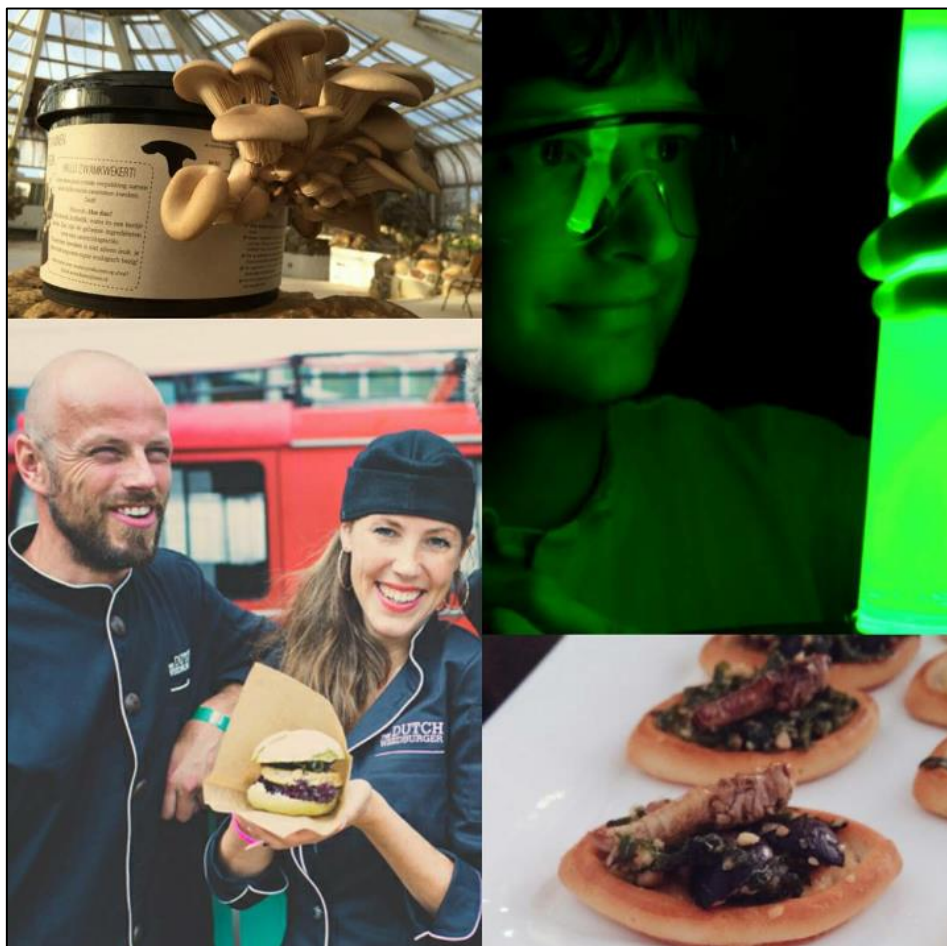


## The characteristics of successful sustainability-driven entrepreneurship in the food industry: a case study approach



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Images on frontpage (clockwise, starting top-left): The Homegrown kit from De Zwammerij, Tim van Koolwijk with his blue green algae, a snack from Bugalicious & Mark Kulsdom and Lisette Kreischer, initiators of the Dutch Weedburger

## **The characteristics of successful sustainability-driven entrepreneurship in the food industry: a case study approach**

### **Bachelor thesis**

Liberal Arts & Sciences  
Track: Duurzaamheid & Ontwikkelingslanden  
Faculty of Geosciences, Utrecht University

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**Abstract**

In this research, the characteristics of successful sustainability-driven enterprises is researched. The research question is: *Which of the factors on the micro level, identified through literature, stimulate the success of sustainability-driven enterprises in the food industry in the Netherlands?* Success is based on the Triple Bottom Line and the factors are grouped into four: entrepreneur characteristics, employee characteristics, business characteristics (or strategy) and external factors. This research indicates that every factor has influence on success, on both environmental, social and prosperity, although business characteristics had significantly more effect on success than entrepreneur characteristics. Both employee characteristics and external factors were in-between the two factors named above.



## Contents

1. Introduction.....	6
1.1 Problem definition.....	7
1.2 Research project.....	8
1.3 Research objective .....	9
1.4 Research question .....	9
1.5 Relevance .....	9
1. Theoretical Framework .....	10
2.1 Conceptual Model .....	13
2. Methodology .....	13
3. Results .....	14
4.1 Measuring success.....	14
4.1.1 Environmental success .....	14
4.1.2 Social success.....	15
4.1.3 Prosperity .....	15
4.2 Findings.....	16
4.2.1 Entrepreneur characteristics .....	16
4.2.2 Employee characteristics.....	17
4.2.3 Business characteristics (or strategy).....	18
4.2.4 External factors.....	19
4. Discussion .....	20
5. Conclusion .....	21
6. Literature .....	23
Appendix A .....	25
Appendix B .....	26
Appendix C.....	27
Appendix D: Interview Tim van Koolwijk – Spireaux, held on 18 -12-2015 .....	29
Appendix E: Interview Patricia Stevens – Bugalicious, held on 23/12/2015.....	30
Appendix F: Interview Natascha Kooiman – Smaackmakers, held on 24–12-2015 .....	31
Appendix G: Interview Harrie de Vries – De Zwammerij, held on 05-01-2016 .....	32
Appendix H: Interview Mark Kulsdom – The Dutch Weedburger, on 08-01-2016 .....	33

## 1. Introduction

Many prominent scholars advocate entrepreneurship as an answer to wide ranging social and environmental problems (Hall et al., 2010; Gibbs, 2009). The importance of entrepreneurship is increasingly emphasized by both popular as well as academic writers. In June 2015, the English newspaper The Guardian put together a panel of experts to discuss how sustainability-driven enterprises can help sustainable development in countries around the world, and create more awareness for sustainable matters in the Western world (Purvis, 2015). Several insights were given during this debate, but the recurring concept was that sustainability-driven entrepreneurs are considered an important element in the search for solutions to pressing problems, environmental as well as social (Purvis, 2015).

In addition to 'traditional' entrepreneurs, whose main purpose was to maximize profits (see Kirzner, 1978, Schlange, 2007 and Parrish, 2010), there is much to be found in the recent literature on new kinds of entrepreneurs that are driven by alternative motives. Such motives may be aimed at creating environmental and/or social value. There is, however, little consensus in the literature about the definitions of these value-driven entrepreneurs. The term 'social entrepreneurship' (e.g. Dees, 2001; Alvord et al., 2004; Sharir & Lerner, 2005; Bloom & Smith, 2010) is often used, but this term concentrates on entrepreneurial action with social intentions, whilst social entrepreneurship tend to forget environmental actions. 'Environmental entrepreneurship' (e.g. Mair & Marti, 2006) or the 'eco-preneur', 'green entrepreneur' and 'environmental entrepreneur' (Beveridge & Guy, 2005), on the other is focusing on environmental action. Others group together both social and environmental oriented entrepreneurs or require an integration of aims and refer to 'responsible entrepreneurship' (e.g. Azmat & Samaratunge, 2009), 'sustainable entrepreneurship' (e.g. Cohen & Winn, 2007; Dean & McMullen, 2007; Schaltegger & Wagner, 2011) or 'sustainability(-driven) entrepreneurship' (e.g. Gibbs, 2009; Schlange, 2007; Parrish, 2010).

Schaltegger & Wagner (2011) combined all definitions found in literature (table 1). Schaltegger & Wagner also proposed the definition of 'institutional entrepreneurs'. This definition is excluded in table 1, because this group is not relevant for this research.

**Table 1** | Characterization of different kinds of sustainability oriented entrepreneurship by Schaltegger & Wagner (2011:2)

	<b>Ecopreneurship</b>	<b>Social entrepreneur</b>	<b>Sustainability-driven entrepreneurship</b>
<b>Core motivation</b>	Contribute to solving environmental problem and create economic value	Contribute to solving societal problem and create value for society	Contribute to solving societal and environmental problems through the realization of a successful business
<b>Main goal</b>	Earn money by solving environmental problems	Achieve societal goal and secure funding to achieve this	Creating sustainable development through entrepreneurial corporate activities
<b>Role of economic goals</b>	Ends	Means	Means and ends
<b>Role of non-market</b>	Environmental issues	Societal goals as ends	Core element of

<b>goals</b>	as integrated core element		integrated end to contribute to sustainable development
<b>Organizational development challenge</b>	From focus on environmental issue to integrating economic issues	From focus on societal issues to integrating economic issues	From small contribution to large contribution to sustainable development

In this research the term *Sustainability-driven Entrepreneurs* (or SdE's) is used to describe the researched entrepreneurs. Sustainability-driven entrepreneurship is here defined as *any entrepreneurial activities of individuals and/or organizations whose core operations are driven by sustainability-related motives, values, and goals that are internal and/or external to the business*. In other words, the core motivation of such SdE's is to contribute to solving societal and environmental problems through the realization of a successful business. The main goal of SdE's is to create sustainable development through entrepreneurial corporate activities.

This research is aimed at different sustainability-driven entrepreneurs in the food industry, for two main reasons. The first reason is because the food industry has a large impact on environmental and social issues. For example, according to a report by the UN Food and Agriculture Organization (Shand, 2007), the diets of today's society and, specifically, the meat in them cause more greenhouse gases, like carbon dioxide (CO<sub>2</sub>), nitrous oxide, methane, and others to spew into the atmosphere than either industry or transportation. The food industry is also notorious for a range of social injustices, such as child labor and slavery. Also, there is much innovation in the food industry and a many sustainability-driven entrepreneurs. In the food industry, SdE's focus on a broad range of environmental and social problems, ranging from promoting vegan food (more environmental focus), focusing on the battle of food waste (environmental) to the inclusion of vulnerable groups and banning out slavery (social). In the Netherlands, we can see this clearly with a few examples of specific SdE's. For example, The Dutch Weedburger (a burger made out of seaweed) aims to popularize the vegan kitchen, because that is – in their own words – 'the key for true change', Bugalicious on the other hand stimulates entomophagy (eating of insects), and FoodSharing is a concept that aims to raise awareness of the issue of food waste.

Bringing the paragraphs above together; the fact that the food industry has a large impact on environmental and social issues together with the fact that there is much innovation (and sustainability-driven entrepreneurs), make it an interesting industry to look at in researching the link between a sustainable way of development and entrepreneurship.

## 1.1 Problem definition

As stated in the introduction, the importance of entrepreneurship is increasingly emphasized (Hall et al., 2010; Gibbs, 2009). A major concern of entrepreneurship in general (so not only sustainability-driven entrepreneurs) is that many start-ups fail within the first year(s). Enterprises with a value-creating aim struggle just as much, or even more during the start-up period (Seelos & Mair, 2005). The majority of research on SdE's has therefore been focusing on the success factors and obstacles for SdE's. As this is a new field of study, most research on this topic has been theoretical. Some case

studies were done on this topic, for example by Rodgers (2010), but there has not been a case study on SdE's in the food industry.

Despite the fact that there is an increasing amount of literature on the success factors and barriers of SdE's, there are still few successful SdE's. Although perceived as very valuable, the phenomenon sustainability-driven entrepreneurship is as of yet little understood and investigated, especially in practice. This research will therefore link the literature to practice and contributes to the debate on sustainability-driven entrepreneurs.

1.2 Research project

While the concept of sustainability-driven entrepreneurship is still a topic of debate, a number of success factors and barriers for (sustainability-driven) entrepreneurship can be found through literature research.

This research builds mainly upon the framework developed by Curtis (2012), Van Dalfsen (2012) and Kors (2012), who researched success factors at three levels of sustainability-driven entrepreneurship in the Western Cape, South-Africa. This framework is displayed in figure 1. Because of the scale of this thesis, research is limited to the *micro level*. In the literature, there is no consensus on how to measure 'sustainability success' and there are also no models available (e.g. Schlange, 2006). As in the framework developed by Curtis (2012), Van Dalfsen (2012) and Kors (2012), success is approached in this research project as *having a positive impact on, or contribution to sustainable development*, which is based on Elkington's (1997) triple bottom line: people (social impact), planet (ecological impact) and prosperity (economic impact). A business is successful when it contributes to these three factors.

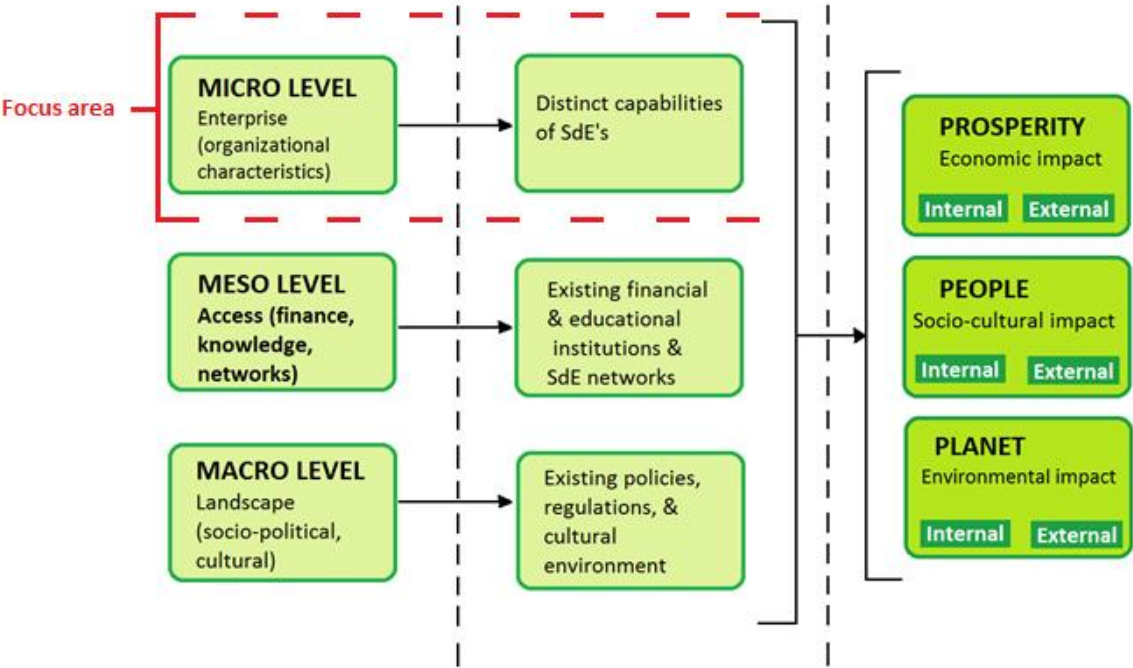


Figure 1 | Overarching research model (Curtis, et al., 2012)

As mentioned above, the main focus of this research is on the success factors on the *micro level*. This is often associated with the entrepreneur as an individual with certain characteristics such as



motivation, personality or talent. However, some authors stress the fact that it is more important to look at the activities that underlie sustainability entrepreneurship (focusing on behavior and processes, rather than individual characteristics) (Mair & Marti, 2006). This can be backed by the fact that SdE's have to meet the same requirements as commercial entrepreneurs for running their business, but because SdE's have more goals set for themselves (environmental and social goals for example), they also face other challenges.

Based on the above, this research will focus on the process-based *organizational characteristics* of sustainability-driven enterprises, more specifically their distinct *capabilities*. As stated in the research by Curtis (2012), Van Dalfsen (2012) and Kors (2012) capabilities is best explained as:

*[Capabilities] refer to an organization's ability to do what they need to in order to reach the intended outcomes, i.e. be successful (Dosi et al., 2000). This is based on the idea that successful SdE's are characterized by a different set of capabilities than commercial enterprises. (Curtis et al., 2012)*

### 1.3 Research objective

This research has two main objectives. The first key objective is to identify what the success factors for SdE's are on the micro level of the framework developed by Curtis (2012), Van Dalfsen (2012) and Kors (2012), according to the literature. The second key objective is to link the literature to the practice, to research whether the success factors (according to the literature) has its shortcomings in the food industry of sustainability-driven enterprises in the Netherlands.

### 1.4 Research question

This research aims to link the literature on success factors for sustainability-driven entrepreneurs on the micro level (distinct characteristics) to practice. This research is aimed at different sustainability entrepreneurs in the food industry in the Netherlands. The research question is therefore:

*Which of the factors on the micro level, identified through literature, stimulate the success of sustainability-driven enterprises in the food industry in the Netherlands?*

This research question is approached through several sub-research questions:

- Which organizational characteristics (or capabilities) are relevant and seen as success factors, according to literature?
- How successful (in terms of the Triple Bottom Line) are the researched (sustainability-driven) enterprises?
- To what extent are various capabilities present amongst the researched (sustainability-driven) enterprises?
- What is the influence of the capabilities on the success of the researched (sustainability-driven) enterprises, according to the initiator of the enterprise?

### 1.5 Relevance

As mentioned in the introduction, the importance of entrepreneurship is increasingly emphasized (Hall et al., 2010; Gibbs, 2009). Although perceived as very valuable, the phenomenon sustainability-

driven entrepreneurship is as of yet little understood and researched (Cassar, 2004). The innovativeness of SdE's is an essential element for the creation of a competitive economy (Moulaert et al., 2013). Particularly social and environmental innovation is emerging as a field of competitive advantage for entrepreneurs, boosting waste reduction, resource efficiency, new markets and knowledge capacity, which can help them build a sustainable and profitable business (Potts, 2010). This research contributes to the discussion about sustainability-driven entrepreneurship.

The societal relevance of this research is that the results are to help existing and aspiring sustainability-driven entrepreneurs in their way to become successful. Several learnings, from literature review as well as practice, will be given, which sustainability-driven entrepreneurs can use to become a healthy, profitable company. This will benefit society as a whole, because the change that sustainability-driven entrepreneurs want to create are profitable for both people and the environment.

## 1. Theoretical Framework

As stated above, success is approached in this research project as *having a positive impact on, or contribution to sustainable development*, which is based on Elkington's (1997) triple bottom line: people (social impact), planet (ecological impact) and prosperity (economic impact). A business is successful when it contributes to these three factors. However, there is no universal standard method for calculating the TBL, although there are some methods to measure TBL. The problem is that those methods are not applicable to the researched entrepreneurs. These were mainly start-ups (the oldest one is established in 2012). The enterprises did not have any sustainability reporting nor performance figures. The researcher based the success of the entrepreneurs on their own goals on the TBL, explained in the first chapter of the results.

A significant amount of literature is written about success factors of entrepreneurs. For example, Ulrich & Smallwood (2004) identified eleven generic capabilities that well-managed entrepreneurs tend to have, like 'talent', 'collaboration' and 'learning capability'. These generic capabilities are included in the research and can be found in table 2. Besides these eleven characteristics that are applicable to every enterprise, the research is based upon the research of Parrish (2010). According to this author, there are capabilities that are specific for SdE's in order to become successful. He calls this need 'perpetual reasoning'. In his words: *'The skillful use of perpetual reasoning, then, is likely one of the key features that distinguishes successful from equally motivated, but ultimately unsuccessful, sustainability entrepreneurs* (Parrish, 2010, p. 511)*'*. He identified five characteristics of perpetual reasoning that are specific for sustainability-driven enterprises. In table 2, the general characteristics for any enterprise (Ulrich & Smallwood, 2004) as well as the specific characteristics for SdE's (Parrish, 2010) are explained<sup>1</sup>.

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<sup>1</sup> More detailed explanations of the SdE characteristics can be found in Appendix A

Table 2 | The success factors for SdE's, according to literature review

Organizational characteristic	Generic / specific for SdE	Explanation
Talent	Generic	Competent and committed employees
Speed	Generic	Capability to recognize opportunities and act quickly to developments, in the market as well as within the business itself
Shared-mind set	Generic	Employees have positive and consistent images of the organization
Accountability	Generic	Employees within the organization are stimulated to work hard and do their best
Collaboration	Generic	The organization as a whole gains efficiencies of operation by external cooperation
Learning	Generic	The capability of the entrepreneur to generate new ideas and generalize these within the organization
Leadership	Generic	The organization has capable leader(s), and everyone within the company knows what the leader should know, be, and do
Customer connectivity	Generic	Employees have meaningful interaction with customers
Strategic unity	Generic	The organization has a strategic point of view, and is good at articulating and sharing this view
Innovation	Generic	The organization is good at doing something new
Efficiency	Generic	The entrepreneur is good at managing costs
Resource perpetuation	specific for SdE	Produce benefit streams by enhancing and maintaining quality of human and natural resources for the longest time possible
Benefit stacking	specific for SdE	Stack as many benefits as possible onto each operational activity
Strategic satisficing	specific for SdE	The entrepreneur strategically identifies satisfactory outcomes of multiple objective
Qualitative management	specific for SdE	Use expected quality of outcomes and processes as decision criteria
Worthy contribution	specific for SdE	Structure benefit streams to privilege worthy recipients by providing opportunities for contributing to the enterprise

These sixteen factors are grouped into four main factors. There were several reason why this was done. First, this was done to better process the collected data. Data on all factors was collected, but with sixteen factors it is hard to distinguish the effect of these factors on the success of a company. When grouped into four main factors, it becomes easier to describe the effect on success. The second reason is because the sixteen factors could all be classified into these four main characteristics. Some could be added into two groups (for example: 'customer connectivity' could have been grouped into both 'employee characteristics' and 'external factors', because it is about

both the behavior of employees and the behavior of customers. And 'strategic satisficing' could have been grouped into both 'entrepreneur characteristics' as 'business characteristics', because it is about the entrepreneurs triple P goals. But the goals are set for the company). However, there was not one factor that stood out and could not be placed in any of these groups. The last reason that these factors were grouped together, is because there now is a clear distinction between the characteristics of the entrepreneur, the characteristics of the employees, the strategy of the company and external factors. These can be seen as the different 'layers' or levels of a company. Together they form the organizational characteristics of the microlevel, as explained in section 1.2.

#### **Entrepreneur characteristics**

- Leadership
- Speed
- Learning
- Efficiency
- Strategic satisficing

#### **Employee characteristics**

- Talent
- Shared-mind set
- Accountability

#### **Business characteristics – Strategy**

- Strategic unity
- Innovation
- Qualitative management
- Benefit stacking
- Resource perpetuation

#### **External factors**

- Collaboration
- Customer connectivity
- Worthy contribution

## 2.1 Conceptual Model

Based on the literature review, the conceptual model from figure 2 is constructed. From the literature review, there were sixteen characteristics that contributed to the success of a sustainability-driven enterprise. As stated above, these were combined into four main characteristics, as one can see on the left. Success (TBL) can be seen on the left side.

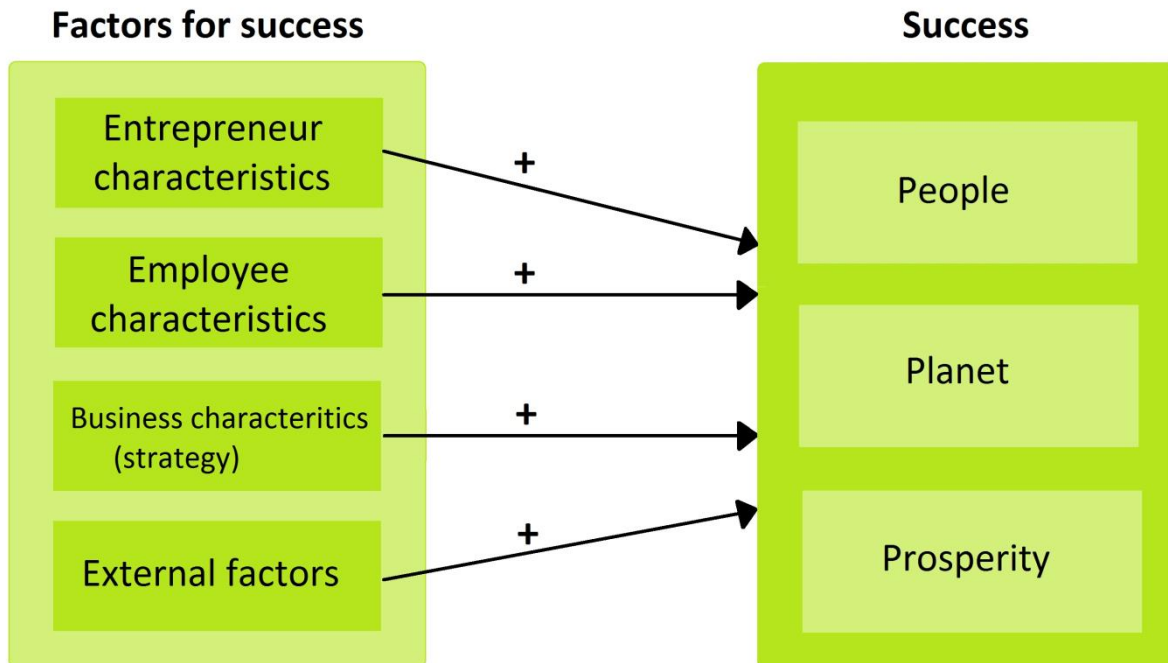


Figure 2: Conceptual model

## 2. Methodology

Information is gathered in several ways. First, the researcher has access to a database from the platform Voor de Wereld van Morgen, which is a business incubator. All the interviewed sustainability-driven entrepreneurs have good contacts with this business incubator. This database gives basic information on all of the enterprises. The sustainability-driven enterprises contacted are<sup>2</sup>:

Table 3 | contacted sustainability-driven enterprises

Enterprise (interviewed entrepreneur)	Theme	Type	Customer base*	Scale
De Zwammerij (Harrie de Vries)	De Zwammerij uses coffee grounds for cultivating oyster mushrooms	For profit	Middle	National
Bugalicious (Patricia Stevens)	Bugalicious promotes entomophagy: the eating of insects	For profit	Middle	International
The Dutch Weedburger	The Dutch Weedburger is a vegan burger, with seaweed as the key	For profit	Large	International

<sup>2</sup> More detailed descriptions can be found in the appendices

(Mark Kulsdom)	flavor maker			
Spireaux (Tim van Koolwijk)	Spireaux produces fresh blue green algae paste that can be used as an ingredient to fortify a wide variety of existing food products	For profit	Middle	International
Smaackmakers (Natascha Kooiman)	Smaackmakers does several things to promote a healthier and more sustainable food system	For profit	Large	National

\*Small = Up to 5000, Middle = 5000 – 25.000, Large > 25.000

Next, a qualitative research method is applied. Qualitative research allows researchers to get at the inner experience of participants. Qualitative research is more fluid, evolving, and dynamic than quantitative research. It also leaves room for new discoveries. The SdE's chosen, are Dutch sustainability-driven entrepreneurs with a business model based on generating revenue through sales to customers. To reduce the scope, only enterprises in the food industry are chosen. All of them are widely considered as sustainability-driven enterprises, because they seek to contribute on solving societal and environmental problems through the realization of a successful business. The intention is to do a comparable qualitative research, so five successful SdE's were contacted. The enterprises vary in scope and scale from local to national and international. Qualitative data from the interviews will be compared with the literature. A score card with the sixteen success factors will be filled in and evaluated to see whether or not the literature of success factors of SdE has its shortcomings.

### 3. Results

#### 4.1 Measuring success

As stated in the theoretical framework, there is no universal standard method for calculating the TBL. The researcher therefore based the success of the entrepreneurs on their own goals on the TBL. Also here, there's still significant variation in how companies interpret and use the resulting data to guide their activities. It's interesting to see what the sustainability-driven entrepreneurs saw as 'success' for their business. As can be seen in the theoretical framework, success is made up of three components: environmental, social and prosperity success.

##### 4.1.1 Environmental success

Several answers were given on this topic. For example, Tim van Koolwijk from Spireaux stated that social issues were his primary concern, and he sees the environmental advantages of his product as an additional advantage. Remarkable, considering the fact that during the cultivation process, large quantities of CO<sub>2</sub> are converted into oxygen. Patricia Stevens from Bugalicious said that her company was successful once the eating of insects was incorporated in the lifestyle in the West in such a way that 'it has a significant positive impact on the reduction of the emission of greenhouse gasses'. In other words: when it replaces conventional meat in such a way that it reduces the emission of greenhouse gasses. She acknowledge that this is hard to measure. Harrie de Vries from De Zwammerij combined profit and environmental success. He stressed that capital is important to grow for a small business. With more financial capital, he can do more to combat environmental issues.

For example, his own company is not yet fully sustainable, he wants that to change. And with more financial capital he can get his product more widespread.

Natascha Kooiman from De Smaackmakers indicated that ‘success’ did not have an end target, it is an ever continuous road with new developments. She indicates that success is for her company, when gamechangers, like multinationals, government agencies and universities make the transition to a fully vegan and sustainable canteen. In this way, the environment will profit the most.

4.1.2 Social success

Several answers were given on this debate. However, it was striking that no subjects like slavery and child labor were mentioned. All of the SdE’s were active in the Netherlands, so slavery and child labor are not matters that the SdE’s dealt with. All of the SdE’s provide good loans for their employees. Lisette Kreischer and Mark Kulsdom, initiators of the Dutch Weedburger, stated that they were paid the same wage as all of their employees and will continue to do so.

Most answers of entrepreneurs, regarding their business as ‘successful’, covered people’s health. For example, as mentioned in the section above, Tim van Koolwijk from Spireaux stated that social issues were his primary concern. He wants to combat malnourishment in the slums of Indonesia. That is, however a long-term project. On the short term, he wants to help vulnerable groups, like elderly and kids whom have difficulties receiving their daily required nutrients. Stevens sees Bugalicious as successful when people gain more consciousness about the food they’re eating. Kooiman stated that here SdE is successful once the world has a fairer food distribution and that fair trade is standard for every product. She stressed that if she ‘can only play the smallest of part that development, I am succeeded’. De Vries works together with a local care farm and the clients of that farm help to cultivate the mushrooms, learning several skills in the process. He plans to do more of this kind of work in the community in the future.

4.1.3 Prosperity

The debate one whether a SdE was successful was less severe on the topic of profit. Every SdE said somewhat the same. The bottom line being: there is no such thing as (sustainability-driven) entrepreneurship without profit. With profit, investments can be made within the company and (in some cases) to the community. With investments, you can improve the product and – more important - improve the positive impact of the product. Several entrepreneurs stressed that ‘making profit’ was one of the hardest things for sustainability-driven entrepreneurs, mainly because sustainability-driven entrepreneurs sell innovative, ‘new’ products (e.g. insects, spirulina or burger made out of seaweed).

Sustainability-driven enterprise	Enterprise is successful when...
Spireaux	<ul style="list-style-type: none"> <li>- Planet</li> <li>- People</li> <li>- Prosperity</li> </ul> <ul style="list-style-type: none"> <li>- Reduces greenhouse gasses</li> <li>- Product combats malnourishment</li> <li>- It makes profit to invest in the quality of</li> </ul>

	the company
Bugalicious	<ul style="list-style-type: none"> <li>- Reduces greenhouse gasses</li> <li>- People gain more consciousness about what they're eating</li> <li>- It makes profit to invest in the quality of the company</li> </ul>
Smaackmakers	<ul style="list-style-type: none"> <li>- When large companies change to a more sustainable canteen and reduce their ecological footprint</li> <li>- Fair trade is standard / world's food distribution is more equal</li> <li>- It makes profit to invest in the quality of the company</li> </ul>
De Zwammerij	<ul style="list-style-type: none"> <li>- Reduces waste</li> <li>- Employ vulnerable groups and supply healthy snacks</li> <li>- It makes profit to invest in the quality of the company</li> </ul>
The Dutch Weedburger	<ul style="list-style-type: none"> <li>- Stimulate vegan food and give a boost to seaweed as a new source of nutrition</li> <li>- Equal wages for everyone in the company (internal) and promote healthy food (external)</li> <li>- It makes profit to invest in the quality of the company</li> </ul>

Table 4 | Measuring success (Triple Bottom Line)

## 4.2 Findings

### 4.2.1 Entrepreneur characteristics

**Leadership** was not considered an important element for success. It was contrariwise. All five entrepreneurs stressed that every employee and stakeholder could participate in the company. Kulsdom said: *“Both Lisette [the other initiator] and I have the final responsibility, but we don’t behave like that in practice. We get the same wage as everyone else in the company and everyone has got a voice. There is no top-down corporate culture.”*

**Speed** was also not considered an important element for success. Kulsdom stated that they take their time to improve their products. *“We work together with several chefs to improve our product, and we are very careful with that. We have a strong base and we need to make sure that every adjustment is a real improvement. That takes time.”* Similar remarks were mentioned by Bugalicious, de Zwammerij and Spireaux. These entrepreneurs said that this slow process had a positive effect on both environmental success (improvements to the product generally have a positive effect on the environment) as on prosperity success (a good product is sold more and that money can be invested in the company).



**Learning** was also not considered an important element for success, mainly because the entrepreneurs are the innovative authorities in their area. Stevens: *"I am – as far as I know – the only company that uses insects as food source. People often come to me to learn things, rather than the other way around."* Comparable answers were given by the other entrepreneurs. Only De Vries stated something else: *"A company in Rotterdam that does the same as ur helped us during the start-up phase. We travelled to Rotterdam several times to see how they work, how they do things, like collecting their coffee grounds and search for a building. We learned a lot from them."*

**Efficiency** was considered an important success factor by all entrepreneur, though most of the entrepreneur indicated it was something that they could improve on. Van Koolwijk: *"Efficiency goes hand in hand with both economic, environmental and social success. We are not yet very good at this, but we are making steps."* Stevens experienced efficiency by means of trial-and-error. *"I had no experience in entrepreneurship when I started, so I wasn't working very efficient. I've learned it through trial-and-error and I can clearly see that it has a positive effect on my enterprise: both economic and environmental."* Kooiman underlined this opinion and also stated that it was something she could improve on.

**Strategic satisficing** assumes sustainability-driven entrepreneurs would 'strategically' aim for a level of satisfaction on different objectives, like social or environmental objectives. Strategic satisficing is considered very important for the success of entrepreneurs. Every entrepreneur had goals besides financial profit. These goals were both environmental as social. For example, van Koolwijk stated that his main goal was to combat malnourishment in the slums of Indonesia. Everything he does now (for example, improve the product, develop and improve his led-based photobioreactors, et cetera) is for its ultimate goal.

Only two out of five factors of entrepreneur characteristics were seen as a major influence on success. The entrepreneurs stated that there was room for improvement with one of those two (efficiency). It turns out that entrepreneur characteristics are not highly important to the success of sustainability-driven enterprises. This can be explained by the fact that most entrepreneurs did not have any experience as an entrepreneur, before starting their company. Thus, they are not yet thoroughly experiences entrepreneurs (with associated characteristics). As Stevens stated: *"I became an entrepreneur through trial-and-error, I am still learning every day."* One characteristic that entrepreneurs do have to possess is strategic satisficing. It is needless to say that most sustainability-driven enterprises possess this quality, because that is one of the reasons they started the company in the first place: they wanted to combat a problem (like malnourishment, climate change, etc.)

#### 4.2.2 Employee characteristics

Ulrich & Smallwood (2004) identified '**talent**' as one of the success factors and described this as 'competent and committed employees'. The interviewed entrepreneurs underlined that competent and committed employees were highly important for the success of the enterprise. Tim van Koolwijk stressed that it is necessary to know 'at least a bit' from everything in your enterprise. For example, before he started Spireaux, van Koolwijk had very little economic knowledge. He noticed that he failed on this matter, so he trained himself. *"I'm still not brilliant at this subject, but at least I know the basics. In this way I knew how to make more profit. The same counts for biological processes: I can achieve more success on the ecological front by having knowledge about it. I long the same from*

my employees.” Self-knowledge is also a key talent that every SdE should have in order to become more successful. Van Koolwijk: *“I know I can’t compete in the market for sport supplements. The companies have more capital, more knowledge, et cetera. That is also a reason why I am focusing on vulnerable groups”*. Organizational talents is a key skill, according to Stevens, especially in the start-up phase.

It was also mentioned that a **shared-mind set** contributes to success. Kulsdom: *“With every seaweed burger, my employees think: wow, I saved a cow! They do not work solely for the money, they work for us because we have a good mission.”* Natascha Kooiman: *“Belief in your product, in your mission, it gives you and your employees the extra energy to become successful.”* A shared-mind set also had effect on **accountability**. Kulsdom, initiator of the Dutch Weedburger: *“Our employees believe in our product. They don’t want to make money; they want the world to change. They love working for us. And I believe that happy employees brings more success, on all fields.”*

All factors of employee characteristics were considered an important factor for success. Talented, committed and hardworking employees are thus important to the success of the company.

#### 4.2.3 Business characteristics (or strategy)

A major success factor is **strategic unity**. The SdE’s interviewed have unique products, but most of all: a very strong philosophy. And that is important, according to Kooiman: *“Everything we do is done with one thought in our mind: how can we have the most impact. We want to change the world for the better, so we want to reach people.”* Tim van Koolwijk stressed out that economic gains are important, but your motives must be of a different nature. *“When I went to Indonesia, I saw that malnourishment was a big problem, especially in the slums. I want to change that with my product. In order to help those people, I have to have economic success in the Netherlands. But my mission is always considered when making decisions concerning my product.”*

**Innovation** is an essential success factor, according to entrepreneurs, even though the products are generally already innovative. Kulsdom: *“we are always improving our product. We invest money in it, because you have a little known product and you want to convince people at their first bite.”* Stevens underlined those words: *“One of the things I am most worried about, is legislation: according to the law I have to freeze-dry my insects and that is not good for the taste. But legislation is going to change next year and when it does I’m going to invest money to improve my products.”*

**Qualitative management** assumes that sustainability-driven entrepreneurs are guided by considerations on quality, rather than quantity, in their decision making and management. This was the case with every SdE interviewed. Van Koolwijk (Spireaux) and Stevens (Bugalicious) did indicate that economic considerations were taken into account. Without profit, there is no company. However, every entrepreneur indicated that ecological and social considerations were taken into account when making a decision. Both Kulsdom (Dutch Weedburger) and de Vries (De Zwammerij) stated that environmental and social considerations were more important than economic. Kulsdom: *“In order to stay true to our beliefs, we always take environmental and social considerations into account. For example: when choosing a new ingredient for our product, we want to know everything about it. Where is it made? How is it made? Are the used methods good for the planet and the*

*people? We take all these questions into account.” De Vries’ message was comparable: “you can grow as a company with financial gains. However, sustainability is and always will be our starting point. We want to make a change. Profit is important, our philosophy is holy. If we don’t stay true to our philosophy, we lose customers.”*

**Resource perpetuation** refers to the assumption that sustainability-driven entrepreneurs would use both human and natural resources in such a way that the quality of their functioning is maintained and enhanced as long as possible. This is different for every SdE. For example, The Dutch Weedburger uses seaweed. Kulsdom indicated that they consult constantly with their farmer in order to enhance the quality. Bugalicious uses insects. According to Stevens, legislation is strict in the Netherlands, with regard to the cultivation of insects. For example, it is not possible to order a container with more than one kilogram of insects. The maximum is 50 grams, which is expensive. But because the rules are so strict and because the eating of insects is still in its infancy, it is not possible to draw on the resources used. Besides this, insects are cold-blooded and when cultivated, a small amount of the energy, food and water is needed in comparison to conventional meat. Both Spireaux as De Zwammerij indicated that the resources used (respectively spirulina and coffee grounds) are over stock and difficult to draw out.

**Benefit stacking** refers to the qualitative manner sustainability-driven entrepreneurs deal with economizing. SdE’s are not only focused on economic gains, but they tend to focus on gaining as many beneficial outcomes for as many different actors. Benefit stacking is considered an important success factor by SdE’s. For example, in order to increase profits, De Zwammerij uses waste as soil (the waste being coffee ground). This has another positive effect. He gets his coffee grounds from the building of DUO, the executive agency of the Rijksoverheid for education. DUO has less waste to take care of and De Zwammerij uses this waste as soil. This is a classic win-win situation and was one of the many examples that the entrepreneurs (all five of them) indicated.

Business characteristics – or strategy – has a huge influence on success. The products, the philosophy and the way the companies work is what sets them apart from common enterprises. These companies promote themselves as truly sustainable, and they have to live up to this promise.

#### 4.2.4 External factors

**Collaboration** was widely considered as one of the most important success factors. Van Koolwijk: *“We started these enterprises with two people. But there were many others that helped us: an investor, the coaches from a start-up competition, the people at Tropicana [building where many entrepreneurs work together] and many more. Without those people, Spireaux wouldn’t have had the flying start it did.”* Kulsdom: *“Collaboration is key. We have good relationships with external parties. Our seaweed farm, festival organizers, our customers, we consider them a huge part of our success. We also work together with chefs that help us improve our product, making it tastier and better for the environment.”* Stevens noticed that she collaborated with external parties when she wanted to outsource capabilities that she had not yet mastered.

Mark Kulsdom pointed out that **customer connectivity** was important for their success, and then mainly for their economic success. *“Especially at festivals, people are interested in our product,*

*because of our name. So we joke around with our customers and that is the moment we have them.”* Stevens pointed out: *“Customers are obviously important, but to be fair... Most of the time they come to me.”* Van Koolwijk: *“I get a lot of calls by people that truly want to try my product. The positive attention my product gets is overwhelming.”* Similar answers were given by other entrepreneurs.

**Worthy contribution** assumes that sustainability-driven entrepreneurs give preference to stakeholders that are recognized as most ‘worthy’. This was the case for the Dutch Weedburger. Kulsdom said: *“it is possible to buy seaweed from England. It’s the same type of seaweed as the one we buy now [from a seaweed farm based in Zeeland], but it is much cheaper. However, it’s better for the environment if we buy seaweed from a local farm, so that’s what we are choosing for. Besides that, we want to give a boost to the local seaweed business.”* However, this was not the case for other SdE’s. Spireaux: *“Well, at this point I am especially interested in people that can bring my enterprise to the next level: people with money.”*

External factors play a part in the success of companies. Collaboration in particular is considered an important factor of success, especially in the start-up phase. Through collaboration, companies can make their first steps and outsource capabilities that they had not yet mastered. Qualitative contact with customers and other stakeholders is also considered to play a part in the success of the enterprises.

#### 4. Discussion

This chapter of this thesis contains a review of the methodology and presents suggestions for future research.

There are two problems regarding the theoretical framework. First, the sixteen factors were grouped into four. As a result, conclusions were highly simplified. Besides that, some factors could have been placed in more than one group. For example, customer connectivity could have been grouped into both ‘employee characteristics’ and ‘external factors’. The conclusions drawn may thus differ from reality. The second problem with the theoretical framework is the Triple Bottom Line. There is no universal standard method for calculating the TBL. Besides this, the three separate accounts of the TBL cannot easily be added up. It is difficult to measure the planet and people accounts in the same terms as prosperity. There are some methods to measure TBL, however. The problem is that those methods are not applicable to the researched entrepreneurs. These were mainly start-ups, the oldest one being established in 2012. The enterprises did not have any sustainability reporting nor performance figures. The researcher based the success of the entrepreneurs on their own goals on the TBL. The researcher considers this as the weakest point of the thesis.

Several problems were encountered when the research was carried out. First, the time period (December – January) was short. Due to the time restriction, only five sustainability-driven entrepreneurs interviewed. This has several implications. First, with five entrepreneurs, it is difficult to adhere conclusions about this subject. Further research is necessary with a larger sample. The second problem is that the entrepreneurs tend to give the socially desirable answers to questions. I experienced the interviews as stories of triumph, although I was also searching for struggles and difficulties. It is therefore possible that this research is too positive about sustainability-driven

entrepreneurs. A final note on the success variables is that some of the items used to measure performance were not applicable to one-man or very small enterprises, such as the items on policies or employees.

What remains are suggestions for future research. To start off with, it might be interesting to further investigate the translation of Parrish's (2010) principles into capabilities. What also could be interesting is to do this research, but in a quantitative manner. Social acceptable answers can be ruled out that way. Then finally, what also might be theoretically and practically interesting is to perform this research in other countries or other industries.

## 5. Conclusion

The objective of this research was to identify key factors in the success of sustainability-driven entrepreneurship in the food industry in the Netherlands. This thesis is focused on factors on the micro level, on organizational characteristics. The research question that this study sought to answer is: *'Which of the through literature identified factors on the micro level stimulate the success of sustainability-driven enterprises in the food industry in the Netherlands?'*

The factors that were identified, were:

- Entrepreneur characteristics
- Employee characteristics
- Business characteristics – Strategy
- External factors

This research indicates that every factor has influence on success, on both environmental, social and prosperity, although business characteristics had significantly more effect on success than entrepreneur characteristics. This is seen in the fact that all of the business characteristics were ranked as major influential on the success of the company, in both environmental, social and prosperity. The products are innovative and sustainable. The companies take environmental and social issues into account and also show this to the outside world. Besides this, the way that companies work is also important for their success. They are careful when making decision and think every and think there decision through. These companies promote themselves as truly sustainable, and they have to live up to this promise.

Entrepreneur characteristics are less important for the success of the company. Especially characteristics like speed and leadership. If any, it was contrariwise. Sustainability-driven enterprises tend to take their time before adjusting something about their product or company. Also, in all of the companies there wasn't a strong leader and a clear hierarchy. It is typical for sustainability-driven enterprises that they tend to have a more grassroots structure in the company, where everyone gets the same wage and have equal rights. The fact that entrepreneur characteristics are not very influential on the success of the enterprise can be explained by the fact that most entrepreneurs did not have any experience as an entrepreneur, before starting their company. Thus, they are not yet thoroughly experiences entrepreneurs (with associated characteristics). As Stevens stated: *"I became an entrepreneur through trial-and-error, I am still learning every day."* One very important factor of entrepreneur characteristic is strategic satisficing, because the entrepreneur do have to set both

prosperity, environmental as social goals and live up to that. However, as stated in the theoretical framework strategic satisficing could have been grouped into both entrepreneur characteristics as business characteristics, because it is about the entrepreneurs Tripe Bottom Line goals. But the goals are set for the company.

Both employee characteristics as external factors contribute to the success of a company. Talented, committed and hardworking employees are important. External factors play a part in the success of companies. Collaboration in particular is considered an important factor of success, especially in the start-up phase. Through collaboration, companies can make their first steps and outsource capabilities that they have not yet mastered. Qualitative contact with customers and other stakeholders is also considered to play a part in the success of the enterprises.

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## Appendix A

### **Explanation of the characteristics, specific for sustainability-driven enterprises**

*Resource perpetuation* refers to the assumption that sustainability-driven entrepreneurs would use both human and natural resources in such a way that the quality of their functioning is maintained and enhanced as long as possible, Traditional entrepreneurs at the other hand, are expected to use their resources to make as much money as possible in a short amount of time.

*Benefit stacking* refers to the qualitative manner sustainability-driven entrepreneurs deal with economizing. SdE's is not only focused on economic gains, but they tend to focus on gaining as many beneficial outcomes for as many different actors.

*Strategic satisficing* assumes that traditional entrepreneurs often set for the maximization of single-objectives (mainly profit maximization). Other objectives are less important. Sustainability-driven entrepreneurs would 'strategically' aim for a level of satisfaction on different, competing objectives, like social or environmental objectives.

*Qualitative management* assumes that sustainability-driven entrepreneurs are guided by considerations on quality, rather than quantity, in their decision making and management.

*Worthy contribution* assumes that sustainability-driven entrepreneurs give preference to stakeholders that are recognized as most 'worthy'. Traditional entrepreneurs are often more interested in stakeholders with the most control. These stakeholders are provided with the most (economic) benefits. In this definition 'worthy' means the contribution of a stakeholder to the needs of the enterprise.

## Appendix B

The SdE's contacted

Enterprise	Theme	Environmental/ Social/Both	Type	Customer base*	Scale
De Zwammerij	Food waste/ vegan	Both	For profit	Middle	National
Bugalicious	Bugs	Environmental	For profit	Middle	International
The Dutch Weedburger	Seaweed/ vegan	Both	For profit	Large	International
Spireaux	Vegan	Both	For profit	Middle	International
Smaackmakers	Vegan	Both	For profit	Large	National

\*Small = Up to 5000, Middle = 5000 – 25.000, Large > 25.000

## Appendix C

### Questionnaire

#### Algemene karakteristieken

1. Wat is de naam van uw bedrijf?
2. Wanneer is uw bedrijf opgericht?
3. Welk specifieke business model gebruikt het bedrijf?
4. Hoeveel entrepreneurs waren betrokken bij het oprichten van uw bedrijf?
5. Wat voor producten of services verkoopt u?
  
6. Hoe draagt het bedrijf bij aan...
  - Een beter milieu (planet)
  - Welzijn van mensen, zowel intern als extern? (people)
  - Welvaart? (prosperity)
  
7. Wanneer ziet u uw bedrijf als succesvol, op de volgende vlakken...
  - Een beter milieu (planet)
  - Welzijn van mensen, zowel intern als extern? (people)
  - Welvaart? (prosperity)

#### Specifieke vragenlijst → Bij elke vraag doorvragen hoe dit doorwerkt op het succes

##### Het bedrijf

8. Wat is de missie van het bedrijf en op welke manieren draagt u dat uit? (strategic unity)
9. Hoe probeert u het beeld van uw bedrijf zo positief mogelijk te maken? (shared-mind set)
10. Is er een hiërarchie in het bedrijf? Zijn de taken van de leidinggevenden duidelijk? (leadership)
11. Hoe probeert u als bedrijf zo efficiënt mogelijk te laten opereren? (efficiency)

##### Werknemers

12. Welke specifieke talenten acht u nodig voor het runnen van een succesvol bedrijf, zowel voor medewerkers als voor uzelf? (talent)
13. Hoe stimuleert u werknemers, zodat ze zich volledig inzetten voor uw bedrijf? (accountability)

##### Innovatie en leren

14. Hoe onderscheidt u zichzelf van andere bedrijven in de voedselindustrie? (innovation)
15. Kunt u voorbeelden noemen van momenten dat u ontwikkelingen op zowel de markt als binnen uw bedrijf identificeert en hier op inspringt? (learning)
16. Gebeurde dat snel, of duurde dat langer dan u wilde? Waar heeft dat mee te maken? (speed)

### Klanten, stakeholders en externe partijen

17. Hoe probeer je het beeld van je bedrijf zo positief mogelijk te maken ten opzichte van de buitenwereld? (shared-mind set)
18. Werk je samen met externe partijen? Zo ja, welke en hoe? (collaboration)
19. Op welke manieren probeert u als bedrijf in contact te komen met klanten? (customer connectivity)

### Duurzaamheid

20. Hoe gebruikt u uw producten op zo'n manier dat de natuur er zo min mogelijk last van ondervindt en uw resources/middelen niet uitput? (resource perpetuation)
21. Maak je winst? Zo ja, hoe? En winst op andere vlakken? (bijvoorbeeld milieutechnisch, sociaal, etc.)? (strategic satisficing)
22. Gaat u altijd uit van winst voor uw bedrijf of denkt u ook aan externe partijen (dat kan de natuur zijn, klanten, etc.)? (benefit stacking)
23. Bij het maken van belangrijke beslissingen wat betreft uw product, welke overwegingen neemt u dan allemaal mee? (Qualitative management)
24. Welke stakeholders zijn het meest belangrijk voor u en waarom? (worthy contribution)

**U kunt 100 punten verdelen over deze 5 velden. In welke velden excelleert het bedrijf?**

De missie van het bedrijf is duidelijk en positief, bovendien zit de structuur in het bedrijf goed en werken we efficiënt.	
Het bedrijf haakt snel in op ontwikkelingen in de markt en is altijd op zoek naar innovatie.	
Werknemers doen hun uiterste best voor het bedrijf, zijn getalenteerd en zijn ook trots op het bedrijf.	
De contacten met klanten, externe partijen en andere stakeholders zijn zeer goed te noemen.	
In het bedrijf wordt niet alleen economische winst in het oog gehouden, maar ook zaken met betrekking tot de natuur, sociale omstandigheden, etc.	

## Appendix D: Interview Tim van Koolwijk – Spireaux, held on 18 -12-2015



Spireaux produces fresh blue green algae paste that can be used as an ingredient to fortify a wide variety of existing food products. According to their website, their spirulina is made up of loads of food fibers, vitamins, minerals and poly unsaturated fatty acids.

The initiator, Tim van Koolwijk, developed novel led-based photobioreactors that are able to produce the fresh spirulina paste in and near urban environments for a fraction of the ecological cost of other protein sources. In fact: during the cultivation process, large quantities of CO<sub>2</sub> are converted into oxygen. In other words: they use cyanobacteria to make both people and the planet healthier.

Tim van Koolwijk started this project mainly because he learned the process during his internship in Jakarta, Indonesia. It rapidly became his hobby, and gained a lot of knowledge on this subject. He then asked a friend of him to join him. They run the company with the two of them, but he also hires trainees and is planning to expand their number of employees. He sees the small amount of employees as a positive point in this stage. 'It doesn't take long to make a decision. It's just the opinion of two people.'

'The current supply chains in the food industry are inefficient. Just look at the chocolate chain, for example. They use a lot of land, water and energy in the production process of a chocolate bar. This isn't the case with my spirulina. I produce it and sell it directly to customers: an ultra-short supply chain. No transport costs, nearly no emission of greenhouse gasses and I use just a very small amount of water and energy. Besides this, it's healthy.' He also stress the fact that he works in Tropicana, an old, abandoned swimming pool, in which now several sustainable initiatives are situated. Van Koolwijk: 'We all help each other. We also apply according to the principles of the circular economy. In practice, this means that I use waste of other companies and vice versa. For example, my convert CO<sub>2</sub> into oxygen, whilst Rotterzwam [the company situated next to Spireaux in Tropicana, comparable to De Zwammerij, WB] does the opposite with their mushrooms.'

As stated above, Tim van Koolwijk learned to cultivate blue green algae during his internship in Indonesia. His main goal is to combat malnourishment in the slums of Jakarta. 'I want to help people. That is my main goal. Matter of fact, my product has many benefits for the environment in comparison to common food, but that is – in my eyes – just a beneficial byproduct!' He also stated that he is far from ready to go back to Jakarta. 'I have to improve my product and invest money in my company. The road just started for me. But I have clear long-term goals, and I won't lose sight of them.' His focus groups in this stage are vulnerable groups in the Netherlands. 'It sounds a bit harsh, but I can make the most money out of vulnerable groups, like elderly and kids whom have difficulties receiving their daily required nutrients. Those people are the ones who need my product the most. I can compete in the market for sport supplements, but then I will be blown away by competitors. Now I can help people, make money and improve my product with this money.'



## Appendix E: Interview Patricia Stevens – Bugalicious, held on 23/12/2015



Bugalicious is a company situated in Groningen that promotes entomophagy: the eating of insects. Initiator Patricia Stevens promoted as a Molecular Biologist and Nutritionist, before she started Bugalicious. Bugalicious came from another company she started: Healthy Food Vision. With this company, she helped people that wanted to eat healthier. She noticed that the eating of insects was something that many

people were interested about and she decided to start Bugalicious. She runs a versatile business. She makes several snacks containing insects. She visits festivals to sell the snacks, gives workshops and lectures, provides catering and sells the Bugalicious nut bars.

According to Stevens, the eating of insects has several advantages, for both people and planet. Insects are healthy for people because of their nutritional value. Insects have also environmental advantages. Insects are also cold-blooded, so they don't need as much food as animals like pigs and cows. Besides this, insects produce less waste. Raising insects requires relatively little water, especially when compared to the production of conventional meat.

Bugalicious is a one-man company, although she works together with several insect breeders. Stevens stated that her profit was not very high, mainly because insects are very expensive. 'The breeders have to meet many requirements, the Dutch law is very strict on this topic. The result is that there are not many breeders and it is very difficult to scale up. This is the reason that insects are very expensive.' She noticed that this is not the case in every country. 'The legislation is less strict in Belgium. Insects are cheaper and the eating of insects is more mainstream there than here.'



She tries to be as sustainable as she can get with Bugalicious. 'I try to sustainable from A to Z. I do not use plastic cutlery, my car is electric, I use ecological detergent, et cetera. But sometimes it's hard, especially in this sector. For example, it is not possible to order a container with more than one kilograms of insects. The maximum is 50 grams, which is expensive. And besides that, I throw away a lot of unnecessary packing.'

The eating of insects is not something that will be mainstream within a few years. Stevens stated: 'It will take at least one generation. That is also one of the reasons I focus on kids. Adults are often too scared to try insects. Or they try just one and that's it. Kids are not at all scared and very inquisitive. If they learn this from a young age, then it will become mainstream.'

## Appendix F: Interview Natascha Kooiman – Smaackmakers, held on 24–12-2015



The Smaackmakers are Natascha Kooiman & Aart Jan van Dijk. They do several things to promote a healthier and more sustainable food system. For example, the Smaackmakers are in an advisory board for the United Nations. Their job is to advise the UN how to achieve the Global Goals on the issue of food. They also give several workshops and they advise companies how to make their canteen sustainable.

Kooiman had started another company before she started Smaackmakers: FoodQuake. This was a platform that collected all sustainability-driven enterprises in the Netherlands. She then felt the urge to do more and started Smaackmakers with a friend. They became a registered company in February 2013. Their business model is bilateral. The first is called Smaackmakers Incorporate and the other is called Smaackmakers Experience. With Incorporate they help large businesses to become more sustainable, mainly within their canteen. With Experience they give workshops, lectures, dinners, etc. The first one is focused on lobbying and trying to make an impact within companies and the second is more focused on private customers and the 'experience' of vegan food.

The employees are carefully screened, because Kooiman only wants people that really care about the cause. She believes that passion and knowledge are two things that makes your entrepreneurship successful. Kooiman stated that here SdE is successful once the world has a fairer food distribution and that fair trade is standard for every product. She stressed that if she 'can only play the smallest of part that development, I am succeeded'.

Decision regarding her company are based on impact, rather than financial gains. Kooiman: 'Everything we do is done with one thought in our mind: how can we have the most impact. We want to change the world for the better, so we want to reach people.' One other way she triest to influence as much people as she can, is by using (social) media. Kooiman: "Communication is key. Especially in the start-up phase. You want attention, or otherwise it's very difficult in the food industry to survive as a company. Besides that, it is a great way to gain a large audience.'



She is actively searching for new customers. She referrers to this as her push strategy. 'I am quite annoying for companies. I always call and say: "have you thought about this? And this?" Also when there is something new, I let my customers know. Well, not all customers, the sustainable business, the frontrunners.'

## Appendix G: Interview Harrie de Vries – De Zwammerij, held on 05-01-2016

In De Zwammerij coffee grounds are used for cultivating oyster mushrooms. These mushrooms are then used to make several snacks. The initiator is Harrie de Vries. De Zwammerij is situated within the ecological care farm De Mikkelfhorst, where clients are playing a mayor part in the process of cultivating oyster mushrooms. With De Zwammerij, waste (coffee grounds) is reduced, a healthy product is made (oyster mushrooms) and clients of De Mikkelfhorst learn a unique skills.

The idea for this company started during Let's Gro, a festival in Groningen with all sorts of sustainability-driven and local initiatives. Harrie de Vries, then CEO of Hoogeland Catering, went to the festival with the idea that he wanted to make healthy snacks to add to the collection of Hoogeland Catering and got in touch with people from RotterZwam, a comparable initiative from Rotterdam that already cultivated oyster mushrooms on coffee grounds. De Vries figured out that could use these mushrooms to make (more or less) healthy snacks in a sustainable way.

Since that day, De Zwammerij works together with RotterZwam in several ways. De Vries: 'They helped us during the start-up phase. We travelled to Rotterdam several times to see how they work, how they do things, like collecting their coffee grounds and searched for a building. We learned a lot from them. And if we ever got questions about something, we contact them. We also sell their mushroom growkit in our shop, by the way. They really dragged us through our start-up phase. They showed us how to do things proper, not only in building up the company, but also how to do things in a sustainable way.'

The coffee grounds are collected from the building where DUO is situated. It is a large building in Groningen that produces enough coffee grounds to keep De Zwammerij running at this moment. De Vries: 'It is one of the largest companies in Groningen and it is easy to collect all your coffee ground from one source. In the future, however, we want to collect our coffee ground from more than one company and also collect it from restaurant and bars. RotterZwam for example already does that.



De Vries has also a social mission. 'I wanted to give something to the community, and a friend of mine works in de Mikkelfhorst, a care farm. The people there learn to cultivate oyster mushrooms and how to make the snacks. I also give workshops there, the people from the farm help me do that, they enjoy it!' There is also another reason that De Vries does this. 'Well, it's beneficial. It's good for De Mikkelfhorst, but also good for the image of my company.'

De Vries has several things he does to get in touch with his customers. 'I love social media. Mather of fact: I don't think a start-up can exist without using social media. It's a great way to build up a community, to get fans. It is also a great way to build good relationships with your fans, by asking them things, start a conversation, show what your plans for the future are, etc.' He says that it has its effect on offline activities. 'What happens online has influence on your success offline. When announcing a workshop, for example. I spread the word online and reach a large audience.'



## Appendix H: Interview Mark Kulsdom – The Dutch Weedburger, on 08-01-2016



The Dutch Weedburger is a vegan burger, with seaweed as the key flavor maker. The patty is made of soy shreds and Royal Kombu, a healthy winter weed, sustainably cultivated in the Dutch region of Zeeland. The bun colors green, due to the chlorella, a microalgae. The Sea Sauce is from organic ingredients and is enriched with Sea Lettuce, a summer weed. The initiators of this project are Lisette Kreischer and Mark Kulsdom.

The idea of the Dutch Weedburger started when senior researcher Willem Brandenburg proclaims seaweed as the protein source of the future. Kulsdom and Kreischer decided to shoot a documentary in New York City on their quest for the most delicious seaweed recipe. The answer: a burger made out of seaweed. As the documentary world premieres at the Washington DC Environmental film festival 2014, the film spins off into an actual seaweed burger and The Dutch Weed Burger was born. An important step in their success was the opening of a seaweedfarm in the National Park Oosterschelde: Zeewaar. ‘This gave seaweed as known source of protein a boost in the Netherlands. It had its spin-off on our company. Besides that: it became easier to get our seaweed. We maintain close contact with them.’ Kulsdom sees collaboration as one of the key factors of their success. ‘We started this company with a simple idea. It is now a profitable company, with more than 3 full-time employees and even more part-time employees. We would have never come to this level without all the people helping us. From the seaweedfarm, to professors that help us improve our product. From the restaurants that sell the Dutch Weedburger, to all the fans.’



Besides the burger (Sold on festivals, in 98 restaurants and 60 Bagel & Beans), the company generates profit out of workshops, lectures, cooking lessons and their documentary. The company always tries to improve their product and the way they work by investing money. ‘In the first year of our existence, making the hamburgers was a handicraft. We still managed to make 3000 a day. But now it is factory-made, we produce 8000 in two hours. That is very efficient. Another improvement that we have done: we now use a binder made out of waste from residual current. This is beneficiary for both the environment as for our own gains.

Kulsdom pointed out that economic gains were not the primary goal of the company. ‘You have to choose carefully when making decisions. For the sake of the company, its image and of course the world. We [founders Kreischer and Kulsdom] were deeply committed to the world from the start. I was an ‘eco-director’ before I started the Dutch Weedburger and Lisette Kreischer was already into vegan food, writing books like Plant Power. We never lost sight of our values, not even now when we are really becoming a business.’ He illustrates this with an example: ‘A couple of months ago we got an offer from a seaweed farm from North-England, maybe even from Scotland. The seaweed was exactly the same as the one from the seaweedfarm in the Netherlands, but much cheaper. We decided to not go through with this, because they couldn’t guarantee us that the activities at that

farm were fully biological or ecological, whatever you want to call it. If they were, I think we still hadn't done it, because of the transport costs (in both economic as ecological way).

Mark Kulsdom states that there is not a clear hierarchy within his company. 'I don't want that. It's part of the success of our company that we do not have one leader.' Kulsdom further explained: 'Both Lisette [the other initiator] and I have final responsibility, but we don't behave like that in practice. We get the same wage as everyone else in the company and everyone has got a voice. There is no top-down corporate culture. Besides that, we [Kulsdom and Kreischer] get the same wage as all of our employees and will continue to do so.'