're addressing SDG 7.  
9

10 DR: We've been sustainable since before the word became fashionable. Many  
11 companies don't have these values, but they've labelled themselves as  
12 green to give that image. We were sustainable without that label. Some  
13 aspects of the SDGs benefit us, such as healthy eating because we work  
14 with fresh products. Are we making a profit from consumers' healthy  
15 eating? Yes, because that's our business, but it's not in bad faith. The  
16 SDGs have to stand for your values, or else it's just a farce.  
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19 According to ANECOOP, society, corporate image and UN guidelines are some of the  
20 reasons for companies to implement the SDGs. However, some of the companies in the  
21 supply chain are forced to implement them because of the demands of neighbouring  
22 companies in the supply chain. In the case of the last link in the chain (i.e. the consumer),  
23 the opinions of the two ANECOOP managers differ:  
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26 DR: There is a movement around the world where end consumers are looking  
27 for sustainability and sustainable products. This drives our customers  
28 (SDG 8) to look for more sustainable suppliers.  
29

30 JB: If you go to the supermarket at the end of the day, have the organic  
31 products run out? If consumers were really aware, there would be no  
32 organic products left on the shelves. Now that we're in a crisis, nobody  
33 buys organic produce. The rate of consumption has dropped sharply  
34 because very few people are willing to pay for organic products. When you  
35 look at a non-specialist supermarket, how many of their products are  
36 organic and how many are conventional? If we really were  
37 environmentally aware, we would all buy organic.  
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40 Factors such as the purchasing power of customers can influence whether they buy  
41 sustainable products, especially during difficult economic conditions. However, when  
42 low purchasing power dissuades a consumer from buying sustainable products, it does  
43 not necessarily imply that the consumer is not aware of sustainability.  
44

45 DR: Consumers are like companies that have to strike a balance between being  
46 able to eat and not being able to eat.  
47

48 JB: So we're not environmentally sustainable. It's more about visibility than  
49 reality at the moment. We all have to be sustainable, and all the companies  
50 want to sell more than anyone else. But, ultimately, I don't think that  
51 anyone facing a crisis like the one right now would choose to be  
52 environmentally sustainable.  
53

54 DR: The figures on the development of innovative products show that organic  
55 products are by far the best priced. We're growing more with organic  
56 products than conventional products (...) What adds value now will  
57 become the norm. In Europe, there's a movement of raised awareness (...)  
58 where people buy a lot of organic produce. It's true that they have greater  
59 purchasing power, but they're also more aware because they not only buy  
60

organic products but also recycle and have other sustainable habits. This is pushing us, and it's good for us because we are in the rural world.

The executives from ANECOOP had different yet complementary opinions regarding the actors (consumers and distributors) that demand that food sector companies implement the SDGs:

JB: A distributor asked us, how much of the energy that you consume is clean energy, green energy? Did they ask me because they really want to know or because of the trend? That distributor has to tell its customers that it works with a supplier that uses 50% clean energy. So why are we doing it? Because we want to report it or because it's who we really are?

DR: Society demands it.

JB: Does society demand it? We've had a photovoltaic station for 14 years. (SDG 8). We never put it in our report until we started with CSR. Before, we only said that we had a photovoltaic station, and now we say we have a station that saves I don't know how many forests, that stops cutting down so many trees . . . but we include it because we have to address the SDGs. We've always donated to the food bank and other institutions, and now we report it. We've always hired the best people, both women and men (SDG 5). We've shown a concern for high-quality education by teaching master's degrees and courses (SDG 4). We've implemented drip irrigation (SDG 6). We now put this in the report.

The ANECOOP representatives reported that the implementation of the SDGs has more advantages than disadvantages, ~~as reflected by the responses of External Relations Director, José Balaguer (JB), and Organisation and Systems Department Executive, David Ruiz (DR):~~ Some of the advantages that this social economy company has gained by implementing the SDGs include competitiveness, cost reductions and productivity:

JB: You gain in competitiveness if you can take the lead, if you're able to work with another organisation and get something that your competitors, don't have and you sell it first. The thing is that you won't become more competitive until you apply it. Implementing the SDGs or some of them can boost your competitiveness. It's not a token job that's just about impressions or purely about image.

DR: In my opinion, part of implementing the SDGs in the company could be the rewards it offers. For example, energy efficiency helps you because it reduces your costs. Providing better training (SDG 4) rewards you with better performance. Another aspect is the intention behind implementing the SDGs.

JB: I think there has to be a balance between working towards the SDGs and improving worker productivity. If you create a better environment for workers, it will influence their performance, their productivity. Having efficient buildings where workers have the right mix of spaces helps give them a good job.

Moreover, implementing the SDGs also has the advantage of giving employees a sense of belonging to the firm, together with an improved working environment:

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3 DR: Sustainability is a long-term task. If employees work at a company with  
4 sustainable values, they work better. Maybe in the short term, you won't  
5 get the same return as a company that doesn't have those values, but in the  
6 long term, workers at companies with values will be able to work better.  
7 Also, if the company cares about workers and not just financial results, the  
8 relationship between colleagues will be better, and this relationship is  
9 important because, even though there's no specific SDG, it affects training.  
10 The SDGs are a long-term task. In the short term, you might be penalised  
11 when you compete with companies with no limits, no rules.  
12  
13

14 JB: The workers are also consumers. If you work at a company that does what  
15 it should, that visualises its values, its SDGs, as a consumer, as a worker,  
16 you'll value it even more. As an employee of ANECOOP, I like it when  
17 they say that ANECOOP has donated to the food bank. I feel proud of my  
18 company. And it's the same when my company is efficient. It generates  
19 self-consumption. That's why whatever your company does, it improves  
20 productivity. It can create a sense of belonging. It makes you feel a  
21 connection to the company. You feel part of the culture of that company.  
22 Of course, let's not forget that you have to involve them in SDG  
23 awareness.  
24  
25

26 Although implementing the SDGs has more advantages than disadvantages for  
27 ANECOOP, disadvantages include the conflict between performance, profitability and  
28 sustainability. This conflict arises when one or more of the supply chain actors does not  
29 pull in the same direction:  
30

31 DR: Sometimes, it's difficult when there are actions that pose a problem for  
32 you in terms of performance. When what you do is sustainable and doesn't  
33 cost anything, it's fine. When it's sustainable and good for you, everything  
34 is good. The problem is when you have a conflict between performance,  
35 profitability and sustainability. For example, you tell growers who can't  
36 keep their land under control not to use a treatment that protects against  
37 some disease and then you see fruit arriving from other countries without  
38 undergoing the controls that are applied in Spain. So there's a conflict  
39 between sustainability and performance. If I have very tight margins,  
40 profitability becomes a problem.  
41  
42

43 JB: Really, the key question is, is the retailer going to buy more from you  
44 because you try to meet the SDGs than a competitor who has a better price  
45 than you, perhaps from South Africa, who doesn't meet the SDGs? I'm not  
46 assuming that meeting the SDGs means that you have a higher price. I'm  
47 assuming that my goods are worth more than those from other countries  
48 because I'm not allowed to use certain chemicals that are not restricted in  
49 other countries. The problem is that not all the actors in the supply chain  
50 are pulling in the same direction, and the agencies that are supposed to  
51 oversee this don't always apply the same criteria. This jeopardises my  
52 profitability, regardless of whether or not I'm saving the planet.  
53  
54

55 DR: That's what I meant to earlier: What's the problem with the SDGs? When  
56 you get to your profit and loss statement.  
57  
58

59 Finally, the ANECOOP respondents believe that companies should measure the impact  
60 of implementing the SDGs.

1  
2  
3 DR: Most of all, the SDGs have helped us reflect on everything we're doing  
4 and to adapt, helping us become aware of what we're doing. I think it's  
5 good internally. In terms of the profit and loss statement, it's difficult to  
6 measure everything because not everything has an easy to quantify impact.  
7 How does everything we do affect us financially? How does what we  
8 donate affect us financially? Is it reputation? How do you measure  
9 reputation? It's difficult to evaluate, but it could be measured with some  
10 certification, some score or some rating. It would probably be another  
11 incentive. It would also be a benchmark for competition. I think that  
12 knowing what you do and having indicators of whether you're improving  
13 is good to tell you where you are.

14  
15  
16 JB: Ultimately, the financial report is where you can see the impact of the  
17 SDGs, and that's what's getting quite a lot of attention.

#### 18 19 20 4.2. Case 2: Consum

21 CONSUM is a large company with revenues of 3.5 billion euros and about 20,000  
22 employees. The Director of External Relations, Francisco Javier Quiles (FJQ), reports the  
23 view that the implementation of the SDGs is easier for large companies than for SMEs.

24  
25 FJQ: Large companies are quite well placed to meet the SDGs, bearing in mind  
26 that the Spanish economic ecosystem is not made up of SMEs but micro-  
27 enterprises, which means companies with fewer than 10 employees. Large  
28 companies have the means and specialist teams for this purpose. They  
29 contribute to associations, and they have a major capacity to absorb  
30 information. Don't tell a company with fewer than 10 employees that it  
31 has to meet the SDGs because it probably won't know what they are, what  
32 CSR is, what the three dimensions of sustainability are, what non-financial  
33 information is. And a company with 50 employees might not know either.  
34 A company with 500 employees knows what it is because it has a legal  
35 department.  
36  
37

38 The interviewee also reports that cooperatives find it easier to implement the SDGs  
39 because of the values derived from their status as a cooperative.

40  
41 FJQ: The SDGs are in situ in cooperatives. There's no need to disguise them.  
42 When you become familiar with a cooperative, you realise it straight away.  
43 We have a programme ("Profit") that fits perfectly with the SDGs. Being  
44 a cooperative makes it easier, even if it's not very big.  
45  
46

47 CONSUM has tools to measure the impact of the implementation of the SDGs. It is  
48 gradually introducing others.

49  
50 FJQ: If you ask me about the Zero Hunger SDG, how do you measure it? In  
51 terms of the donations we make because I assess it financially and it has a  
52 value of  $X$ . Of course we have measured it, but other SDGs are much more  
53 difficult to measure in terms of ROI, return on investment. For example,  
54 even though it's not actually an SDG, it offers an example to illustrate the  
55 idea. I want to measure the impact of my website. Why do I make corporate  
56 communication policy on the website? To get people to buy. I have a tool  
57 that tells me how many people click on the website and how many people  
58 have gone to the shop, but I still don't know what they've bought. We have  
59 tools, but we don't have a complete system of tools. I mean, for SDG 1, I  
60

click on the tool and see the impact. We don't have this. We're working on it slowly because it needs work every day, adapting to the SDGs and the nomenclature, which is another requirement of how it affects things and how much it affects your activity. This was a law from 2021 that we had to make for the environment.

Regarding healthy eating (SDG 3), the interviewees reported profitable market potential.

FJQ: We're doing very well in terms of healthy eating. There's less and less demand for processed products, without anyone having to tell us. We've reduced the salt and sugar in our own brand products, where we are in control, which is more than 30%.

CONSUM also seeks a balance between financial performance, market performance and sustainable performance.

FJQ: When people tell you that cooperatives are not for profit, they're lying. Of course we're driven by profit. We need to make money. How we share it out and who's the owner are separate questions. We share it out amongst everyone. My cooperative has to make money because it has to pay for jobs. It has to invest. If I go to a bank and ask for a loan, the first thing they'll ask me is how much profit I make.

To summarise the responses of the interviewees as per the recommendations of Gioia et al. (2013), Table 1 shows the focal phenomenon by category (SDG approach) and subcategory (enables, barriers, motivations and outcomes).

[Insert Table 1]

## 5. Discussion and conclusions

The findings of the case analysis presented in this paper show two companies from the food sector supply chain with differences in their approaches to implementing the SDGs. Therefore, the results support the hypothesis that the SDG approach is an applicable alternative for companies from the food sector supply chain to achieve sustainability. The cooperative legal structure and the sector are the key enablers of SDG implementation in social economy enterprises involved in the food supply chain.

ANECOOP is a supply chain intermediary that directly and indirectly addresses all of the SDGs, even those that are not directly associated with its business activity. For example, ANECOOP also addresses SDG 14 (Life Below Water) through the circularity of its packaging and SDG 11 (Sustainable Cities and Communities) through reverse logistics and last mile logistics. According to Mohtar (2022) and Ratzmann et al. (2018), collaboration with other companies through partnerships and agreements enables ANECOOP to implement the SDGs that are not directly related to its business activity (e.g. SDG 17). Echoing the research of Mainali et al. (2018), ANECOOP is a case that reveals interconnections between the 17 SDGs. These interconnections should involve all stakeholders, including governments and consumers, in the co-design of transformational business models.

Accordingly, ~~this paper has~~ several theoretical contributions can be derived from this paper. These contributions should be inferred with the due caution applicable to a study that consists of comparative analysis of two cases. First, the food sector could contribute to the implementation of not only the SDGs that are most closely linked to the sector but also the other SDGs, albeit to a lesser degree, given that all SDGs are interlinked. Analysis of how other sectors contribute to the implementation of the SDGs in firms in those sectors is also necessary. Second, the results of this study lead to the conclusion that the cooperative legal structure, cooperation networks and open projects with other firms, as well as agreements and partnerships with other robust institutions could be enablers that encourage the implementation of the SDGs that are not directly related to the sector. Finally, in line with the research of Benavides-Espinosa and Ribeiro-Soriano (2014) and Bouncken et al., (2018), collaboration with other firms or institutions could offer a solution for companies that are within the supply chain but that are too small to have the financial, technological, infrastructure and information resources needed to implement the SDGs (~~Benavides-Espinosa and Ribeiro-Soriano, 2014; Bouncken et al., 2018~~).

The absence of indicators to measure the degree of implementation of the SDGs leads the analysed companies to continue working towards these goals. However, some companies, such as CONSUM, are developing their own internal tools to measure the impact of the SDGs on their business activity. Other companies, such as ANECOOP, have opted for the use of external firms to audit their degree of implementation of the SDGs to secure external public recognition, which provides an incentive for firms and improves their competitiveness. Regarding the economic and financial indicators that provide insight into the profitability of actions taken in relation to the SDGs, both companies highlight the difficulties in measuring return on investment in the implemented SDGs because not all impacts can be easily quantified. However, as described by Dovgotko et al. (2022), ANECOOP's implementation of the SDGs is conducive to competitiveness and worker productivity because it creates a sense of belonging to a business culture that the workers believe in (Lapidus and Qui, 2022; Bouncken et al., 2022). The conflict between sustainability, performance and profitability arises when some of the firms within the supply chain do not pull in the same direction. For example, they might use cheap labour or banned products on crops. Another possible issue is when the organisations in charge of monitoring these practices do not enforce standardised criteria.

Given this scenario, the study has several managerial implications for food sector businesses involved in the supply chain that belong to the social economy. ~~The first, it seems possible that companies~~ involved in the food supply chain, from growers to consumers, can apply an SDG approach. Second, in accordance with the research of Bouncken et al. (2023), when these firms struggle to implement the SDGs, a possible solution may be to seek collaborations~~supply chain actors should seek collaborations~~ (partnerships or agreements) with other companies within the chain ~~to implement the SDGs that they find most difficult due to their size.~~ Third, even though working towards the SDGs might entail difficulties that affect short-term profitability, it may be advisable for social economy enterprises to work towards the SDGs in the long term are advised to work towards the SDGs in the long term because they contribute to their productivity. Finally, food sector cooperatives that have not yet started to implement the SDGs have the chance to start raising awareness of the actions taken based on cooperative values.~~they~~

are also advised to raise awareness of existing SDG-related actions that they already carry out simply by following cooperative values.

These managerial implications must be accompanied by policies that encourage the implementation of such an approach. First, institutions should develop indicators that are objective, public and external to the firm to measure the degree of implementation of the SDGs. These indicators will have a positive impact on the competitiveness and productivity of firms, especially given the demands from more sustainable-oriented consumers looking for distributors that display greater sustainability. Second, policymakers should continue to work towards developing a standardised global legal framework in relation to the SDGs in the food sector so that the same criteria are demanded of all food products and so that the same controls are applied to avoid unfair competition. In light of the results, the conclusion is that the SDG approach is another alternative that can be successfully applied by social economy enterprises involved in the food supply chain to ensure their sustainability.

Finally, all studies have limitations. Although the results of this study can be extended to other food sector supply chain firms with the same legal structure, the number of cases should be increased to ensure that the findings can be generalised. However, most importantly, there is a need to analyse cases of food sector supply chain firms with other legal structures to ascertain whether the SDG approach can be applied as successfully as it has been in the case of cooperatives. In addition to increasing the number of cases in future research, it would also be of interest to analyse the relationship between company size and the impact of implementing the SDGs on profitability.

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Table 1. Relationship between categories and subcategories

	Sector	“(…) mainly because of our sector and because we are a social cooperative” (ANECOOP) “The SDGs are in situ in cooperatives” (CONSUM) “We have a programme (“Profit”) that fits perfectly with the SDGs” (CONSUM)	
	Circular packaging	“We don’t report SDG 14 (Life Below Water), but we could because if you put waste (plastics and other materials) in a circular system, (ANECOOP)	
	Agreements with robust institutions	“We also comply with SDG 16 (Peace, Justice and Robust Institutions), but we don’t report on it” (ANECOOP).	
	Reverse logistics and last mile logistics	“Others like SDG 11 (Sustainable Cities and Communities) are harder for us, but we also participate through logistics, reverse logistics and last mile logistics” (ANECOOP)	
	Infrastructure: photovoltaic stations	“We’ve changed our fleet to hybrids. But we’re already preparing in case they have to go electric. And we’re preparing our photovoltaic stations to supply our vehicles with electricity” (ANECOOP)	
Enablers	Private sector cooperation	“Most of the projects we are involved in are multi-company partnerships in our sector or other sectors” (ANECOOP)	
	Network cooperation and open projects	“There are a lot of advantages to networks and working on open projects. In the packaging project, even though it’s not our business, it affects us as intermediaries” (ANECOOP)	
	Size	“A big company has greater resources to be able to do more. The bigger you are, the more scope you have to make an impact”. (ANECOOP) “Large companies are quite well placed to meet the SDGs (…) have the means and specialist teams (...). Don’t tell a company with fewer than 10 employees that it has to meet the SDGs because it probably won’t know what they are” (CONSUM)	
	Consumer demand	“There is a movement around the world where end consumers are looking for sustainability and, sustainable products” (ANECOOP) “A distributor asked us, how much of the energy that you consume is clean energy, green energy? That distributor has to tell its customers that it works with a supplier that uses 50% clean energy” (ANECOOP) “There’s less and less demand for processed products, without anyone having to tell us” (CONSUM)	
	Barriers	Sustainability/performance/profitability trade-off	“When a grower can’t keep their land under control not to use a treatment that protects against some disease and then you see fruit arriving from other countries without undergoing the controls”. (ANECOOP) “If I have very tight margins, profitability becomes a problema” (ANECOOP)
		Conflicting behaviours within supply chain	“The problem is that not all the actors in the supply chain are pulling in the same direction“ (ANECOPP) “My cooperative has to make money because it has to pay for Jobs” (CONSUM)
		Discrepancies in criteria applied by different entities	“(…) and the agencies that are supposed to oversee this don’t always apply the same criteria. This jeopardises my profitability, regardless of whether or not I’m saving the planet.” (ANECOOP”
Outcomes	Visibility of actions	“Now, all we’re doing is making sure that actions that we were doing before are visible so that people are aware” (ANECOOP)	
	Competitiveness	“Implementing the SDGs can boost your competitiveness. It’s not a token job that’s just about impressions or purely about image. (ANECOOP) “(…) energy efficiency helps you because it reduces your costs” (ANECOOP) “Maybe in the short term, you won’t get the same return as a company that doesn’t have those values, but in the long term, workers at companies with values will be able to work better” (ANECOOP)	
	Productivity	“. If you work at a company that does what it should, that visualises its values, its SDGs (...) as a worker, you’ll value it even more. (...), it improves productivity” (ANECOOP)	

## **Responses to reviewers' comments on Manuscript ID BFJ-01-2023-0080R2 (second revision)**

We thank the three reviewers for their insightful comments on the paper. These comments have helped us improve our work. The revisions address all of the reviewers' suggestions and comments. We feel that this process has resulted in a stronger manuscript.

We also apologise for not sending the responses to the comments on the first round of reviews. We made a mistake in not attaching the document with the submission. In this document, we not only provide the responses to the comments for the second round of reviews but also attach the document with the responses to the first round of reviews. We hope that this document will help explain the changes made in the first review and will help us respond to some of the comments in the second review.

Detailed responses to each reviewer are given below.

### **Reviewer#1**

#### **Comment 1 (Reviewer#1)**

2. Relationship to Literature: Does the paper demonstrate an adequate understanding of the relevant literature in the field and cite an appropriate range of literature sources? Is any significant work ignored?: I see well chosen references that underlie a good logic only a few more on supply chains or buyer-supplier alliances.

#### **Response**

The authors thank the reviewer for this comment and the suggested references, which have helped us strengthen the article. The references have been included in different sections of the paper, as shown in the attached manuscript.

#### **Comment 2 (Reviewer#2)**

3. Methodology: Is the paper's argument built on an appropriate base of theory, concepts, or other ideas? Has the research or equivalent intellectual work on which the paper is based been well designed? Are the methods employed appropriate?: yes. I like the quotes of the interviews. They might appear in the text but not necessarily. Just a matter of tast

#### **Response**

We understand the comment and feel that if the reviewer had been able to see the document with the responses to the comments on the first review, it would have helped explain the way the quotations from the interviews were presented. We attach the document with the responses from the first review. We also take this chance to offer a

personal apology for failing to upload the document with the responses to the reviewers' comments in the first review. We thank the reviewers for their understanding.

## Reviewer#2

### Comment 1 (Reviewer#2)

First, in the abstract you can still make more clear and more insightful your findings

#### Response

We thank the reviewer for this recommendation because it has helped increase the impact of the article. We have rewritten the findings paragraph, as shown below:

*“Findings – There are no differences in the way that the SDGs are implemented by social economy enterprises involved in the food sector supply chain. Therefore, the SDG approach is an alternative that can be applied by food sector supply chain companies to achieve the sustainability favoured by the cooperative model.”*

### Comment 2 (Reviewer#2)

In the introduction, when you say that "The findings reveal that there are no differences in the way that the SDGs are implemented by companies involved in the food sector supply chain" this generalization from two case studies (or the comparison of them) seems to simplified. Generalization can be made in front of hundred of cases. While single or multiple cases usually are useful to look at dynamics that would not be observable through large dataset analyses. So, the suggestion is to rethink the way findings are presented and more generally, the paper is framed .You don't need to mention the cases you analysed in the intro but focus more in clarifying the intro by stating:

- Relevance of the topic
- Gap
- RQ
- Method
- Main findings
- Main contributions

#### Response

We agree and thank the reviewer for the suggestion regarding the sentence, “The findings reveal that there are no differences in the way that the SDGs are implemented by companies involved in the food sector supply chain.” We have changed the wording of this sentence to avoid generalisations. The sentence now reads as follows:

*“The findings reveal that there are no differences in the way that the SDGs are implemented by the two analysed companies involved in the food sector supply chain.”*



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5 As per the recommendation regarding the analysed cases, we have moved the following  
6 text from the Introduction to Section 3: Research method:  
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8 *“In the context of the food supply chain, ANECOOP is a Spanish cooperative that*  
9 *purchases vegetables, fruit and wine from producers (growers) and sells them to*  
10 *distributors such as CONSUM. In turn, CONSUM is a Spanish cooperative that*  
11 *purchases vegetables, fruit and wine from intermediaries such as ANECOOP or directly*  
12 *from growers. It then resells these products to end consumers.”*  
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15 As a result, we have deleted the following text to avoid repetition [Section 3: Research  
16 method, third paragraph]:  
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18 *“ANECOOP is a cooperative that acts as an intermediary between growers and*  
19 *distributors, whereas CONSUM is a cooperative that distributes to end consumers.”*  
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21 Finally, regarding the clarification requested by the reviewer regarding the relevance of  
22 the topic, gap, RQ, method, main findings and main contributions, the editor requested  
23 these changes in the first review. The reviewer might not have requested this clarification  
24 if we had not failed to attach the responses to the first round of reviews in the previous  
25 submission. We attach the responses to the reviewers' comments in the first review. We  
26 also take this chance to offer a personal apology for failing to upload the document with  
27 the responses to the reviewers' comments in the first review. We thank the reviewers for  
28 their understanding.  
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32 Below, we explain how we have clarified the issues noted by the reviewer:  
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#### 34 **Relevance of the topic** [Introduction, second paragraph]

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36 *“The food sector has been criticised for being responsible for global sustainability issues*  
37 *related to its environmental impact. Examples include greenhouse gas (GHG) emissions,*  
38 *water and soil contamination, biodiversity loss and deforestation (De Bernardi and*  
39 *Azucar, 2020). It has also been blamed for social problems such as poor pay and*  
40 *precarious working conditions amongst supply chain actors, as well as public health*  
41 *problems such as obesity, diabetes and chronic illness due to excessive consumption of*  
42 *processed foods that are high in saturated fats, salt and added sugar (Bocken and Short,*  
43 *2021). Finally, there is the issue of food waste due to overproduction, poor transport*  
44 *connections and a lack of supply chain coordination (Espósito et al., 2007).“*  
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#### 48 **Gap** [Introduction, third and fourth paragraphs]

49 *“The SDGs have thus become a guide for the development of sustainable and responsible*  
50 *business practices. However, the potential of the SDGs to transform the dominant*  
51 *governance approaches towards sustainability remains unclear (Zimon et al., 2020). The*  
52 *supply chain plays a decisive role in the successful implementation of the SDGs, provided*  
53 *that these goals are understood as a process in which all elements interact with each*  
54 *other (Sudusinghe et al., 2018).” [Third paragraph, lines 3-8]*  
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56  
57 *“Despite measures proposed to improve sustainability and reduce the environmental and*  
58 *social impact of food production and distribution (Jacob-John et al., 2021), little*  
59 *attention has been paid to other aspects of the supply chain such as transport,*  
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3 *warehousing and distribution, as well as the evaluation of the impacts of the SDGs on*  
4 *companies within the supply chain.” [Fourth paragraph, lines 8-12]*  
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7 **RQ** [Introduction, fourth paragraph]

8 *“This lack of attention on the supply chain is addressed from an SDG approach by*  
9 *reflecting on the following research question: How do companies involved in the food*  
10 *sector supply chain implement the SDGs?” [lines 12-14]*  
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13 **Method** [Introduction, fifth paragraph]

14 *“Case study methodology was used to answer this research question (Yin, 1994). In line*  
15 *with this methodology, a semi-structured interview process was designed to collect data*  
16 *from two food sector supply chain companies. Representatives from these companies*  
17 *were questioned about their implementation of the 17 SDGs, the enablers and barriers*  
18 *that they face, and the evaluation of their impact”*  
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21 **Main findings** [Introduction, sixth paragraph]

22 *“The findings reveal that there are no differences in the way that the SDGs are*  
23 *implemented by the two analysed companies involved in the food sector supply chain.*  
24 *From the study, it can be concluded that the SDG approach is an alternative that can be*  
25 *applied by food sector supply chain companies to achieve the sustainability favoured by*  
26 *the cooperative model”. [lines 1-5]*  
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29 **Main contributions** [Introduction, sixth paragraph]

30 *“Finally, the main contributions of this paper include the fact that the food sector and the*  
31 *cooperative legal form are key factors for the implementation of SDGs in social economy*  
32 *companies. Also, collaboration networks are important for social economy companies*  
33 *that lack the necessary resources to implement the SDGs.” [lines 5-8]*  
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36 **Comment 3 (Reviewer#2)**

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38 In the findings, although I appreciate that you reported a relevant number of quotations  
39 to highlight people's points of view, a narrative is totally missing. Quotations must be  
40 integrated in a narrative that renders pleasant the reading to the audience. This can be  
41 achieved by balancing quotations and authors' ability to link the dots.  
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46 **Response**

47 The authors once again thank the reviewer for this recommendation. We have included  
48 introductory comments in the blocks of quotations that highlight the points of view of the  
49 interviewees. The new version of the article contains these new paragraphs included with  
50 the comments.  
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55 **Comment 4 (Reviewer#2)**

56 Theoretical and practical implications seem to have been just written with little care. I  
57 suggest to review them more accurately.  
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## Response

The authors thank the reviewer for the recommendation because it contributes to the rigour of the research, whilst also strengthening the article. We have rewritten the theoretical and practical implications as accurately as possible to avoid making generalisations, given that we only performed comparative analysis of two cases. Below, we provide the paragraphs that we have rewritten:

*“Accordingly, several theoretical contributions can be derived from this paper. These contributions should be inferred with the due caution applicable to a study that consists of comparative analysis of two cases. First, the food sector could contribute to the implementation of not only the SDGs that are most closely linked to the sector but also the other SDGs, albeit to a lesser degree, given that all SDGs are interlinked. Analysis of how other sectors contribute to the implementation of the SDGs in firms in those sectors is also necessary. Second, the results of this study lead to the conclusion that the cooperative legal structure, cooperation networks and open projects with other firms, as well as agreements and partnerships with other robust institutions could be enablers that encourage the implementation of the SDGs that are not directly related to the sector. Finally, in line with the research of Benavides-Espinosa and Ribeiro-Soriano (2014), and Bouncken et al. (2018), collaboration with other firms or institutions could offer a solution for companies that are within the supply chain but that are too small to have the financial, technological, infrastructure and information resources needed to implement the SDGs.”*

*“Given this scenario, the study has several managerial implications for food sector businesses involved in the supply chain that belong to the social economy. First, it seems possible that companies involved in the food supply chain, from growers to consumers, can apply an SDG approach. Second, in accordance with the research of Bouncken et al. (2023), when these firms struggle to implement the SDGs, a possible solution may be to seek collaborations (partnerships or agreements) with other companies within the chain. Third, even though working towards the SDGs might entail difficulties that affect short-term profitability, it may be advisable for social economy enterprises to work towards the SDGs in the long term because they contribute to their productivity. Finally, food sector cooperatives that have not yet started to implement the SDGs have the chance to start raising awareness of the actions taken based on cooperative values.”*

## Reviewer#4

### Comment 1 (Reviewer #4)

1. Originality: Does the paper contain new and significant information adequate to justify publication?: After the review, the authors have implemented the recommended changes. For the next time, I recommend to include a response letter for clarifying the changes.

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**Response**

We apologise to the reviewer for not having included the document with the responses to the comments made in the first review. This document might have helped the reviewer to understand some of the changes made to the manuscript, such as in the methodology and research implications. We appreciate the reviewer’s comprehension.

British Food Journal

## Responses to the reviewer's comments on the Manuscript ID BFJ-01-2023-0080R1. First revision.

We would like to thank the four reviewers and editor for their insightful comments on the paper. These comments have helped us improve our work. The revisions address all of the reviewers' suggestions and comments. We feel that this process has resulted in a stronger manuscript. Detailed responses to each reviewer are given below.

### Editor

#### Comment 1 (Editor)

**Motivation of the Paper.** in the introduction I do not understand and see clearly the theoretical contribution of the paper. I think the paper, at the present form, partially fails to formulate a research problem, which is of interest. We have partial answers on what we know now about the topic and what we do not know. The author should more in detail and in a more systematic way present answer on these questions, but also what we need to know. Why is this important, for research, for practise? Also, the introduction is critical and I suggest the following key points within this section (Positioning, Gap, Purpose, Central argument, Organizing, Contribution, So what?)

#### Response

The authors thank the Editor for this comment. We have reworked the introduction following the Editor's suggestions, as reflected in the latest version. We hope that this version links the starting point with the gap, research question, central argument, method and contributions. The following extracts from the new manuscript reflect these changes:

#### **Positioning** [section Introduction, second paragraph]

*"The food sector has been criticised for being responsible for global sustainability issues related to its environmental impact. Examples include greenhouse gas (GHG) emissions, water and soil contamination, biodiversity loss and deforestation (De Bernardi and Azucar, 2020). It has also been blamed for social problems such as poor pay and precarious working conditions amongst supply chain actors, as well as public health problems such as obesity, diabetes and chronic illness due to excessive consumption of processed foods that are high in saturated fats, salt and added sugar (Bocken and Short, 2021). Finally, there is the issue of food waste due to overproduction, poor transport connections and a lack of supply chain coordination (Espósito et al., 2007)."*

#### **Gap** [section Introduction, third and fourth paragraph]

*"The SDGs have thus become a guide for the development of sustainable and responsible business practices. However, the potential of the SDGs to transform the dominant governance approaches towards sustainability remains unclear (Zimon et al., 2020). The supply chain plays a decisive role in the successful implementation of the SDGs, provided that these goals are understood as a process in which all elements interact with each other (Sudusinghe et al., 2018)."*

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*“Despite measures proposed to improve sustainability and reduce the environmental and social impact of food production and distribution (Jacob-John et al., 2021), little attention has been paid to other aspects of the supply chain such as transport, warehousing and distribution, as well as the evaluation of the impacts of the SDGs on companies within the supply chain.”*

**Purpose** [section Introduction, fourth paragraph]

*“This lack of attention on the supply chain is addressed from an SDG approach by reflecting on the following research question: How do companies involved in the food sector supply chain implement the SDGs?”*

**Central argument** [section Introduction, third and fourth paragraph]

*“The considerable negative impact of food production and consumption on environmental, social and economic sustainability justifies the implementation of the SDGs in the food sector (Pizzi et al., 2020). The SDGs have thus become a guide for the development of sustainable and responsible business practices.”*

*“The implementation of the SDGs is a complex process that requires a combination of approaches and strategies such as collaboration between sectors and the active participation of all stakeholders, from producers to consumers (Mohtar, 2022; Zimon, et al., 2020). In the agrifood sector, companies focus on areas such as reducing food waste, promoting sustainable agricultural practices and improving food security. However, there are still many challenges ahead. Examples include addressing inequality in the food supply chain, improving energy efficiency (Chien, 2022) and reducing the environmental impact of food production”*

**Organisation** [section Introduction, fifth paragraph]

*“Case study methodology was used to answer this research question (Yin, 1994). In line with this methodology, a semi-structured interview process was designed to collect data from two food sector supply chain companies. Representatives from these companies were questioned about their implementation of the 17 SDGs, the enablers and barriers that they face, and the evaluation of their impact”*

**Contribution** [section Introduction, fifth paragraph]

*“The findings reveal that there are no differences in the way that the SDGs are implemented by companies involved in the food sector supply chain. From the study, it can be concluded that the SDG approach is an alternative that can be applied by food sector supply chain companies to achieve the sustainability favoured by the cooperative model”.*

**Comment 2 (Editor)**

**literature. The paper should be grounded more on: a) food literature, this helps you in better develop a contribution for this stream of research; b) SDGs RECENT literature**

**Some examples may be: <https://doi.org/10.1002/sd.2118>; <https://doi.org/10.1108/MEDAR-01-2020-0667>**

**Response**

We appreciate this suggestion and the recommended literature. As per the Editor's suggestion, we have focused the literature review on the food sector and the SDGs. Therefore, we have rewritten the literature review section, which is now entitled "Literature review: SDGs in the food sector". We have tried to select the most recent articles on the SDGs.

### **Comment 3 (Editor)**

**- Method. Please motivate and support more with key literature (e.g. <https://doi.org/10.1108/BPMJ-05-2015-0074>)**

### **Response**

We once again thank the Editor for the help provided to enhance the justification of the method. We have stated our motivation and have cited more key literature to support the case study. The following paragraphs (Section 3: Research method) reflect this change:

*"Case study methodology (Yin, 1994) is most suitable when seeking to respond to a research question that asks "how" about a series of current events, over which researchers have little or no control (Scuotto et al., 2016)" [Section 3. Research Method, 2<sup>nd</sup> paragraph]*

*"Although this methodology has weaknesses in terms of statistical significance and selection bias, it also has strengths. For instance, it enables in-depth analysis, offers a high level of conceptual validity, enables comprehension of context and process, and encourages new hypotheses and research questions (Scuotto et al., 2016)." [Section 3. Research Method, 2<sup>nd</sup> paragraph]*

*"This paper presents an approach based on a multiple case study of two cases (Yin, 2013). This approach enables comparative analysis between these two social economy enterprises with different roles in the food supply chain." [Section 3. Research Method, 3<sup>o</sup> paragraph]*

### **Comment 4 (Editor)**

**Building your discussion: I would suggest that a discussion section be more comprehensively developed that links back to your initial research questions and a clear statement of proposed contributions, once you have reframed your arguments and developed some propositions. What should we, as readers, take away regarding your study? What are the key theoretical contributions that are gained? How can these findings contribute to the literature stream associated with food businesses? What do we know about this literature stream now that we have read your study? What future research should be conducted within this literature stream that can be extended based upon your study?**

### **Response**

The authors would like to express their sincere thanks for such a constructive review and explanations. Regarding the discussion, we have written a new section discussing the results by responding to the Editor's questions. We have also added some conclusions.

We have eliminated the “Conclusions, implications, limitations and future lines of research section” and have created a new section entitled “*Discussion and conclusions*”.

### **Final comment of the authors to Editor**

The authors thank the Editor for all the positive suggestions and comments that have undoubtedly helped improve this paper. The authors have included the following acknowledgement in the manuscript:

*The authors thank the editor and the four anonymous reviewers for their valuable comments and suggestions on how to improve the paper.*

## **Reviewer 1**

### **Comment 1 (Reviewer #1)**

The paper is an interesting read. The literature is good, only (see above) might mention some work on buyer-supplier alliances and on sustainability factors. The normativity that is inherent in the sustainability and that influences mind sets might not only support incumbent firms but also can advance entrepreneurship and new ventures. Furthermore, firms with such sustainability and moral behavior can attract more backup and financing from externals. You will find some important thoughts in here: Täuscher, K., Bouncken, R., & Pesch, R. 2021. Gaining legitimacy by being different: Optimal distinctiveness in crowdfunding platforms. *Academy of Management Journal*, 64(1): 149-179.

### **Response**

The authors are pleased that Reviewer #1 found the paper interesting and thank the reviewer for providing references to strengthen the paper. After reading the study by Täuscher et al. (2021), we have added the following text in Section 2, third paragraph:

*“Calic and Mosakowski, (2016) proposed the collaborative economy as a new model of interaction and financing for sustainable projects between firms with scarce access to traditional sources of capital, as is the case of small and medium-sized growers.”*

### **Comment 2 (Reviewer #1)**

**I really like the paper. As aforementioned, please provide some overview results. If you really want to push your work (but not necessary) than you might bring a table in which you compare your case**

### **Response**

We thank Reviewer #1 for this suggestion. In accordance, we have created a new section entitled “*Discussion and conclusions*”, where we discuss the results and highlight the main theoretical, managerial and policy recommendations. We have also added the



conclusions and limitations of the study. Regarding the suggested table, we have included Table 1 at the end of the Findings section to summarise the results of the analysis of the two cases.

### Comment 3 (Reviewer #1)

There is a very sound literature review. I would only like to see a few more sentences and cites on supply chain collaboration, perhaps not necessarily in the theory but but related to the outcomes and/or in the discussion.

Ratzmann, M., Pesch, R., & Laudien, S. M. 2018. Alliances of service firms and manufacturers: Relations and configurations of entrepreneurial orientation and hybrid innovation. *Journal of Business Research*, 89: 190-197. DOI: 10.1016/j.jbusres.2018.01.039

### Response

In response to this suggestion, for which we are grateful, we have included some sentences and references in the section: discussion and conclusions, where we comment on the results on supply chain collaboration. These sentences and references appear in the second paragraph of Section 5 (Discussion and conclusions).

*“According to Mohtar (2022) and Ratzmann et al. (2018), collaboration with other companies through partnerships and agreements enables ANECOOP to implement the SDGs that are not directly related to its business activity (e.g. SDG 17)”*

We have also added text at the end of the third paragraph of Section 5 (Discussion and conclusions).

*“Third, collaboration with other firms or institutions is a solution for companies that are within the supply chain but that are too small to have the financial, technological, infrastructure and information resources needed to implement the SDGs (Benavides-Espinosa and Ribeiro-Soriano, 2014; Bouncken et al., 2018).”*

### Comment 4 (Reviewer #1)

I especially noticed that the part 5 should include also discussion as a point and has to refer to existing literature, too. At the moment is more written prosa. You might relate your sustainability behavior also to the identity - or at least common values and norms in the firms. There is one article about it

Lapidus, A., & Qui, Y. 2022. Organizational sustainability identity: 'New Work' of home offices and coworking spaces as facilitators. *Sustainable Technology and Entrepreneurship*, 1(2) (May - August 2022):100011. <https://doi.org/10.1016/j.stae.2022.100011>

### Response

The authors regret that there was no section devoted to the discussion of the results in the original manuscript. In response to your recommendation we have created a section

entitled “Discussion and conclusions”, where we discuss the results and highlight the theoretical, managerial and policy implications. We thank the reviewer for the recommended article, which we have cited in Section 5, fourth paragraph, where we mention workers’ sense of belonging a sustainable company:

*“(…) ANECOOP’s implementation of the SDGs is conducive to competitiveness and worker productivity because it creates a sense of belonging to a business culture that the workers believe in (Lapidus and Qui, 2022; Bouncken et al., 2022 [Fourth paragraph in section 5 Discussion and conclusion])*

#### **Comment 5 (Reviewer #1)**

**Yes, only I would like 1-3 sentences on the main findings.**

#### **Response**

The authors hope that the rewrite of Section 5 (Discussion and conclusions) provides Reviewer #1 with the desired summary of the main findings. The following extract from the manuscript provides some of the text on the main findings at the start of Section 5, first paragraph:

*“The findings of the case analysis presented in this paper show two companies from the food sector supply chain with differences in their approaches to implementing the SDGs. Therefore, the results support the hypothesis that the SDG approach is an applicable alternative for companies from the food sector supply chain to achieve sustainability. The cooperative legal structure and the sector are the key enablers of SDG implementation in social economy enterprises involved in the food supply chain.”*

#### **Comment 6 (Reviewer #1)**

**I would like to see concluding findings a bit sharper put forward**

#### **Response**

We thank the reviewer for this suggestion and hope that the rewrite of Section 5 (Discussion and conclusions) provides a clearer and more extensive presentation of the findings of the study.

#### **Comment 7 (Reviewer #1)**

**In some places the sentences were not complete. Perhaps have it properly proof read.**

#### **Response**

The authors thank the reviewer for this comment on the writing in the manuscript. In response, we have revised the entire manuscript and have rewritten any incomplete sentences from the earlier version. We have hired a highly experienced professional English language editor to revise and improve the manuscript. If you still feel that the

manuscript requires further editing, please provide several examples of the incomplete sentences that you have identified so that we can address them more effectively and ensure the high standards of writing required by the journal. We hope that you are now convinced of the paper's value and that the new version is easier and more enjoyable to read.

### **Final comment of the authors to Reviewer#1**

The authors thank Reviewer#1 for all the positive suggestions and comments that have undoubtedly helped improve this paper. The authors have included the following acknowledgement in the manuscript:

*The authors thank the editor and four anonymous reviewers for their valuable comments and suggestions on how to improve the paper.*

## **Reviewer 2**

### **Comment 1 (Reviewer #2)**

**In the abstract, the findings are not presented clearly. At the same time, the originality of the paper must reflect not only the description of the scope of the paper but why and how your contribution differs from existing research.**

### **Response**

The authors thank Reviewer #2 for the comments on the findings and originality of the abstract. They have helped ensure that the paper has a greater impact. In response to these comments, we have rewritten the findings part. We hope that it is clearer than the earlier version:

*“Findings – This paper presents the SDG approach as an alternative that can be applied by social economy enterprises from the food sector supply chain to achieve sustainability. The cooperative legal entity structure is the main enabler of SDG implementation by social economy enterprises involved in the agrifood supply chain”*

Regarding originality, we have rewritten the following paragraph to reflect not only the scope of the article but also “why” (the use of a novel approach in the literature) and “how” the contribution of the paper differs from the existing research (the SDG approach, which covers all three dimensions of sustainability, as opposed to other approaches, which focus on only one dimension).

*“Originality – The value of the present study lies in its analysis of the sustainability of the agrifood supply chain from an SDG-based approach that is more comprehensive than other commonly cited approaches in the academic literature”*

### **Comment 2 (Reviewer #2)**

**The introduction fails to introduce to the reader the sustainability debate in the food sector: why is this topic relevant? what are the main claims of unsustainability that the food sector is receiving? What are the possible solutions? The challenges? Possible papers in support**

**De Bernardi, P., Bertello, A., & Forliano, C. (2022). Circularity of food systems: a review and research agenda. British Food Journal, (ahead-of-print).**

**Bogers, M., Chesbrough, H., & Strand, R. (2020). Sustainable open innovation to address a grand challenge: Lessons from Carlsberg and the Green Fiber Bottle. British Food Journal, 122(5), 1505-1517.**

**Rana, R. L., Tricase, C., & De Cesare, L. (2021). Blockchain technology for a sustainable agri-food supply chain. British Food Journal.**

**De Bernardi, P., Bertello, A., Venuti, F., & Foscolo, E. (2020). How to avoid the tragedy of alternative food networks (AFNs)? The impact of social capital and transparency on AFN performance. British Food Journal, 122(7), 2171-2186.**

### **Response**

We are grateful for this comment because the questions raised by Reviewer #2 have helped us rethink the positioning or starting point of the study, the research question, the research aim, the method and the main results. Consequently, we have rewritten the Introduction section, citing the recommended references. We feel that the new version of the manuscript answers the reviewer's questions.

### **Why is this topic relevant?** [section Introduction, second paragraph]

*“The food sector has been criticised for being responsible for global sustainability issues related to its environmental impact. (...) (De Bernardi and Azucar, 2020) (...) social problems (...), as well as public health problems (...) (Bocken and Short, 2021). Finally, there is the issue of food waste (...) (Espósito et al., 2007).”*

### **What are the possible claims of unsustainability against the food sector?** [section Introduction, second paragraph]

*“The food sector has been criticised for being responsible for global sustainability issues (...) greenhouse gas (GHG) emissions, water and soil contamination, biodiversity loss and deforestation (De Bernardi and Azucar, 2020) (...) poor pay and precarious working conditions amongst supply chain actors (...) obesity, diabetes and chronic illness due to excessive consumption of processed foods that are high in saturated fats, salt and added sugar (Bocken and Short, 2021) (...) food waste due to overproduction, poor transport connections and a lack of supply chain coordination (Espósito et al., 2007*

### **What are the possible solutions?** [section Introduction, third paragraph]

*“The considerable negative impact of food production and consumption on environmental, social and economic sustainability justifies the implementation of the SDGs in the food sector (Pizzi et al., 2020). The SDGs have thus become a guide for the development of sustainable and responsible business practices*

### **What are the challenges?** [section Introduction, fourth paragraph]

*“In the agrifood sector, companies focus on areas such as reducing food waste, promoting sustainable agricultural practices and improving food security. However,*

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3 *there are still many challenges ahead. Examples include addressing inequality in the food*  
4 *supply chain, improving energy efficiency (Chien, 2022) and reducing the environmental*  
5 *impact of food production. Despite measures proposed to improve sustainability and*  
6 *reduce the environmental and social impact of food production and distribution (Jacob-*  
7 *John et al., 2021), little attention has been paid to other aspects of the supply chain such*  
8 *as transport, warehousing and distribution, as well as the evaluation of the impacts of the*  
9 *SDGs on companies within the supply chain.”*  
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### 12 13 14 **Comment 3 (Reviewer #2)**

15  
16 **Gap and positioning must be strengthened in the introduction as well as**  
17 **methodology and main results are not clearly described and outlined.**  
18

### 19 **Response**

#### 20 21 22 **Positioning** [section Introduction, second paragraph]

23 *“The food sector has been criticised for being responsible for global sustainability issues*  
24 *related to its environmental impact. Examples include greenhouse gas (GHG) emissions,*  
25 *water and soil contamination, biodiversity loss and deforestation (De Bernardi and*  
26 *Azucar, 2020). It has also been blamed for social problems such as poor pay and*  
27 *precarious working conditions amongst supply chain actors, as well as public health*  
28 *problems such as obesity, diabetes and chronic illness due to excessive consumption of*  
29 *processed foods that are high in saturated fats, salt and added sugar (Bocken and Short,*  
30 *2021). Finally, there is the issue of food waste due to overproduction, poor transport*  
31 *connections and a lack of supply chain coordination (Espósito et al., 2007).*  
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33

#### 34 35 36 **Gap** [section Introduction, third and fourth paragraph]

37 *“The SDGs have thus become a guide for the development of sustainable and responsible*  
38 *business practices. However, the potential of the SDGs to transform the dominant*  
39 *governance approaches towards sustainability remains unclear (Zimon et al., 2020). The*  
40 *supply chain plays a decisive role in the successful implementation of the SDGs, provided*  
41 *that these goals are understood as a process in which all elements interact with each*  
42 *other (Sudusinghe et al., 2018).”*  
43

44 *“Despite measures proposed to improve sustainability and reduce the environmental and*  
45 *social impact of food production and distribution (Jacob-John et al., 2021), little*  
46 *attention has been paid to other aspects of the supply chain such as transport,*  
47 *warehousing and distribution, as well as the evaluation of the impacts of the SDGs on*  
48 *companies within the supply chain.”*  
49  
50

#### 51 52 **Method** [section Introduction, fifth paragraph]

53 *“Case study methodology was used to answer this research question (Yin, 1994). In line*  
54 *with this methodology, a semi-structured interview process was designed to collect data*  
55 *from two food sector supply chain companies. Representatives from these companies*  
56 *were questioned about their implementation of the 17 SDGs, the enablers and barriers*  
57 *that they face, and the evaluation of their impact”*  
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#### 60 **Contribution** [section Introduction, fifth paragraph]

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*“The findings reveal that there are no differences in the way that the SDGs are implemented by companies involved in the food sector supply chain. From the study, it can be concluded that the SDG approach is an alternative that can be applied by food sector supply chain companies to achieve the sustainability favoured by the cooperative model”.*

#### **Comment 4 (Reviewer #2)**

**In the literature review section, the logical flow that links the theoretical background to the aim of your research needs improvements.**

#### **Response**

The authors agree with this comment and thank the reviewer for the recommendation. We have rewritten the literature review section, considering the link between the theoretical antecedents and research aim. We have renamed the literature review section on the SDGs in the food sector because we have focused the review on the SDGs in the food sector. Therefore, the literature cited in this new version is different. We hope that the rewrite of Section 2 (Literature review: SDGs in the food sector) addresses the reviewer’s requests.

#### **Comment 5 (Reviewer #2)**

**In the methodology, the selection criteria that led you to identify two cases need further justification.**

#### **Response**

Once again, we thank the reviewer for this comment on the method because it has helped us give more credibility to the results. The justification of the criteria applied to choose the two cases is found in Section 3 (Research method), third paragraph.

*“This paper presents an approach based on a multiple case study of two cases (Yin, 2013). This approach enables comparative analysis between these two social economy enterprises with different roles in the food supply chain. In the context of the food industry, the implementation of the SDGs entails the adoption of sustainable and responsible food production, distribution and consumption practices. Therefore, companies were chosen to cover two links in the food sector supply chain between growers and consumers. ANECOOP is a cooperative that acts as an intermediary between growers and distributors, whereas CONSUM is a cooperative that distributes to end consumers. ANECOOP was chosen because of its position as the leading cooperative in exports (Cooperativas Agroalimentarias de España, 2021). CONSUM was chosen because it is the only cooperative in the Spanish distribution sector.*

In the Introduction (sixth paragraph), we have justified the choice of companies from the social economy.

*“This choice of social economy enterprises is justified by the fact that such companies account for a large proportion of business activities in the Spanish agrifood sector. In 2020, they had a combined revenue of 34,186 million Euros and created 119,700 direct*

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3 *jobs. Moreover, export revenues increased by more than 82% between 2011 and 2020*  
4 *(Cooperativas Agroalimentarias de España, 2021)."*  
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7 **Comment 6 (Reviewer #2)**

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9 **A data analysis section that follows data collection is necessary.**

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11 **Response**

12 The authors regret not having included a data analysis section in the original version of  
13 the manuscript. We apologise for this omission. In this version, we have added a section  
14 entitled "Discussion and conclusions", where we discuss the results of the case analysis  
15 and include some conclusions and limitations.  
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20 **Comment 7 (Reviewer #2)**

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22 **Findings need to be structured in a more proper way.**

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24 **Response**

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26  
27 The authors agree with this recommendation, for which we are grateful, because it helps  
28 improve the readers' understanding of the cases. Therefore, we have structured the  
29 comments of the interviewees according to common themes.  
30

31  
32 Based on the requests of Reviewer #1 and Reviewer #4, we have added a table at the end  
33 of Section 4 (Findings), where we summarise the key comments of the two cases related  
34 to the enablers, barriers and results of the SDGs.  
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37 **Comment 6 (Reviewer #2)**

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39 **Discussion with existing research, theoretical, managerial, and policy-making**  
40 **implications are almost absent.**

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42 **Response**

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45 We once again thank the reviewer for the suggestions because they have helped us write  
46 Section 5 (Discussion and conclusions, third paragraph. In response to these  
47 recommendations, we have written the following paragraphs:  
48

49  
50 *"Accordingly, this paper has several theoretical contributions. First, the food sector*  
51 *contributes to the implementation of not only the SDGs that are most closely linked to the*  
52 *sector but also the other SDGs, albeit to a lesser degree, given that all SDGs are*  
53 *interlinked. Second, the cooperative legal structure, cooperation networks and open*  
54 *projects with other firms, as well as agreements and partnerships with other robust*  
55 *institutions are enablers that encourage the implementation of other SDGs that are not*  
56 *directly related to the sector. Third, collaboration with other firms or institutions is a*  
57 *solution for companies that are within the supply chain but that are too small to have the*  
58 *financial, technological, infrastructure and information resources needed to implement*  
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3 *the SDGs (Benavides-Espinosa and Ribeiro-Soriano, 2014; Bouncken et al., 2018)."*  
4 [Section, 5, third paragraph]  
5

6 *"Given this scenario, the study has several managerial implications for food sector*  
7 *businesses involved in the supply chain. The first is to apply an SDG approach in all those*  
8 *involved in the food supply chain, from growers to consumers. Second, supply chain*  
9 *actors should seek collaborations (partnerships or agreements) with other companies*  
10 *within the chain to implement the SDGs that they find most difficult due to their size.*  
11 *Third, even though working towards the SDGs might entail difficulties that affect short-*  
12 *term profitability, social economy enterprises are advised to work towards the SDGs in*  
13 *the long term because they contribute to their productivity. Finally, they are also advised*  
14 *to raise awareness of existing SDG-related actions that they already carry out simply by*  
15 *following cooperative values. "* [Section, 5, fifth paragraph]  
16  
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19 *"These managerial implications must be accompanied by policies that encourage the*  
20 *implementation of such an approach. First, institutions should develop indicators that*  
21 *are objective, public and external to the firm to measure the degree of implementation of*  
22 *the SDGs. These indicators will have a positive impact on the competitiveness and*  
23 *productivity of firms, especially given the demands from more sustainable-oriented*  
24 *consumers looking for distributors that display greater sustainability. Second,*  
25 *policymakers should continue to work towards developing a standardised global legal*  
26 *framework in relation to the SDGs in the food sector so that the same criteria are*  
27 *demanding of all food products and so that the same controls are applied to avoid unfair*  
28 *competition".* [Section, 5, sixth paragraph]  
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### 34 **Final comment of the authors to Reviewer#2**

35  
36 The authors thank Reviewer #2 for all the positive suggestions and comments that have  
37 undoubtedly helped improve this paper. The authors have included the following  
38 acknowledgement in the manuscript:  
39

40 *The authors thank the editor and the four anonymous reviewers for their valuable*  
41 *comments and suggestions on how to improve the paper.*  
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### 48 **Reviewer 3**

49  
50 The authors thank Reviewer #3 for the time spent reading the original manuscript and  
51 hope that the inclusion of all suggestions in the latest draft of the manuscript are in line  
52 with the reviewer's wishes.  
53  
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55

### 56 **Reviewer 4**

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59 **Comment 1 (Reviewer #4)**  
60



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3 **The qualitative analysis allows to obtain some insights that are lost in the**  
4 **quantitative analysis and brings a lot of value in incipient topics such as the SDGs.**  
5 **Therefore, its originality and suitability for publication in this prestigious journal is**  
6 **latent.**  
7

#### 8 **Response**

9  
10 The authors appreciate the reviewer's words. We hope that the new version of the  
11 manuscript where the results (Section 4) and discussion (Section 5) have been  
12 restructured has eliminated the problem highlighted by the reviewer.  
13  
14

#### 15 **Comment 2 (Reviewer #4)**

16  
17 **I miss a more detailed explanation of the contribution of this article as well as the**  
18 **hypotheses it seeks to support. Despite being a case study this could be done perfectly**  
19 **and I believe it would provide more value and order for the reader.**  
20  
21

#### 22 **Response**

23  
24 We thank the reviewer for this suggestion about the theoretical contribution and  
25 hypotheses. We have added the following text in Section 3 (Research method), first  
26 paragraph:  
27

28  
29 *“This paper examines the implementation of the SDGs in two Spanish social economy*  
30 *enterprises in the agrifood supply chain. The research question addressed by this study*  
31 *is as follows: How do companies involved in the food sector supply chain apply an SDG*  
32 *focus? To respond to this research question, the following hypothesis was formulated:*  
33 *The SDG approach is an alternative that can be applied by companies in the food sector*  
34 *supply chain to ensure sustainability”.*  
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37

#### 38 **Comment 3 (Reviewer #4)**

39  
40 **What could be included is a stricter protocol for the selection of the cases, justifying**  
41 **these two cooperatives as a reference in the sector at a global level, or how the results**  
42 **can be extrapolated to more companies.**  
43  
44

#### 45 **Response**

46  
47 Thanks again for the recommendation related to the choice of cases that have helped us  
48 enhance the method and thus give greater credibility to the results. In response to the  
49 recommendations, we have included the following text:  
50

#### 51 **In Section 1, sixth paragraph:**

52  
53 *“The cases analysed in this paper were two social economy enterprises involved in the*  
54 *food sector supply chain: Anecoop S. Coop (ANECOOP) and Consum (CONSUM). In the*  
55 *context of the food supply chain, ANECOOP is a Spanish cooperative that purchases*  
56 *vegetables, fruit and wine from producers (growers) and sells them to distributors such*  
57 *as CONSUM. In turn, CONSUM is a Spanish cooperative that purchases vegetables, fruit*  
58 *and wine from intermediaries such as ANECOOP or directly from growers. It then resells*  
59 *these products to end consumers. This choice of social economy enterprises is justified*  
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3 *by the fact that such companies account for a large proportion of business activities in*  
4 *the Spanish agrifood sector. In 2020, they had a combined revenue of 34,186 million*  
5 *Euros and created 119,700 direct jobs. Moreover, export revenues increased by more*  
6 *than 82% between 2011 and 2020 (Cooperativas Agroalimentarias de España, 2021).”*  
7

8 **In Section 3, third paragraph:**  
9

10 “This paper presents an approach based on a multiple case study of two cases (Yin, 2013).  
11 This approach enables comparative analysis between these two social economy  
12 enterprises with different roles in the food supply chain. In the context of the food  
13 industry, the implementation of the SDGs entails the adoption of sustainable and  
14 responsible food production, distribution and consumption practices. Therefore,  
15 companies were chosen to cover two links in the food sector supply chain between  
16 growers and consumers. ANECOOP is a cooperative that acts as an intermediary between  
17 growers and distributors, whereas CONSUM is a cooperative that distributes to end  
18 consumers. ANECOOP was chosen because of its position as the leading cooperative in  
19 exports (Cooperativas Agroalimentarias de España, 2021). CONSUM was chosen  
20 because it is the only cooperative in the Spanish distribution sector”.

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22  
23 The results can be extended to other food sector supply chain firms with the same legal  
24 form. Analysis of cases of good sector supply chain firms with other legal forms is needed  
25 to ascertain whether the focus on the SDGs can be applied as successfully as in the  
26 cooperative sector.  
27  
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29 **Comment 4 (Reviewer #4)**  
30

31 I think that the way they are presented is not the most appropriate, because the reader can  
32 get lost with so many details in the transcript. I recommend including a summary table of  
33 this section with the most important results of each of the cases, as well as with the aim  
34 of establishing parallels and comparisons between them and some conclusions that can  
35 be derived for more co-operative enterprises.  
36  
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38 **Response**  
39

40 The authors agree with the comments of Reviewer #4 on the results. We have restructured  
41 the interviewee comments in Section 4 (Findings), arranging them by common themes to  
42 make it easier to read.  
43

44 In response to this request, we have added a table at the end of Section 4 (Findings), where  
45 we present the most relevant comments on the two cases in relation to enablers, barriers  
46 and results of SDGs.  
47  
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49 **Comment 5 (Reviewer #4)**  
50

51 I think this part should be treated with more importance than it is given. It is research that  
52 should be directly connected to the practical implications for business, and therefore more  
53 emphasis should be placed on it.  
54  
55

56 **Response**  
57

58 We thank the reviewer again for this suggestion. We have created a section to discuss the  
59 results in Section 5 (Discussion and conclusions), where we present the key findings of  
60

the research and mention the theoretical contributions and practical implications for business.

### **Section 5, third paragraph:**

*“Accordingly, this paper has several theoretical contributions. First, the food sector contributes to the implementation of not only the SDGs that are most closely linked to the sector but also the other SDGs, albeit to a lesser degree, given that all SDGs are interlinked. Second, the cooperative legal structure, cooperation networks and open projects with other firms, as well as agreements and partnerships with other robust institutions are enablers that encourage the implementation of other SDGs that are not directly related to the sector. Third, collaboration with other firms or institutions is a solution for companies that are within the supply chain but that are too small to have the financial, technological, infrastructure and information resources needed to implement the SDGs (Benavides-Espinosa and Ribeiro-Soriano, 2014; Bouncken et al., 2018).”*

### **Section 5, fifth paragraph:**

*“Given this scenario, the study has several managerial implications for food sector businesses involved in the supply chain. The first is to apply an SDG approach in all those involved in the food supply chain, from growers to consumers. Second, supply chain actors should seek collaborations (partnerships or agreements) with other companies within the chain to implement the SDGs that they find most difficult due to their size. Third, even though working towards the SDGs might entail difficulties that affect short-term profitability, social economy enterprises are advised to work towards the SDGs in the long term because they contribute to their productivity. Finally, they are also advised to raise awareness of existing SDG-related actions that they already carry out simply by following cooperative values. “*

### **Comment 6 (Reviewer #4)**

I recommend that the paper be reviewed by a native copyeditor.

### **Response**

We appreciate your suggestion. We have hired a highly experienced professional English language editor to revise and improve the manuscript. If you still feel that the manuscript requires further editing, please provide several examples of the issues that you have identified so that we can address them more effectively and ensure the high standards of writing required by the journal. We hope that you are now convinced of its value.

### **Final comment of the authors to Reviewer#4**

The authors thank Reviewer #4 for all the positive suggestions and comments that have undoubtedly helped improve this paper. The authors have included the following acknowledgement in the manuscript:

*The authors thank the editor and the four anonymous reviewers for their valuable comments and suggestions on how to improve the paper.*