Social Enterprise Journal

On social impact measurement and social entrepreneurs combatting food waste in the Netherlands

Seda Muftugil-Yalcin and Anna Klas
Department of Organization Sciences, Vrije Universiteit Amsterdam, Amsterdam, The Netherlands

Received 12 March 2024
Revised 12 August 2024
23 December 2024
26 February 2025
Accepted 10 March 2025

Abstract

Purpose – This paper aims to understand how social enterprises working in the food waste sector in the Netherlands make sense of discourses around social impact measurement and explicate what they actually practice in this domain. Building on the literature on impact measurement and differentiating between outcome and output level outcome measurement, the authors want to understand, albeit current marketization and rationalization discourses surrounding social entrepreneurs, why there is a palpable reluctancy to measure social impact at the outcome level in this specific sector.

Design/methodology/approach – In this qualitative study, 18 semi-structured interviews were carried out with the founders and employees of the social enterprises that were operating in food waste sector. The authors use phenomenological constructivist approach.

Findings – The results indicated that in the Netherlands, social enterprises that combat with food waste did not measure their social impacts at the outcome level, and almost all of them resorted to arguments that delegitimized impact measurement, as theorized by Molecke and Pinkse (2017) on the outcome level. However, the findings also show that these enterprises did measure their social impact at the output level. Following Ebrahim (2014), The authors think that the nature of the sector in the Netherlands has too provided an impetus for social entrepreneurs to measure impact only at the output level, since in this sector the causal link between output and outcomes was clearly established through evidence, making outcome-level measurement irrelevant for the enterprises in question.

Originality/value – Sector-specific empirical analysis of social entrepreneurship is rather scarce. By using various theoretical approaches, the authors show internal dynamics of this sector, as they relate to social impact measurement at the output and outcome levels.

Keywords Social entrepreneurship, Social impact measurement, Food waste sector, Outcome level impact measurement

Paper type Research paper

Introduction

In recent decades, social enterprises have experienced a trend toward the rationalization and marketization of their management and accountability (Ebrahim and Rangan, 2014; Eikenberry and Kluver, 2004). The shift toward new public management (NPM), which has

Authors would like to thank to all respondent who offered their time to participate in the research.
Disclosure statement: The authors report that there are no competing interests to declare.

Social Enterprise Journal
Emerald Publishing Limited
1750-8614
DOI 10.1108/SEJ-03-2024-0033

been promoted across Europe, has also had a significant impact in the Netherlands (Patetta and Enciso-Santocildes, 2024). As welfare systems face resource constraints, there is an increasing reliance on social enterprises to design and deliver public services (Heyes *et al.*, 2021; Powell *et al.*, 2019; Doherty *et al.*, 2014; Arvidson and Lyon, 2014; Mason, 2012). In line with NPM, funders increasingly expect formal methodologies for measuring social impact, drawing on performance measurement and reporting practices from accounting and finance (Fazzi, 2012; Cunningham *et al.*, 2014; O'Dwyer, 2007; Millar and Hall, 2013).

In the Netherlands, impact measurement is currently a requirement for becoming a member of the "Code Social Ondernemingen" (Social Enterprise Code), an important organization within the social entrepreneurship ecosystem. Enterprises must apply to this code if they wish to be certified as social entrepreneurs. In the near future, the introduction of a new legal form, the social limited liability company (BVm), will also require impact measurement (van Orden and Hogenstijn, 2023). However, due to the ambiguity surrounding the nature of social impact (Molecke and Pinkse, 2017; Choi and Majumdar, 2014), the relationship between social enterprises' interventions and social impact (Ebrahim and Rangan, 2014), and the methodologies used to measure social impact (Nicholls, 2009), social impact measurement remains a contested practice in the Netherlands as well (Molecke and Pinkse, 2017; Choi and Majumdar, 2014; Mair and Martí, 2006; Paton, 2003).

The *Social Enterprise Monitor Netherlands* reports from 2018, 2019 and 2022 offer valuable insights into the state of impact measurement within the Dutch social entrepreneurship ecosystem (*Social Enterprise Monitor*, 2018, 2019; *Dutch Social Enterprise Monitor*, 2021–2022). These reports are based on extensive surveys conducted among social enterprises in the Netherlands. Each year, the same set of questions is posed to track progress across various areas. The 2018 report revealed that 63% of social enterprises in the Netherlands were already engaged in impact measurement (*Social Enterprise Monitor*, 2018). Similarly, the 2019 report indicated that a significant number of social enterprises had conducted impact measurements and intended to continue doing so in the future (*Social Enterprise Monitor*, 2019). The 2022 report further highlighted that two-thirds of Dutch social enterprises were measuring their impact (*Dutch Social Enterprise Monitor*, 2021–2022). However, these reports also acknowledged that the term "measuring impact" can be interpreted differently by the social enterprises participating in the research (*Social Enterprise Monitor*, 2018), underscoring the socially constructed nature of this concept.

The social impact measurement literature reveals that many existing frameworks rely on the "results chain" or "theory of change," emphasizing the alignment of an organization's inputs, outputs, outcomes and impact. Ebrahim and Rangan (2014) differentiate between outputs (immediate results), outcomes (medium- and long-term effects on individuals) and impact (medium- and long-term effects on communities or populations). While conventional wisdom in the social entrepreneurship sector advocates for measuring results as far along the logic chain as possible – extending to outcomes and societal impacts – an increasing number of scholars are questioning whether such comprehensive measurement is appropriate or feasible for differing types of social enterprises (Ebrahim and Rangan, 2014; Emerson, 2003; Hehenberger *et al.*, 2019; Costa and Pesci, 2016).

Food waste sector and social impact measurement: a case study

In the Netherlands, there are approximately 5,000 social enterprises (Bosma, 2019). The 2018 Social Enterprise Monitor classified these enterprises into four main sectors:

(1) Work integration (WISEs: 44%);

(2) Climate (circular economy, food and environmental waste: 24%);

(3) Well-being (neighborhood cohesion, health and other initiatives: 26%); and
(4) International development (value chain interventions and other activities: 6%) (Social Enterprise Monitor, 2018).

In this study, we would like to focus on social enterprises who are working on food waste sector. The reason to focus on this is mostly due to the fact that in the food waste sector, in comparison with other sectors, the interventions of enterprises are often narrowly focused, making it relatively straightforward for them to measure outputs, such as the kilograms of food saved.

A study conducted by Trompert identifies four distinct social business model archetypes operating in the field of food waste management in the Netherlands:

(1) Producers – Organizations that create various products from food waste;
(2) Food Waste Restaurants – Restaurants that primarily use food waste as ingredients for their dishes;
(3) Platforms – Entities that connect supply and demand to address food waste; and
(4) Waste Farmers – Farmers who incorporate food waste into diverse farming activities (Trompert, 2020).

Our preliminary research suggested that many social enterprises operating in the food waste sector were hesitant to measure their impacts at the outcome level. This observation prompted us to conduct a more detailed investigation into this sector to understand how these enterprises interpret and engage with discourses surrounding social impact measurement and as to why they do not do outcome-level measurement. This study, therefore, uses the food waste sector as a case study, focusing on critical perspectives regarding why social purpose organizations, such as social enterprises, might either adopt or resist social impact assessment practices at the outcome level. In addition, we examine whether this reluctance aligns with the arguments proposed by Ebrahim and Rangan (2014).

We contend that "social impact measurement" has become a buzzword in the Dutch social entrepreneurship scene, despite the absence of a clear consensus on its meaning. Nevertheless, numerous policy reports in the Netherlands emphasize the importance of promoting social impact measurement and reporting, driven by the belief that these practices enable public authorities and impact investors to better understand the potential impact of investing in or purchasing from social enterprises (European Commission, 2020; OECD, 2019; Keizer *et al.*, 2016; Avance *et al.*, 2020; Hogenstijn, 2021; van Orden and Hogenstijn, 2023).We argue that it is essential to critically examine the meaning of social impact measurement within the Dutch context. Furthermore, it is important to assess whether different sectors require tailored and more nuanced approaches from stakeholders who demand impact measurement from social enterprises.

The remainder of the study is structured as follows. The first part describes the phenomenon of social impact and poignant themes that surface academic debates such as the meaning of social impact and delegitimization of impact measurement practices. We think that these delegitimization strategies speak to what Ebrahim and Rangan (2014) indicate to happen on the ground if social enterprises are asked to do outcome-level measurements if they do not genuinely see the merit of doing them. We also briefly examine the phenomenon of scale and scope in food waste sector. In the second part, the method is explained, describing the data set, the variables and the technique of analysis that have been applied. In the third part, the results are described and explained. Finally, discussion and conclusion are provided in Section 4.

Theoretical framework: conceptualizing social impact and its measurement

Social impact is a central aspect of social entrepreneurship (Dacin *et al.*, 2010; Lumpkin *et al.*, 2011; Rawhouser *et al.*, 2019). It focuses on assessing the long-term and broader effectiveness of organizational or policy actions (Lane and Casile, 2011). While the success of for-profit enterprises is primarily evaluated based on financial performance (Austin *et al.*, 2006), social enterprises are designed to create social value and address societal challenges that markets and governments have failed to resolve (Rosenzweig, 2004; Conway, 2008; Gibbon and Affleck, 2008; Di Domenico *et al.*, 2010). Reflecting their dual purpose of generating both financial and social value, many social enterprises are experimenting with accounting practices that measure not only economic performance but also social outcomes (Bagnoli and Megali, 2011; Manetti, 2014; Nicholls, 2009; Costa and Andreaus, 2021).

The debate around social impact and its measurement is gaining significant traction in Europe. This momentum is driven both by funders' demands to assess whether their investments effectively address societal problems and by social enterprise managers' desire to better understand the outcomes and impacts of their activities. Costa and Andreaus (2021) note that the pressure to demonstrate meaningful impact is increasing across Europe, fueled by diminishing public and private sector responses and rising competition for fundraising.

The literature highlights various benefits of social impact measurement. It helps social enterprises establish legitimacy and accountability (Nicholls, 2009), enhance learning and improve efficiency (Dees, 2007; Paton, 2003) and aids funders in evaluating the effectiveness of their investments (Ebrahim and Rangan, 2010). Additionally, some scholars argue that the ultimate goal of measuring social impact is to understand how social interventions meet or satisfy human needs for social well-being (Kroeger and Weber, 2014), including healthcare, education, happiness, equality and social integration.

Social impact measurement, therefore, focuses on perceptual judgments of social well-being (Diener and Suh, 1997), as experienced by the target communities, or on self-reflective evaluations aimed at achieving a social mission (Nicholls, 2009). Given this, numerous approaches have emerged for conceptualizing and implementing social impact measurement. A wide range of social performance measurement tools, initiatives and frameworks have been developed by both practitioners and academics (Rawhouser *et al.*, 2019).

For the purposes of this study, we adopt the definition of social impact measurement used by Ebrahim and Rangan (2014), which encompasses the broad range of practices an organization uses to track its progress toward achieving social goals. In this framework, *outcomes* refer to lasting changes in the lives of individuals, while *outputs* denote the immediate results stemming from a social enterprise's interventions. Both output and outcome measurements are integral components of social impact measurement.

We align with Grieco *et al.* (2015), who highlight a growing interest in outcome measurement as a means of assessing organizational effectiveness. This shift reflects a broader trend where outcomes have become the primary indicators of organizational performance, surpassing traditional success metrics (Alexander *et al.*, 2010; Liket and Maas, 2015; Mitchell, 2013).

Arguments for delegitimizing formal social impact measurement

As previously discussed, social enterprises have been increasingly subjected to trends of rationalization and marketization in their management and accountability practices (Ebrahim and Rangan, 2014; Eikenberry and Kluver, 2004). Similar to the challenges faced by NGOs, we contend that social enterprises exhibit a spectrum of responses to funders' demands for formal impact measurement – whether at the output or outcome level. These responses range

from acceptance and compliance to resistance, reluctant compliance or outright rejection of such directives.

Molecke and Pinkse (2017) identify four primary critiques used by social enterprises to delegitimize formal social impact measurement practices. The first critique is that social entrepreneurs often portray social impact as fundamentally immeasurable – both in their specific context and more broadly. They frequently highlight a lack of capabilities, resources or expertise to undertake such measurements. The second critique concerns the cost and effort required to collect the data necessary for formal methodologies. Many social entrepreneurs view the implementation of these practices as an imprudent investment, given the time and financial resources needed. While they are motivated to measure social impact, the day-to-day demands of running their enterprises often preclude them from dedicating substantial time or money to these efforts. The third critique is that even when data can be accurately collected, social entrepreneurs often find it fundamentally incomplete, unable to capture the full complexity and significance of their social impact. They perceive the insights generated by these measurements as distorted and invalid, failing to reflect the nuanced reality of their work. Finally, the fourth critique is that social impact measurement provides little to no actionable insights. Social entrepreneurs frequently regard these practices as irrelevant, as they fail to guide decision-making or predict future success (Molecke and Pinkse, 2017).

Within the theoretical landscape in which Dutch social entrepreneurs operating in the food waste sector find themselves, the decision to engage in or abstain from impact measurement cannot be fully captured by the widely referenced dichotomy of "measuring to prove" versus "measuring to improve" (van Rijn *et al.*, 2024). While existing literature commonly suggests that social entrepreneurs' approach to impact measurement is shaped by two primary drivers, we contend that this oversimplification does not account for the nuanced, sector-specific considerations that influence such decisions.

The first driver, "measuring to prove," is largely externally motivated, functioning as a means for organizations to establish legitimacy and credibility in the eyes of key stakeholders such as funders and policymakers. This perspective aligns with broader discussions in accountability literature, which emphasize the role of impact measurement in demonstrating transparency, meeting donor expectations and justifying continued financial support (Nicholls, 2009; Ebrahim, 2003, 2005; Ebrahim *et al.*, 2014). The second driver, "measuring to improve," is internally oriented, focusing on the use of impact measurement as a tool for continuous learning, refinement of organizational practices and overall enhancement of social interventions (Campbell *et al.*, 2012; Lall, 2017).

While this binary framework offers a useful starting point, we argue that it fails to capture the deeper, context-specific factors that drive social entrepreneurs' engagement with or disengagement from formal impact measurement practices. This is particularly relevant in sectors where a company's outputs and outcomes are directly and visibly interconnected, making the necessity or perceived value of formalized measurement processes highly context-dependent. Furthermore, the internal mechanisms that contribute to the delegitimization of formal impact measurement practices cannot be adequately understood without a thorough exploration of the specific challenges and operational realities faced by social entrepreneurs in this sector. Addressing this gap, our research seeks to provide a more comprehensive understanding of the factors influencing impact measurement choices, shedding light on the complexities that extend beyond the prevailing academic discourse.

Methods

As suggested, our study aimed to understand how social enterprises operating in the food waste sector perceive and make sense of discourses surrounding social impact measurement,

as well as to document their current practices in this area. To address these objectives, the study used a qualitative research approach, using semi-structured interviews.

A phenomenological constructivist framework was adopted, focusing on interpreting, understanding and exploring a range of socially constructed phenomena (Howell, 2013). Participants were recruited through a combination of convenience and snowball sampling methods.

The recruitment process began with an examination of the Social Enterprise Netherlands website to identify social enterprises operating in the food waste sector. Additional participants were located by searching Instagram using hashtags such as *voedselverspilling* (food waste) and *verspillingsvrij* (waste-free). Further efforts included browsing the website of *Verspilling is Verrukkelijk* (Waste is Delightful) and directly contacting social enterprises not listed by Social Enterprise NL. Finally, the study also conducted a detailed review of the Facebook group of *Young Impact Makers*, an initiative by Impact Hub Amsterdam, to identify relevant organizations that might not have been in the list of Social Enterprise NL.

Several inclusion criteria were applied to select the social entrepreneurs for this study. The first criterion was that the entrepreneurs must aim to create social impact by offering services or selling products designed to prevent food waste. This goal could be achieved at any stage along the food chain. The second criterion was that eradicating food waste must be clearly stated as a key objective on their website or primary communication channels.

Given the lack of a specific legal designation for social entrepreneurs in the Netherlands, participants were not selected based on their legal entity. As a result, the social enterprises in the sample varied in legal form, including private limited companies (Besloten Vennootschap or B.V.), general partnerships (Vennootschap Onder Firma or VOF) and sole proprietorships. We ensured that the sample included social enterprises from various social business model archetypes (Trompert, 2020). The first archetype, "producers," involves enterprises that create products from food waste, such as jams, meat substitutes, iced teas and bread. These producers typically source their waste streams directly from farmers or indirectly from wholesalers. These products are often rejected by the conventional market due to factors like appearance or overproduction.

The second archetype, "food waste restaurants," consists of social enterprises that use food waste as an ingredient in their cooking. In addition to operating restaurants, many of these initiatives engage in other activities, such as organizing workshops on food waste, running food waste platforms or hosting weekly free supermarkets.

The third archetype, "platforms," focuses on initiatives that connect surplus food streams with individuals or communities in need. These platforms source food waste from consumers, retailers and farmers.

Finally, the fourth archetype, "waste farmers," encompasses businesses built around farming on food waste, such as growing mushrooms or insects using food waste as a substrate. These enterprises primarily source their input from restaurants, although they may also obtain waste from retailers or farmers.

These efforts resulted in a final sample size of 45 Dutch social enterprises. We attempted to reach all of these enterprises via e-mail and phone, and 18 social enterprises agreed to participate in interviews. Of the 18 interviews, six could be classified as "platforms," nine as "producers," two as "food waste restaurants" and one as a "waste farmer." Although we acknowledge these different archetypes, we did not differentiate the results based on these categories, as our goal was to understand the sector as a whole. In addition, the overall sample size (45) was not large enough to warrant such a distinction. The anonymity of the research participants was ensured by omitting their names and job titles in the study.

The interviews with the founders of social enterprises were conducted between March 2020 and August 2021. Given the centrality of the distinction between output and outcome in our study, we began each interview by presenting our definitions of these concepts, grounded in the framework proposed by Ebrahim and Rangan (2014).

As can be seen from Table 1 which lays out our respondents' characteristics, out of 18 interviews, 13 were conducted with male founders and five were with female founders. Each interview lasted between 45 and 60 min. Most interviews were conducted via Zoom, as

Table 1. Respondent characteristics

Respondent	Gender/Function	Organization type	Date of the interview	Mission
Respondent 1	Male General coordinator	Food waste restaurant	11-03-2020 – in person interview	Reducing consumer food waste by organizing workshops/caterings/events
Respondent 2	Male Founder/owner	Producer	13-03-2020 – Zoom call	Producing a new food system where inclusiveness and sustainability is combined
Respondent 3	Male Founder/owner	Producer	15-03-2020 – phone audio call	Biological and sustainable beverage production
Respondent 4	Male Project leader	Producer	20-03-2020 – Zoom call	Preparing boxes with food products that can no longer be sold to retail, from the parent company
Respondent 5	Male Founder/owner	Producer	18-04-2020 – Zoom call	Organizing sustainable and zero-waste catering events/workshops
Respondent 6	Male Founder/owner	Platform	20-04-2020 – in person interview	Combatting food waste via preparing low-cost meals with almost out-of date products and connecting it to various users
Respondent 7	Male Founder/owner	Producer	30-04-2020 – Whatsapp video call	Biological and sustainable beverage production
Respondent 8	Male Founder/owner	Producer	30-04-2020 – Zoom call	Bread production from old bread
Respondent 9	Female Founder/owner	Waste farm	29-05-2020 – Zoom video call	Growing food on coffee grounds which is collected sustainably
Respondent 10	Male Founder/owner	Food waste restaurant	28-05-2020 – in person interview	Turning food surplus into meals and products and serves in its own restaurant
Respondent 11	Female Founder/owner	Producer	02-04-2020 – in person interview	Creating biodegradable products that comes from residue flows from the food industry
Respondent 12	Male Founder/owner	Platform	10-04-2020 – in person interview	An online application, that offer users rescue food from going to waste
Respondent 13	Male Founder/owner	Producer	19-04-2020 – Zoom call	Catering services prepared by food waste
Respondent 14	Male Account manager	Platform	20-05-2020 – Zoom call	Catering services prepared by food waste, offered from an online platform
Respondent 15	Female Founder/owner	Platform	22-05-2020 – in person interview	An online and offline inspirational platform for professionals in the food sector who combat food waste
Respondent 16	Male Founder/owner	Producer	10-05-2020 – in person interview	Turning otherwise wasted vegetables into soups and sauces
Respondent 17	Male Account manager	Platform	22-05-2020 – in person interview	Offering services for hospitality industry workers who want to achieve less food waste
Respondent 18	Male Project leader	Platform	29-05-2020 – Zoom call	An online platform where consumers can shop healthy, innovative and sustainable food products directly from their local producers

Source(s): Authors' own work

the timing coincided with the COVID-19 pandemic. The interviews were recorded using a fifth-generation iPad Mini and co-transcribed using Amberscript, an online transcription software. Since the transcriptions were not always accurate, they were manually revised to avoid any misinterpretations. Once the transcriptions were near-*verbatim*, they were imported into Atlas.TI, a qualitative data analysis software.

Following transcription, the interviews were coded, which is a crucial part of the analysis process (Miles and Huberman, 1994). The interviews were first open-coded to explore the quantity and range of the data. The study also used pattern coding to identify common themes (Miles and Huberman, 1994). In line with Bryman (2012), we used a three-level coding process: first, open coding, then axial coding and finally, selective coding. From these overarching selective codes, the following themes emerged:

- Ideas of impact measurement and how social enterprises perceive the discourse around it;
- What they do in terms of impact measurement at the output level; and
- Whether and how they measure impacts at the outcome level.

Results

The current study aims to present the results following the interviews. We first present the approach of social enterprises in food waste sector toward impact measurement at the output level, then explain what actually they do in terms of output measurement and finally reveal the causes of their skepticism and their reluctancy to do social impact measurement at the outcome level.

Approaches to social impact measurement at the output level

The literature suggests that to ensure the continuity of social enterprises, it is important to measure the impact they make (Barraket and Yousefpour, 2013). Measuring, but especially knowing, the social impact is a gauge for enterprises to state whether they are well on their way to achieving their goals or whether they need to make adjustments here and there to meet that same goal (Haski-Leventhal and Mehra, 2016). Almost all the interviewees were rather positive about the idea of social impact measurement at the output level. “Measuring to improve” idea seemed to resonate with many enterprises:

> Because otherwise you don't know to what extent you are in the process towards your mission. And also to ultimately know if you are doing it efficiently and effectively. You ultimately want to reach people. And you ultimately want change in real life, on the ground. (Respondent 14, platform organization)

An enterprise that was in the business of recycling waste believed that, in their case, by measuring the social impact, they can keep an eye on the processes and could respond accordingly. This shows that monitoring the outputs is seen as very useful to be able to strategize and come up with improved solutions:

> So by measuring you can detect wasteful flows at a point in time and so you can offer alternatives and then if these alternatives work, only then you prevent or reclaim waste. (Respondent 4, producer)

There were two social enterprises that were rather self-reflexive about the concept of “impact,” and they told us that issue of impact was a complicated one which also necessitated

to think about one's unintended negative impacts. We sensed that a genuine interest by these two enterprises to really understand to what extent they were realizing their goals:

> Our products are sold in glass bottles, we bottle them now in Germany. Because our place is not suitable to do that in the Netherlands. So our product goes from the Betuwe to Germany and comes back bottled, and there is a piece of negative impact in that. (Respondent 3, producer).

So, here, the negative impact was also measured in numbers – the carbon footprint created due to choices the enterprise has made. Overall, the approach toward output-level impact measurement seemed to be rather positive.

There were a few social enterprises who said that they were measuring their impact only for communication and marketing-related reasons. For instance, respondent 9 claimed to measure their outputs because she believed that it distinguished her company from others who do not do that. She was content to have made some sort of an impact measurement – albeit due to external pressures of their funders – because it provided a nice story for her to tell to the third parties. She said:

> I am happy we have an impact report […] because I got tired of telling the story every time to the third parties and the fact that I was trying to convince people about what was going on in the company. And then it is very nice of course to have a paper somewhere or have a certificate explaining what you do. The municipality and future partners frequently ask me to demonstrate my impact (Respondent 9, waste farmer)

Types of output measurements

Measurements that were done in the sector mainly based on the number of products sold, the number of products produced and the number of raw materials, i.e. wasted food, used (thus saved) for this purpose. So it can be said that the measurements were quantitative in nature. Many of the social enterprises we interviewed measured their outputs by the number of orders came in or how many boxes of products they sold by tracking their social media and websites. They thought that this was a useful exercise that made them keep track of what they were doing:

> We can then immediately measure how many orders have come in from Facebook or from an Instagram and that's going really well right now. (Respondent 18, platform)

This is consistent with how Respondent 4, a producer, measured its social impact. The founder said that he measured their social impact either by the amount of packages available or the actual number of packages of fruit they sold to retail markets. He believed that this was a good way to track their success.

Respondent 16, another producer, underlined the importance of "numbers" and the need to monitor the amount of food waste that is saved. The amount of food waste saved turned out to be a one that all social enterprises we have spoken to kept track of:

> Yes look you have that at the numbers, and it's not that difficult because there you can just see how much waste that you have saved. (Respondent 16, producer)

> Look, we use apples, apples that are not nice enough for the supermarket, just because of their appearance. So we express our impact in the amount of apples that we save and process. (Respondent 3, producer)

Respondent 3, in addition to measuring its output, was also experimenting with a method called "True Pricing". It was described as follows:

> In addition, we are calculating the true price of our apples, so that's also fun. So with true pricing we map out what are all the environmental and social costs to make our product now. So what is the real price for which it should actually be in the store. We use that as an explanatory calculation. And that is a way of giving insight into your impact. (Respondent 3, producer).

This respondent indicated that this process of true pricing was still in development so, the results on this were not yet available. But he thought that it was a very interesting method to measure actual social impact on the output level. Respondent 1 also believed that social impact measurement should be done in a quantitative manner in their sector. This respondent believed not to have measured social impact but output. In their company, this was mostly done in quantitative ways by counting the kilograms of food saved as well as monitoring other organizational activities:

> Yeah. We do it so. We keep track of our activities. For instance, we have done 155 activities in 2019 with that's markets, dinners, catering presentations and so forth. We have saved an estimated ten thousand seven hundred seventy-five kilograms of food. With over seven thousand face-to-face interactions with individuals. This is not necessary in measuring social impact but just keep a count on the numbers of the organization. – (Respondent 1, food waste restaurant)

Another respondent said that they sometimes use various different methods that help them monitor their impact. There was an enterprise which was, besides fighting food waste, trying to use people with disabilities, who did not have access to markets and to their social enterprise. This company used a certification method called PS0 30+:

> We follow the PSO 30+ certification. It is about employee participation. They have steps one, two and three. You usually start at step one and then you want to improve yourself in the system and go levels up. At the end you should have at least 30 % of your staff who are in the right target audience. Well, I have a score of 66 %." – (Respondent 9, waste farmer)

The quote above implied that this enterprise has exceeded the standard percentage by using more disabled people, and they considered it as an impact they make besides their main mission. Another method this organization used to assess their sustainability was the Life Cycle Analysis (LCA). The respondent described what LCA encompassed:

> LCA is about sustainability. So what's your energy? Do you save energy? Are you saving water? What about transport? Eh, because I do everything locally. That's [a] massive impact on your CO2 emissions. – (Respondent 9, waste farmer)

The main conclusion that can be drawn from the above results is that social enterprises measure their impact at the output level using figures from purchasing, sales and production. They keep track of activities they conduct, be it meetings, gatherings or event they do. Sometimes they resort to surveys as well. It is remarking that when asked about their social impact, some enterprises directly think about number of products sold or vegetables saved which would otherwise be wasted. This means that many of the social entrepreneurs interpret their social impact as their outputs in this sector. Therefore, they do not resort to use tools to measure their social impact at the outcome level. Yet, they – at least some of them – engage in activities to be able to come up with the best suitable method to measure their outputs. It was also interesting to see that in this food waste sector, there was not so much pressure by the side of funders that compelled them to do outcome level measurement.

Ideas on impact measurement at the outcome level

Our findings indicate that most of the enterprises in this sector were rather skeptic about impact measurement rhetoric at the outcome level. Social enterprises were aware that they had impact beyond their outputs, such as raising awareness on combatting food waste or

improving the lives of people in where they operate, but they admitted that they used their subjective feelings to make sense of this kind of impact:

> I don't know how much we make impact on that. […] That's like something that we don't measure. I mean we've recently done a survey to see if people are attending to our dinners. If they like the things they learn from our dinners and from our events. But we don't gather information on whether they use the sort of knowledge we tell in our dinner talks in their daily lives. I don't think it's something that we can do. I mean I keep a record of who comes to the dinners. But otherwise what they take away is just a feeling. – (Respondent 1,food waste restaurant)

Most of the social enterprises we talked were actually skeptic about the need and use of outcome measurement in their sector. They questioned the added value of measuring social impact, aside from being able to demonstrate results to external parties. Respondent 13 felt that it is "absurd" that enterprises of his size were expected to demonstrate and measure their outcomes. The respondent stated that one way of demonstrating outcome-level impact was by adding quality marks to products. However, these marks, according to him, increased the price per product. This is explained as:

> Companies that want to do better are often forced to carry a quality mark. That can be Fairtrade, organic etc. It is a legion of labels. Moreover, what such a quality mark does, is on the one hand, it gives a form of certainty to the consumer. On the other hand, all of the audits involved and the cost of keeping that system makes it a lot more expensive for those kinds of products. (Respondent 13, producer)

Thus, the quote above shows how one form of demonstrating impact, in this case certifications and quality marks, can be perceived by the social entrepreneur as a costly endeavor since, in a chain reaction, it leads to a higher price of the end product. There were many other social enterprises who thought in a similar vein, arguing that the cost associated with certifications are a burden for them. One of the enterprises was really bitter and argued that the burden should actually be on the companies who are less sustainable and social and that they should be the ones who should be demonstrating their social impact, not the other way around. This entrepreneur suggested a new norm which is:

> […] a reversed system where the standard of doing business is higher and actually the same for everyone. And if you want to do less than the norm […] then that is where the costs for you has to go up. But you should not punish companies who are meeting the norm and who trying to do better. (Respondent 10, food waste restaurant)

The arguments of the social enterprises that we spoke to corresponded to the delegitimizing techniques put forward by Molecke and Pinkse (2017). Almost all the enterprises argued that they lacked resources such as money, time and expertise, which are needed to measure their outcomes. These enterprises found that to measure outcome, they relied on resources, as they did not possess the capacity to measure accordingly by themselves. To give an example, one respondent stated the following:

> We are small, and everyone always asks: how do you measure that? I do not think we are doing that yet at the level at which we would like to do so ourselves, but that solely has to do with a lack of resources. It is also expensive. (Respondent 2, producer)

Respondent 5 seemed to be aware of some benefits of measuring social impact at the outcome level but admitted that they did not have the time and other resources to measure it. There is also the implicit belief that impact measurement will always be subjective, as it will rely on the knowledge of the entrepreneur itself:

> We do not have the time and capacity to do so. I can have a conversation with you, and through that, I can explain to you the impact [my enterprise has]. We probably get to some numbers that

> many of them will be built on my knowledge and experience and building healthy and affordable for the last six, seven years. But we do not have actual measurement processes or results in place. (Respondent 5, producer)

Like the above respondent, a founder of an enterprise that sells snacks created from food surplus believed that it was best if professional companies did the actual measurement since it would then be more "objective". But he too explained that they cannot afford the costs of hiring external professionals:

> I do not have the money to pay an external company and I don't have the working hours and expertise within the company to invest in doing that. (Respondent 7, producer)

Respondent 9 told us that she measured her enterprise's social impact in the past one time using Life cycle analysis (LCA) method but indicated that she cannot measure social impact on her own by any means. She has said:

> It's kind of hard to measure or [it is that] you're spending a lot of money on it. You have a so-called LCA that is Life Cycle Analysis. Yes, it's costly to have that carried out […] that's complicated because you're going to look at every part of your whole process […] However, I don't have all that figured out yet […] I can't do that myself. That's way too complicated. (Respondent 9, waste farmer)

Another theme that emerged corresponded to the idea that the data collection was an imprudent investment. In their logical reasoning, many of our respondents emphasized the development of goods, which are the primary focus of their enterprises, as opposed to impact measuring. We constantly head quotes like the below:

> I believe that the process of saving the food and actually bringing it out to be eaten is more important than the measurement of it […]. (Respondent 5, producer)

Especially some of these respondents claimed to focus primarily on creating a solid customer base, as they are still in their start-up phase. In their view, this phase referred to the development of their product and bringing it to the market and consequently selling it to the right target audience. We were told that in this phase, they were not in the headspace to think about social impact measurement:

> First of all, the most important thing is that I have a healthy company [and] that I emerge from my start-up phase. And if that's the case, then there will be time and space to look further into social impact. – (Respondent 7, producer)

> I'm not in a phase where I'm really working on that either. Or that I measure who they are, how many new or returning customers there are. – (Respondent 13, producer)

A similar entrepreneur was busy converting his current winery into a new one, and his aim was to sell as muchwine as possible. He also said:

> No, I do not measure that yet. I think [my company is] just too young to measure it […] because I'm now in the phase of putting my business on the market and making money. Because with the money I earn, I can do research again, and if I do this research, I'll go one step further in how I can present myself. It's all intertwined. And in the end, I can certainly say a few things. I can do that so I can. I am not trying to map out precisely what, for example, how many kilos I save on how much impact it has socially or on the environment or societally, because I simply do not have the resources for that. So I'm very focused, especially in this crisis, on just surviving and making sure I can continue to exist, get people acquainted with the product." – (Respondent 3, producer)

Respondent 15, platform organization, said that with the right amount of resources (time, money and skills), research can be conducted to measure impact at the outcome level. However, she was unable to focus on impact measurement, as the coronavirus made her shift her focus to keeping the business afloat.

Respondent 11 was part of a network of social enterprises operating against food waste. She said that in the future, if she wants to measure its social impact at the outcome level, she will ask peers within the Verspilling is Verrukkelijk (Waste is Delicious) network how they tackle measuring social impact:

> That's why I'm on a platform such as Verspilling is Verrukkelijk […] because there are all kinds of people who have been practising [Social Impact] for five years or more, who are still in all kinds of other sectors, but who, if I'm that far, can help me with: like okay, you have to do this, you need to have this, and then you need those people for it. But I'm not that far yet. – (Respondent 11, producer)

The quote above shows that respondent 11 can rely on peer support if she wants to do social impact measurement but argues that at the moment she herself not have the right skillset nor the time to execute outcome-level social impact measurements.

In conclusion, the results in this section show that the resources of time, money and expertise seem to be very important for social enterprises if they consider about measuring social impact. Almost all the enterprises resorted to the delegitimization strategies of Molecke and Pinkse (2017) while explaining as to why they do not engage in impact measurement at the outcome level. The results in this section also showed that external social requirements (such as quality, marks and certifications) were sometimes seen as useful to differentiate social enterprises from companies that were doing business as usual. However, it was argued that certifications and related requirements, which demanded more than measuring their outputs, were increasing the price of their products. In sum, it can be seen that social impact measurement at the outcome level is not seen as an integral part of decision-making or management system of the enterprises we talked to, but perceived as rather an additional good-to-do activity, especially for third parties. There was thus not an intrinsic motivation to conduct outcome level measurement. All these findings showed once more that in the Netherlands, social enterprises that combat with food waste showed reluctancy to measure their social impact at the outcome level.

Conclusion and discussion

In summary, this study aimed to explore the social impact measurement practices adopted by social enterprises active in the food waste sector in the Netherlands. We divided the findings section into three parts:

(1) In the first section, we discuss the general stance toward "social impact measurement";

(2) In the second section, we explain what social enterprises do in terms of output measurement; and

(3) In the third section, we examine the factors that dissuade social enterprises from conducting outcome-level measurements.

Our theoretical lens was based on Ebrahim and Rangan (2014) work, which questioned the normative arguments that suggest the necessity of measuring impact at the outcome level to understand one's social impact. In our case, social enterprises operating in the Dutch food waste sector showed reluctance to conduct outcome-level social impact assessments. One reason for this reluctance and disinterest stemmed from the belief that measuring outputs was

sufficient to determine whether they were achieving their goals. The narrow scope of their activities made it easy to establish a clear causal link between outputs and outcomes, supported by evidence (e.g. the amount of apples saved from waste leading to food waste reduction).

Furthermore, social enterprises did not feel pressured to measure their impact at the outcome level. This suggests that, in the Netherlands, funders supporting social enterprises in this sector are also content with output-level measurement. These enterprises appear to be somewhat insulated from the rhetoric of marketization and rationalization, likely due to the close connection between their outputs and outcomes. Several participants in this study described the pressure to measure social impact as forced, with some even describing it as absurd or a relic of the "old world."

As Arvidson and Lyon (2014) note, various stakeholders can impose pressure on social entrepreneurs. However, in this study, social entrepreneurs did not experience significant external pressure to measure their impact at the outcome level. Previous literature suggests that demonstrating and measuring social impact is often essential for communicating with potential partners, government bodies, employees and consumers, with the benefit of facilitating collaboration or securing additional funding (Haski-Leventhal and Mehra, 2016). Our findings, however, indicate that this was not necessarily the case for the social enterprises we interviewed, as they reported maintaining good relationships with stakeholders despite not measuring social impact at the outcome level.

We believe that further research should explore how social enterprises operating in other sectors, where the link between output and outcome is not as straightforward, approach and practice outcome-level impact measurement. Such studies could offer valuable theoretical insights into the discourses of legitimization and delegitimization of impact measurement in a comparative context. In addition, conducting research across all enterprises within the food waste sector would provide a more comprehensive understanding of the practices within the four archetypes discussed earlier in the study. A complementary study focusing on the perspectives of funders and investors working with food waste social enterprises could also yield interesting insights, helping to triangulate the expectations of different actors involved in impact measurement.

This study has several limitations. First, the timing of the research coincided with the COVID-19 pandemic, which resulted in a smaller sample size. As we have explained in the methodology section, our sample universe amounted to 45 social enterprises, but only 18 accepted our interview request. Second, interviews were mostly conducted via Zoom, which inevitably influenced the way interaction usually took place. In addition, from a methodological standpoint, it was not possible to determine the exact number of food waste social enterprises operating in the Netherlands, making it difficult to assess the representativeness of our sample relative to the broader sector. Related to this, the archetypes that we borrowed from Trompert (2020) could not have been used in our analysis.

Nevertheless, we aim to contribute to the ongoing debates on social impact measurement among social enterprises by focusing on a highly specific niche sector. We believe this example will inspire key stakeholders in entrepreneurship ecosystems, both in the Netherlands and globally, to reflect on the varied approaches and underlying reasons different sectors adopt in measuring social impact.

References

Alexander, J., Brudney, J.L. and Yang, K. (2010), "Introduction to the symposium: accountability and performance measurement: the evolving role of nonprofits in the hollow state", *Nonprofit and Voluntary Sector Quarterly*, Vol. 39 No. 4, pp. 565-570.

Arvidson, M. and Lyon, F. (2014), "Social impact measurement and non-profit organisations: compliance, resistance, and promotion", *Voluntas: International Journal of Voluntary and Nonprofit Organizations*, Vol. 25 No. 4, pp. 869-886.

Austin, J., Stevenson, H. and Wei-Skillern, J. (2006), "Social and commercial entrepreneurship: same, different, or both?", *Entrepreneurship Theory and Practice*, Vol. 30 No. 1.

Bagnoli, L. and Megali, C. (2011), "Measuring performance in social enterprises", *Nonprofit and Voluntary Sector Quarterly*, Vol. 40 No. 1, pp. 149-165, doi: 10.1177/0899764009351111.

Barraket, J. and Yousefpour, N. (2013), "Evaluation and social impact measurement amongst small to medium social enterprises: process, purpose and value", *Australian Journal of Public Administration*, Vol. 72 No. 4, pp. 447-458, doi: 10.1111/1467-8500.12042.

Bosma, N. (2019), "Social enterprises and their ecosystems in Europe. Updated country report: the Netherlands", Commissioned by the European Commission. *Publications Office of the European Union, Luxembourg*.

Bryman, A. (2012), *Social Research Methods*, 4th ed., Oxford University Press Inc, New York, NY.

Campbell, D.A., Lambright, K.T. and Bronstein, L.R. (2012), "In the eyes of the beholders: feedback motivations and practices among nonprofit providers and their funders", *Public Performance and Management Review*, Vol. 36 No. 1, pp. 7-30, doi: 10.2753/PMR1530-9576360101.

Choi, N. and Majumdar, S. (2014), "Social entrepreneurship as an essentially contested concept: opening a new avenue for systematic future research", *Journal of Business Venturing*, Vol. 29 No. 3, pp. 363-376.

Conway, C. (2008), "Business planning training for social enterprise", *Social Enterprise Journal*, Vol. 4 No. 1, pp. 57-73.

Costa, E. and Andreaus, M. (2021), "Social impact and performance measurement systems in an italian social enterprise: a participatory action research project", *Journal of Public Budgeting, Accounting and Financial Management*, Vol. 33 No. 3, pp. 289-313.

Costa, E. and Pesci, C. (2016), "Social impact measurement: why do stakeholders matter?", *Sustainability Accounting, Management and Policy Journal*, Vol. 7 No. 1, pp. 99-124.

Cunningham, I., Baines, D. and Charlesworth, S. (2014), "Government funding, employment conditions, and work organization in non-profit community services: a comparative study", *Public Administration*, Vol. 92 No. 3, pp. 582-598.

Dacin, P.A., Dacin, M.T. and Matear, M. (2010), "Social entrepreneurship: why We don't need a new theory and how We move forward from here", *Academy of Management Perspectives*, Vol. 24 No. 3, pp. 37-57, doi: 10.5465/amp.24.3.37.

Dees, J.G. (2007), "Taking social entrepreneurship seriously", *Society*, Vol. 44 No. 3, pp. 24-31, doi: 10.1007/bf02819936.

Di Domenico, M., Haugh, H. and Tracey, P. (2010), "Social bricolage: theorizing social value creation in social enterprises", *Entrepreneurship Theory and Practice*, Vol. 34 No. 4, pp. 681-703.

Diener, E.D. and Suh, M.E. (1997), "Subjective well-being and age: an international analysis", *Annual Review of Gerontology and Geriatrics*, Vol. 17 No. 1, pp. 304-324.

Doherty, B., Haugh, H. and Lyon, F. (2014), "Social enterprises as hybrid organizations: a review and research agenda", *International Journal of Management Reviews*, Vol. 16 No. 4, pp. 417-436.

Ebrahim, A. (2003), "Accountability in practice: mechanisms for NGOs", *World Development*, Vol. 31 No. 5, pp. 813-829, doi: 10.1016/S0305-750X(03)00014-7.

Ebrahim, A. (2005), "Accountability myopia: losing sight of organizational learning", *Nonprofit and Voluntary Sector Quarterly*, Vol. 34 No. 1, pp. 56-87, doi: 10.1177/0899764004269430.

Ebrahim, A. and Rangan, V.K. (2010), "Putting the brakes on impact: a contingency framework for measuring social performance", *Academy of Management Proceedings*, Vol. 2010 No. 1, pp. 1-6, doi: 10.5465/ambpp.2010.54500944.

Ebrahim, A. and Rangan, V.K. (2014), "What impact? A framework for measuring the scale and scope of social performance", *California Management Review*, Vol. 56 No. 3, pp. 118-141, doi: 10.1525/cmr.2014.56.3.118.

Ebrahim, A., Battilana, J. and Mair, J. (2014), "The governance of social enterprises: mission drift and accountability challenges in hybrid organizations", *Research in Organizational Behavior*, Vol. 34, pp. 81-100, doi: 10.1016/j.riob.2014.09.001.

Eikenberry, A.M. and Kluver, J.D. (2004), "The marketization of the nonprofit sector: civil society at risk?", *Public Administration Review*, Vol. 64 No. 2, pp. 132-140.

Emerson, J. (2003), "The blended value proposition: integrating social and financial returns", *California Management Review*, Vol. 45 No. 4, pp. 35-51.

European Commission (2020), "Social enterprises and their ecosystems in Europe", Comparative synthesis report. Authors: Carlo Borzaga, Giulia Galera, Barbara Franchini, Stefania Chiomento, Rocío Nogales and Chiara Carini, Luxembourg, Publications Office of the European Union, available at: https://europa.eu/!Qq64ny

Fazzi, L. (2012), "Social enterprises, models of governance and the production of welfare services", *Public Management Review*, Vol. 14 No. 3, pp. 359-376.

Gibbon, J. and Affleck, A. (2008), "Social enterprise resisting social accounting: reflecting on lived experiences", *Social Enterprise Journal*, Vol. 4 No. 1, pp. 41-56.

Grieco, C., Michelini, L. and Iasevoli, G. (2015), "Measuring value creation in social enterprises: a cluster analysis of social impact assessment models", *Nonprofit and Voluntary Sector Quarterly*, Vol. 44 No. 6, pp. 1173-1193.

Haski-Leventhal, D. and Mehra, A. (2016), "Impact measurement in social enterprises: Australia and India", *Social Enterprise Journal*, Vol. 12 No. 1, pp. 78-103, doi: 10.1108/SEJ-05-2015-0012.

Hehenberger, L., Mair, J. and Metz, A. (2019), "The assembly of a field ideology: an idea-centric perspective on systemic power in impact investing", *Academy of Management Journal*, Vol. 62 No. 6, pp. 1672-1704, doi: 10.5465/amj.2017.1402.

Heyes, J., Rychly, L., Gavris, M. and Ruiz, M.L.V. (2021), "Introduction to the governance of labour administration", in *The Governance of Labour Administration*, Edward Elgar Publishing, pp. 1-21.

Hogenstijn, M. (2021, September), "Catching up: the development of legal frameworks for social entrepreneurship in The Netherlands", In *The Social and Solidarity Economy: From the Margins to the Mainstream: OECD Global Action 'Promoting Social & Solidarity Ecosystems'*.

Howell, K.E. (2013), *An Introduction to the Philosophy of Methodology*, Sage Publications, London

Keizer, A., Stikkers, A., Heijmans, H., Carsouw, R. and van Aanholt, W. (2016), "Scaling the impact of the social enterprise sector", Mckinsey and Company, available at: www.mckinsey.com/~/media/McKinsey/Industries/Social%20Sector/Our%20Insights/Scaling%20the%20impact%20of%20the%20social%20enterprise%20sector/Scalingthe-impact-of-the-social-enterprise-sector.pdf

Kroeger, A. and Weber, C. (2014), "Developing a conceptual framework for comparing social value creation", *Academy of Management Review*, Vol. 39 No. 4, pp. 513-540.

Lall, S. (2017), "Measuring to improve versus measuring to prove: understanding the adoption of social performance measurement practices in nascent social enterprises", *VOLUNTAS: International Journal of Voluntary and Nonprofit Organizations*, Vol. 28 No. 6, pp. 2633-2657, doi: 10.1007/s11266-017-9898-1.

Lane, M.D. and Casile, M. (2011), "Angels on the head of a pin: the SAC framework for performance measurement in social entrepreneurship ventures", *Social Enterprise Journal*, Vol. 7 No. 3, pp. 238-258.

Liket, K.C. and Maas, K. (2015), "Nonprofit organizational effectiveness: analysis of best practices", *Nonprofit and Voluntary Sector Quarterly*, Vol. 44 No. 2, pp. 268-296.

Lumpkin, G.T., Moss, T.W., Gras, D.M., Kato, S. and Amezcua, A.S. (2011), "Entrepreneurial processes in social contexts: how are they different, if at all?", *Small Business Economics*, Vol. 40 No. 3, pp. 761-783, doi: 10.1007/s11187-011-9399-3.

Mair, J. and Martí, I. (2006), "Social entrepreneurship research: a source of explanation, prediction, and delight", *Journal of World Business*, Vol. 41 No. 1, pp. 36-44.

Manetti, G. (2014), "The role of blended value accounting in the evaluation of socio-economic impact of social enterprises", *VOLUNTAS: International Journal of Voluntary and Nonprofit Organizations*, Vol. 25 No. 2, pp. 443-464, doi: 10.1007/s11266-012-9346-1.

Mason, C. (2012), "Up for grabs: a critical discourse analysis of social entrepreneurship discourse in the United Kingdom", *Social Enterprise Journal*, Vol. 8 No. 2, pp. 123-140.

Miles, M.B. and Huberman, A.M. (1994), *Qualitative Data Analysis: An Expanded Sourcebook*, 2nd ed., Sage Publications, Thousand Oaks, CA.

Millar, R. and Hall, K. (2013), "Social return on investment (SROI) and performance measurement: the opportunities and barriers for social enterprises in health and social care", *Public Management Review*, Vol. 15 No. 6, pp. 923-941.

Mitchell, G.E. (2013), "The construct of organizational effectiveness: perspectives from leaders of international nonprofits in the United States", *Nonprofit and Voluntary Sector Quarterly*, Vol. 42 No. 2, pp. 324-345.

Molecke, G. and Pinkse, J. (2017), "Accountability for social impact: a bricolage perspective on impact measurement in social enterprises", *Journal of Business Venturing*, Vol. 32 No. 5, pp. 550-568, doi: 10.1016/j.jbusvent.2017.05.003.

Nicholls, A. (2009), "We do good things, don't we?':'Blended value accounting' in social entrepreneurship", *Accounting, Organisations and Society*, Vol. 34 Nos 6/7, pp. 755-769, doi: 10.1016/j.aos.2009.04.008.

O'Dwyer, B. (2007), "NGO accountability", in Unerman, J., Bebbington, J. and O'Dwyer, B. (Eds), *Sustainability Accounting and Accountability*, Routledge, London, pp. 285-306.

OECD (2019), "Boosting social entrepreneurship and social enterprise development in The Netherlands", In-depth Policy Review, OECD LEED Working Papers, 2019, OECD Publishing, Paris.

Patetta, V. and Enciso-Santocildes, M. (2024), "SIBs and the implications on the relationship between social enterprises and the public sector: a case study from The Netherlands", *International Journal of Public Sector Management*, Vol. 37 No. 3, pp. 421-437, doi: 10.1108/IJPSM-05-2023-0132.

Paton, R. (2003), *Managing and Measuring Social Enterprises*, Sage, London.

Powell, M., Gillett, A. and Doherty, B. (2019), "Sustainability in social enterprise: hybrid organizing in public services", *Public Management Review*, Vol. 21 No. 2, pp. 159-186.

Rawhouser, H., Cummings, M. and Newbert, S.L. (2019), "Social impact measurement: current approaches and future directions for social entrepreneurship research", *Entrepreneurship Theory and Practice*, Vol. 43 No. 1, pp. 82-115.

Rosenzweig, W. (2004), "Double bottom line project report: assessing social impact in double bottom line ventures", available at: www.riseproject.org/DBL_Methods_Catalog.pdf (accessed 12 November 2013).

Social Enterprise Monitor (2018), "Social enterprise monitor", available at: https://social-enterprise.nl/wp-content/uploads/2024/08/Social_Enterprise_Monitor_2018_final.pdf

Social Enterprise Monitor (2019), "Social enterprise monitor", available at: https://social-enterprise.nl/wp-content/uploads/2024/08/362_Publicatie_SE_monitor2019_web.pdf

Trompert, P. (2020), "Relations between business model archetypes, degrees of hybridity and levels of success: a study on surplus food redistribution initiatives in The Netherlands", (Master's thesis).

van Orden, C. and Hogenstijn, M. (2023), *Impactondernemers en Impactmeting*.

van Rijn, M., Raab, J., Roosma, F. and Achterberg, P. (2024), "To prove and improve: an empirical study on why social entrepreneurs measure their social impact", *Journal of Social Entrepreneurship*, Vol. 15 No. 2, pp. 494-516.

Further reading

Avance, Social Enterprise NL, and Impact Centre Erasmus (2018), "Impact path", Social Enterprise NL, available at: https://impactpad.nl/wpcontent/uploads/Het_Impactpad_EN_2020.pdf

Euclidnetwork (2022), "(dutch) social enterpise monitor 2021-2022", available at: https://knowledgecentre.euclidnetwork.eu/wp-content/uploads/2022/09/se_monitor_nl_2021_2022-updated.pdf

Gustavsson, J., Cederberg, C., Sonesson, U., Van Otterdijk, R. and Meybeck, A. (2011), "Global food losses and food waste".

Menkveld, N. (2019), "Prinsjesdag | zeven miljoen extra tegen voedselverspilling; geen weggegooid geld", available at: https://insights.abnamro.nl/2019/09/headlines-zeven-miljoen-extra-tegen-voedselverspillinggeen-weggegooid-geld/

Ministerie van Landbouw, Natuur en Voedselkwaliteit (2020), "Minder voedselverspilling met de foodybag", available at: www.rijksoverheid.nl/onderwerpen/voeding/nieuws/2020/01/13/mindervoedselverspilling-met-de-foodybag

Price waterhouse and Coopers (PwC) (2018), "Het bouwen van een ecosysteem voor sociaal ondernemerschap: de geleerde lessen uit nederland", available at: www.pwc.nl/nl/actueel-publicaties/assets/pdfs/pwc-bouwen-van-een-ecosysteemvoor-sociaal-ondernemerschap.pdf

Schouten, C. (2019), "Voedselverspilling in nederland, kamerstuk, kamerbrief (kamerbrief over voedselverspilling in nederland)", Rijksoverheid, Den haag.

Secondi, L., Principato, L. and Laureti, T. (2015), "Household food waste behaviour in EU-27 countries: a multilevel analysis", *Food Policy*, Vol. 56, pp. 25-40.

Stuart, T. (2009), *Waste: Uncovering the Global Food Scandal*, WW Norton & Company.

Corresponding author
Seda Muftugil-Yalcin can be contacted at: seda.yalcin@vu.nl