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Extended Abstract – Working Paper

Truly Sustainable Strategies in the Food Sector

Translating the SDGs into strategic business opportunities in order to define strategies that effectively contribute to sustainable development

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Introduction and Background

Increasing environmental degradation and resource shortage, growing social inequality and poverty as well as an unstable economic situation in many countries are some examples of the global challenges humanity is facing today. The expected population growth of 30% until 2050 will exacerbate the unprecedented situation (UN DESA, 2015). Especially the food sector will be faced with the increasing challenge to feed the growing population well and within the planet's carrying capacity. On the one hand, the increasing population and demographic shift towards a larger middle class will lead to different consumption patterns. Thus, production of calories will need to increase by 70% until 2050[1] (FAO, 2015). This shift on the demand side is identified as one of the two most critical uncertainties influencing future sustainability scenarios in the food sector besides the connectivity of markets[2] (World Economic Forum [WEF], 2017). On the other hand, with current production levels, the food sector already uses almost 40% of landmass and accounts for 70% of freshwater withdrawal. Additionally, the whole industry is responsible for 30% of all greenhouse gases worldwide and by 2050, it is expected to consume 70% of the tolerable greenhouse gas emissions that would be consistent with the goal of limiting global warming to two degrees. (World Resources Institute, 2013) Furthermore, there is a huge inequality and misbalance in the distribution and availability of food: almost 800 million people are suffering from chronic hunger, while 1.9 billion are overweight and more than 600 million obese. The latter refers mainly to developed countries, whereas undernourishment is a challenge of developing societies. (FAO, 2015; WHO, 2015) Thus, the challenge is to increase food production and ensure healthy nutrition for a growing population, while at the same time keep food production within the environmental planetary boundaries. Additionally, governmental regulations, new technologies and growing competition will intensify the challenges in the food sector (Frost & Sullivan, 2015, 2016). To tackle these multiple challenges and to ensure that the core aspirations for the world's food system defined by WEF (2017) are fulfilled, namely 'efficient', 'sustainable', 'inclusive' as well as 'nutritious and healthy', radical changes in human's use of economic, ecologic and social resources are needed. For that, food production and consumption cannot continue in the same way as it is today. Shifting the food and agricultural system towards a sustainable development pathway requires changes in all parts of the value chain - inputs, production, primary and secondary food processing companies, logistics, retailers as well as consumers (AlphaBeta, 2016; TruCost, 2016).

The relevance and importance of the private sector to successfully tackle these sustainability challenges has become integrated into a joint global consensus around the Sustainable Development Goals (SDGs) (United Nations, 2015). Those goals are replacing the Millennium

[1]Especially the consumption of resource-intense food, like meat and dairy, is expected to rise. The increase of 70% is referred to the year 2006, meaning that the available calories in 2006 need to be increased by 70% in order to meet the calories demand in 2050. This difference is often labeled as the 'food gap'. (World Resources Institute, 2016; FAO, 2015)

[2] The connectivity of markets refers to the openness of trade, trust and resilience of commodity markers or the inclusivity of innovation (WEF, 2017).

Development Goals (MDGs) and shape the agenda for sustainable development until 2030. Unlike the MDGs, the SDGs explicitly address the responsibility of business in sustainable development and point to their important role for a successful implementation. In addition, incorporating the SDGs into the strategy of companies creates a wide range of market opportunities for businesses. In the food and agriculture industry reducing food waste in value chain, promoting dietary switch or fostering sustainable agriculture are some examples of big market opportunities (AlphaBeta, 2016). Especially the reduction of food loss and waste can generate immense economic, social and environmental benefits (Champions 12.3, 2017). Overall, addressing the SDGs provides market opportunities for businesses of US$2.3 trillion annually in the food and agriculture system in 2030 (AlphaBeta, 2016). Although national governments, civil society and international policy systems are jointly responsible to contribute to a sustainable future, „it would be hard to drive such [a sustainable] development without business being on board" (von Angerer et al., 2016, p.4). Companies play a key role in promoting changes towards sustainability and the Post-2015 declaration "call upon all businesses to apply their creativity and innovation to solving sustainable development challenges" (United Nations, 2015, p.29). In fact, in the food and agriculture system, business can support the achievement of one quarter of the 169 SDG targets (AlphaBeta, 2016). Hence, the relevance and importance of business for achieving sustainable development is tremendous in the food sector.

More and more companies realize the potential to create value by incorporating sustainability into business strategies and increasingly engage in sustainability practices. Studies show that 93% of the Fortune 250 companies are publishing a sustainability report (KPMG International, 2015). Furthermore, an increasing number of CEOs rank sustainability among the top five corporate goals (BSR & GlobeScan, 2016). Additionally, companies will be increasingly asked to show their contributions to the SDGs. This increases the need to use the SDGs for strategy development (Corporate Citizenship, 2015). Further, more and more customers value sustainable products or services and expect businesses to act in an environmentally and socially responsible manner. A study shows that 90% of citizens believe that the private sector is important to reach the SDGs and 78% prefer goods and services of companies that had signed up to the SDGs (PwC, 2015). Additionally, more than half of global respondents are even willing to pay a premium for sustainable products (Nielsen, 2015). Besides increased attention of sustainability from customer's side, references to corporate sustainability and sustainability strategies have increased exponentially in academia in the past years (Montiel & Delgado-Ceballos, 2014). Thus, the engagement, attention and popularity of sustainability on a business level highly increased both in practice and science.

However, despite the increasing popularity of sustainability activities on the business level, sustainability activities of companies do not show in an improvement of the planet's state. In contrast, the social, ecological and economic challenges get more and more severe and companies fail to use their potential and to contribute significantly to sustainable development. This discrepancy between micro-level improvements and macro-level deterioration results in a

phenomenon which is described as a *big disconnect* between business activities and the global state of the planet (Dyllick & Muff, 2016; Whiteman et al., 2013).

This limited effectiveness and impact of business activities is the starting point for this research. The aim is to reduce the disconnect between business actions and societal impacts by defining 'truly' sustainable strategies that enable companies to effectively contribute to sustainability challenges in the food sector and thereby fostering an inclusive value creation by business.

Theoretical Approaches and Literature Analysis

Current sustainability management approaches fail to support business "in identifying and attaining goals that contribute significantly to sustainable development" (Baumgartner & Rauter, 2017). Despite the movements towards "making sustainability sustainable" (Montabon et al., 2016) and the claim to dramatically change value creation towards an integrated and balanced approach (Shevchenko et al., 2016), sustainability strategies are still mainly addressed from the perspective of *how can business become less unsustainable and benefit from incorporating sustainability issues into their strategies* rather than *how can business strategies contribute to sustainable development*. This predominant inside-out perspective leads to an overemphasis on the business and the economic domain and results in an asymmetric value creation in which the needs of the wider society and the planet are neglected.

Research and practice identify several causes for the missing contribution of businesses to sustainable development and propose different approaches to align the societal level with the business level in order to enable a balanced value creation as well as to increase the effectiveness of business strategies. Shortly introducing and analyzing these streams helps to identify the research gap and define the theoretical background of this dissertation.

According to the concept of 'True Business Sustainability' or 'Business Sustainability 3.0' by Dyllick and Muff (2016), truly sustainable companies reflect on the question how they can create significant positive impact and translate sustainability challenges into business opportunities. As a key characteristic and prerequisite the authors define the fundamental shift from an inside-out perspective to an outside-in approach. This means that a company does not focus on the business itself, but "starts out by reviewing pressing sustainability challenges that society faces, and then engages in developing new strategies and business models that overcome these" (Dyllick & Muff, 2016, p.166). Thus, the company moves away from merely reducing the negative impacts but searches for ways to create positive environmental and societal values. Hence, in order to link the business and societal level and to reduce the stated discrepancy, there is a need to change the business perspective from inside-out to outside-in, so that strategic business goals are set based on societal needs and the sustainability challenges are taken as a starting point to develop new strategies to address them (Dyllick & Muff, 2016; GRI et al., 2015).

Researchers in the field of strategic sustainability management argue that the reason for the limited impact and effectiveness of sustainability management approaches is the lack of strategic orientation of sustainability practices and the incompatibility between strategy contents and societal needs (Baumgartner & Rauter, 2017; Baumgartner & Korhonen, 2010). Engert et al. (2016) conclude that further research should focus on developing concrete practical guidance for companies how strategic integration of sustainability issues can be increased. Therefore, there is the need to improve the strategic relevance and integration of sustainability management so that both, businesses and sustainable development, will benefit.

In addition to this tension between business and society, companies are confronted with intertemporal tensions between short term and long term inherent in sustainability topics. Slawinski and Bansal (2015) conclude that the reason for the misalignment between business and society is the separation between short-term business goals and long-term societal goals. In reality, these two levels are interrelated and companies need to juxtapose the intertemporal tensions in order to align business goals and societal needs in the long run. This contribution is embedded in a broad discussion about how business should deal with trade-offs, tensions and conflicts involved in sustainability activities. Several streams of organizational research propose coping strategies for the intertemporal tensions, such as paradox strategies or temporal ambidexterity. While the latter treats conflicts as an 'either/or' choice, the paradox lens takes a 'both/and' approach and investigates how organizations can attain multiple competing or divergent demands simultaneously (Gibson & Birkinshaw, 2004; Smith & Lewis, 2011). Such a paradoxical thinking can be an effective and beneficial way to deal with tensions inherent in sustainability issues (Hahn et al., 2014). Yet, there is the need for "a better understanding of managerial responses to various sustainability challenges" (Hahn et al., 2015, p.311) and additionally, "there is a lack of empirical studies examining *how* firms effectively integrate the dimensions of sustainability without focusing on win-win [or] trade-offs" (Van der Byl & Slawinski, 2015, p.70). Therefore, researchers point to the importance of ambidexterity and paradox approaches to effectively deal with the complex tensions inherent in sustainability topics. By doing so, the misalignment between the business and societal level can be reduced.

Another reason for the limited impact of business activities on societal challenges is identified in the underlying perspective of sustainability approaches. Researchers criticize current forms of sustainability engagement, which are often based on a limiting business case thinking and a focus on win-win situations (Agarwal et al., 2017). This leads to self-serving sustainability activities so that companies fail to meaningfully contribute to some of society's most pressing sustainability challenges. Even in more recently developed approaches like shared value creation (Porter & Kramer, 2011), sustainability issues are ultimately dominated by generating economic value and trade-offs are addressed by prioritizing financial profits over sustainability outcomes (Crane et al., 2014; Hahn et al., 2010). The dominance of the economic domain shows also in the high number of studies on the relationship between financial profitability and sustainability (Eccles et al., 2014; Orlitzky et al., 2003; Bonini & Görner, 2011). Researchers conclude that academics and practitioners still predominantly focus on the financial outcomes

of sustainability activities rather than on the impacts on society (Banerjee, 2011; Margolis & Walsh, 2003). Thus, there is the need to enable balanced value creation and to overcome sustainability approaches that prioritize economic success over sustainability outcomes.

More recently, a normative discussion about the desirable outcomes from businesses to support sustainable development is raised (Schaefer et al., 2015; Upward & Jones, 2016). This discussion is of high interest with regard to the missing contribution of businesses to sustainable development as it reflects on the aspirational, ideal purpose of business and the value contributions a business can or should deliver to society. The concepts of a "good company" (Handy, 2002), "successful sustainable businesses" (Schaltegger & Burritt, 2005) as well as "sustainability-as-flourishing" (Ehrenfeld, 2008) go beyond surviving and sustaining. They try to define what outcomes businesses should aim at so that "humans and other life will flourish on Earth forever" (Ehrenfeld, 2008, p.8). These concepts are based on the understanding that business is a significant part of society and embedded in a larger system. In line with the previously presented ideas, Schaefer et al. (2015) identify the prevailing focus on financial success as a fundamental limitation to reach this ideal state. Further, they point to the importance of knowledge about how to deal with trade-offs and contradictions inherent in achieving the desired outcomes. In general, questioning common definitions of business success and (re-)defining its meaning, is of high relevance in this research because it can be seen as the starting point for truly sustainable strategies which are a conceptual model for achieving desired and normatively defined outcomes.

Besides these theoretical suggestions for further research to increase effectiveness of business strategies, a cause for the missing contributions is also identified on a more practical level with regard to the complexity of the concept of sustainable development itself. Sustainable development does not offer clear guidelines which strategies need to be implemented (Baumgartner & Rauter, 2017) and the concept has become highly complex so that it difficult to use it as guiding principles (Holden et al., 2014). Also the SDGs are criticized by researchers for being too vague, meaningless and often not quantified (Linnerud & Holden, 2016; Stokstad, 2015; Holden et al., 2016). Others even criticize the limited perspective of the SDGs, which rather aims at reducing the bad than at increasing the good. Accordingly, the concept ignores important aspects, like the fact that economic growth is not necessarily linked to a reduction of poverty. They claim for an approach that goes beyond reducing negative impacts and overcoming the dominant economic paradigm. (Holden et al., 2016; Hickel, 2015) Additionally, due to the interconnectedness and interrelations between the SDGs (Nilsson et al., 2016), it is difficult for companies to deal with this complexity and find goals, which fit their competencies and at the same time effectively address a specific sustainability challenge. Although governmental institutions, NGOs and different actors in the private sector developed several principles to support businesses in supporting to the SDGs (e.g. Corporate Citizenship, 2015; GRI et al., 2015; UN Global Compact; KPMG, 2015), just a few companies have identified the appropriate tools they need to take action (PwC, 2015). A study shows that 90% of executives perceive sustainability strategies as essential to remain competitive, however,

only 60% of the companies have developed a sustainability strategy (Kiron et al., 2017). Hence, comprehensive approaches and clear guidelines how the private sector can address the complex SDGs and shift away from reducing negative impacts towards increasing positive contributions are still missing.

To sum up, due to the high complexity of sustainable development as well as the weaknesses and interconnectedness of the SDGs, there is a need for concrete guidance and a robust framework that could help business to effectively contribute to tackling sustainability challenges. In order to support companies to navigate in this direction, business activities need to be directly linked to global sustainability challenges. For that, a shift away from 'reducing the bad' towards an outside-in perspective and a stronger integration of sustainability issues into business strategy is inevitable. Applying paradoxical thinking for finding ways to effectively deal with trade-offs and overcoming the sustainability approaches which prioritizes financial profits over sustainability outcomes are also important aspects in order to enhance a balanced value creation and specify a strategic approach for 'true' business sustainability.

Research Questions and Process

Based on this analysis, the aim of this research project is to connect and align the societal level with the business level in order to unlock the potential of business to contribute to a sustainable development. The translation of the SDGs into strategic business opportunities operationalizes and specifies an outside-in perspective and provides on a practical level a starting point for strategy formulation that effectively contributes to sustainability challenges. This enables businesses to address the SDGs more effectively and to integrate them into strategic management. This dissertation is aiming to develop a strategic roadmap which guides companies towards true business sustainability and significant contributions to sustainable development. This helps to bridge the gap between the business action and societal impacts and develops and allows an inclusive and balanced value creation.

On a theoretical level, the purpose of this dissertation is to develop a theoretical understanding of truly sustainable strategies and focus on the implications of an outside-in approach for strategy development, formulation and configuration. Also, the dissertation should contribute to the discussion about the creation of 'real' win-win solutions and deepen the understanding of trade-offs inherent in sustainability issues. Finally, this research project seeks to clarify the meaning of balanced value creation of businesses and to contribute to a re-definition of business success.

The overarching research question (RQ) can be defined as follows: *What does a strategic approach look like that enables companies to make significant contributions to sustainable development?*

In order to answer this research question, the research process is organized into two research steps, which include several more specific questions.

1st research step: Translating the SDGs into societal value contributions (SVCs)

RQ 1.1: What are the societal value contributions a company should aim at in order to contribute effectively to sustainable development?

RQ 1.2: What are current and relevant societal value contributions in the food sector?

RQ 1.3: How do current societal value contributions differ from the ideal state?

2nd research step: Translating the SVCs into strategic goals and defining a strategic approach

RQ 2.1: How can these societal value contributions be translated into strategic goals? What strategic opportunities or topics emerge by adopting an outside-in approach to deliver the identified value contributions?

RQ 2.2: What characterizes sustainability strategies in the food sector and what does internal strategy configuration and formulation look like?

RQ 2.3: How do strategic opportunities differ from inside-out approaches? How do characteristics of true business sustainability strategies differ?

RQ 2.4: What practical implications emerge from the juxtaposition of the ideal and real state of companies?

RQ 2.5: How can strategies be transformed into sustainable once?

Following figure illustrates the research questions and process:

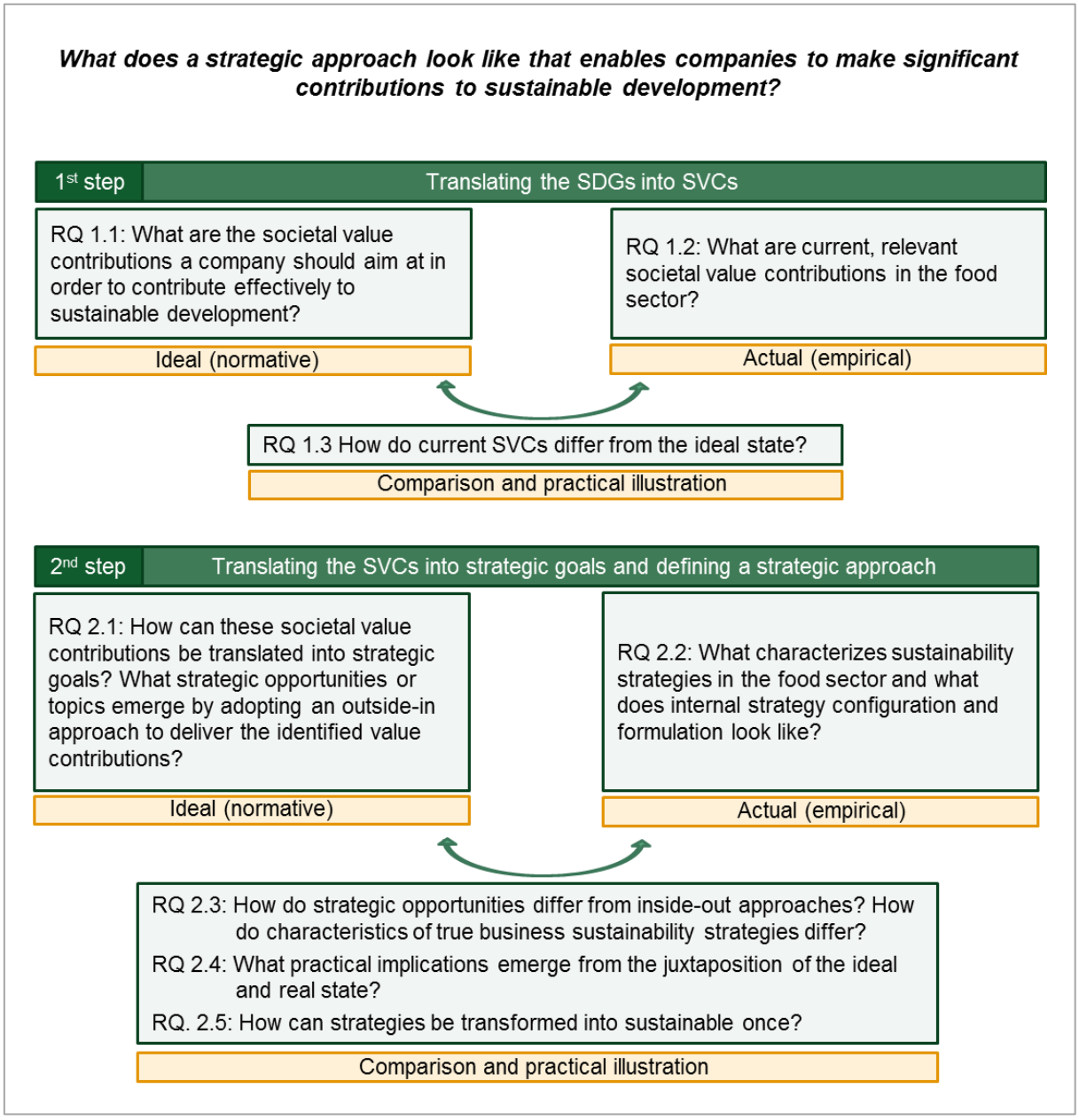


Figure 1: Research Questions and Process (own illustration)

The first research step aims to translate the global, societal goals to the company level. In order to enable business to increase their positive contribute to sustainable development and to improve the strategic relevance of SDGs, they have to be specified for the company level. To do so, it is necessary to find a mechanism which translates the SDGs into concrete sustainability topics on a business level. We call this intermediate term 'societal value contributions' (SVCs). The SVC concept serves as a transmission mechanism to bridge the societal and the business level and to formulate sustainability topics which can be addressed effectively.[3] (RQ 1.1)

[3] This part of the research is jointly conducted with Fiona Stappmanns.

In a next step, this ideal state of societal value contributions will be specified and applied to the food sector. A more focused view on one specific industry makes sense, as the sustainability challenges are very complex and highly differ among industries. As stated in the introduction, the food sector has huge environmental, social as well as economic impacts. The provision of healthy food for an increasing population within the planetary limits is getting increasingly challenging and is calling for radical innovations in the private sector. Hence, RQ 1.2 aims to take a closer look at the challenges in the food sector and how they are addressed by companies today. The identified industry-specific SVCs will be compared and juxtaposed with the results of the first research question in order to identify new avenues for business actions and to derive practical implications. (RQ 1.3)

Taking SVCs as a starting point for iterative strategy development and incorporating them into strategy content supports both, the operationalization of an outside-in approach and the strategic integration of sustainability management. This process helps companies to identify strategic opportunities and goals that align their strategic orientation and strategy contents with societal needs. (RQ 2.1)

This will form the basis to define and analyze characteristics of strategies that effectively contribute to sustainable development. Practical examples will help to further refine the characteristics as well as internal strategy configuration and formulation (RQ 2.2). By juxta-positioning the normative and empirical perspective as well as practically illustrating the findings, the strategic approach will be specified and practical implication will be derived (RQ 2.3, 2.4, 2.5).

Research Approach and Methodology

This dissertation is based on a conceptual research approach, whereby existing concepts are enhanced, criticized or refined. New empirical insights do not have a causative role but serve as clarification and illustration (Dyllick, 2015, p.43). This approach seems feasible for the research project because in business sustainability practices there is a high gap between the normative perspective (the ideal state) and the empirical perspective (facts that can be empirically observed in the real world). Therefore, the comparison and reciprocity between the two perspectives play an important role and are conducted throughout the research process to identify possibilities to bridge the gap and guide companies towards truly sustainable strategies. It helps to bridge the gap between the two states. Exploring the gap between the empirical state and the normative state of business sustainability activities supports the identification of new avenues for truly sustainable strategies as well as the applicability and relevance of the developed framework in practice. Following figure illustrates this dialectic in the research approach:



Figure 2: Research approach – Dialectic between normative and empirical perspective (own illustration)

A normative perspective in research related to sustainability is suitable and presumed due to the normative characteristics of the concept of sustainability itself (Dubielzig & Schaltegger, 2004). In general, as a result of the high complexity of the sustainability phenomenon, research in this field is regarded as inter- and transdisciplinary science, which operates within tensions of social and natural science and needs to integrate knowledge from multiple disciplines (Schaltegger et al., 2013).

Due to the fact that the problem of the dissertation is a comparably unexplored topic, a conceptual and qualitative research approach seems suitable. In order to ensure high quality of the research, the conceptual model should be built on consolidated knowledge and it should allow a broad potential for application. Besides, conceptual research should aspire a high degree of innovation and originality as well as a profound level of differentiation and justification (Dyllick, 2015).

In order to make sure that these quality requirements are met, the conceptual work will be based on a systematic literature review. Contribution from the field of sustainability strategies, strategic sustainability management, normative concepts of business sustainability and strategic approaches as well as sustainability challenges in the food sector will be analyzed in order to define an ideal state and define possible courses of actions for business strategies to significantly contribute to sustainable development. To guarantee a high degree of innovation and originality, established as well as progressive concepts will be considered and contemporary ‘grey literature’ will be included. In order to ensure applicability of the developed conceptual framework, case studies and expert interviews will be conducted to refine and practically illustrate the results. Case studies allow for applied practical insights and are suitable to answer ‘how’ and ‘why’ questions (Yin, 2003).

First Results

In order to answer the first research question, a conceptual framework has been developed to operationalize business contributions to the SDGs[4]. By a qualitative conceptual analysis of existing concepts[5], similarities were identified as well as aggregated and clustered. By logically deducting and identifying suggestions for value creation as well as by conducting feedback loops with sustainability experts, they have been combined to overarching patterns, which were defined as Societal Value Contributions (SVCs). Following figure illustrates the developed conceptual framework and the relationships between the different levels.

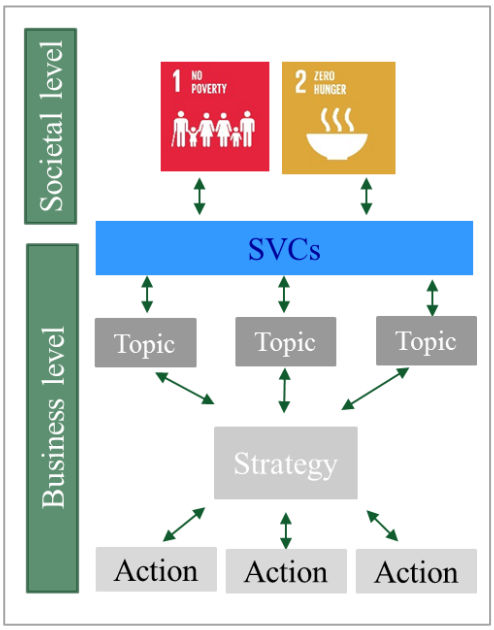


Figure 3: Connecting SDGs to the business level (own illustration)

At this state of the research, 11 SVCs in four categories have been identified. Following table summarizes the results:

Dimension	Societal Value Contribution
Environment	Efficiency
	Sustainable sourcing
	Biodiversity, environmental protection and animal welfare
Economy	Economic inclusion and participation
Society	Reliable and affordable (basic) services
	Training, education and competences
	Labor conditions
	Non-discrimination, equal opportunities and inclusion
Governance	Transparency

[4] This research step is jointly conducted with Fiona Stappmanns.
[5] The contributions were: SDG Compass (GRI et al., 2015), Valuing the SDGs prize (AlphaBeta, 2016) and SDGs mean business (Ugarte et al., 2017).

	Accountability and compliance
	Partnerships and cooperation

Figure 4: First results - 11 SVCs

Each of the SVC covers several topics from which in turn the specific sub-topics for businesses can be deducted. For example the environmental SVC "Efficiency" comprises topics such as resource and energy efficiency and concepts like the circular economy, optimized packaging and modular design, across products and services, as well as processes. The SVCs and related topics can guide strategic goal setting and strategy development in a next step.

Furthermore, different ways to address and deliver the SVCs have been identified during the analysis. Following table summarizes the transmission paths in four different dimensions:

	Direct	Indirect
Together	• Knowledge sharing and technology transfer (open innovation, open source knowledge platforms), capacity building • Establishing long-term business relationships • Set Industry Standards	• Collaboration and partnerships with other stakeholders, academics, governments, civil society and international organizations or NGOs
Alone	• Investment and innovation (including technological, environmental investments and investment in infrastructure and R&D)	• Awareness and education (e.g. customer education, awareness rising)

Figure 5: Transmission paths to deliver the SVCs

The developed list of SVCs build a solid basis for further specification and deduction of concrete business topics as well as actions in the food sector. The presented list of SVCs does not aim at establishing a universal truth and general approach towards sustainable development for businesses because the challenges and actions to address these challenges highly depend on the industry and context of the company. Instead, it has the goal to support companies in their efforts to contribute towards generating societal value in a very specific, case dependent manner for a single firm or an industry at most. Thus, the extensive list of SVCs does not mean that a company has to address all of them. In the contrary, also in the context of SDGs, business should not aim to address all of them but prioritize goals and focus on those areas where the greatest impact is possible (Agarwal et al., 2017). Prioritizing makes sense as companies have limited resources and different capabilities for problem solving. Hence, prioritizing is necessary in order to address global sustainability challenges most efficiently. Besides, focusing on material issues increases business profits from sustainability (Kiron et al., 2017). Consequently, a so called 'pragmatic approach' is needed, which breaks down the list of SVCs to the specific business and industry context. The 'Gap Frame' by Muff et al. (2017) defines priorities of SDGs on a national level and supports the identification of most pressing sustainability challenges of

a country. Combining these national priorities with the core competencies of a business helps to develop effective sustainability strategies. Therefore, the core competencies of a company will play an important role in defining company specific SVCs and strategies to address them. By aligning the core competencies with relevant SVCs, effective business strategies can be developed.

Additionally, the SVCs provide not only orientation but also purpose for the business. The purpose of a company is defined "as a concrete goal or objective for the firm that reaches beyond profit maximization" (Henderson & Steen, 2015, p.327). In research and practice, purpose-driven businesses are an increasing phenomenon with promising impacts regarding value creation for both, business and society (Henderson & Steen, 2015; Zedlmayer, 2015). Thus, the duality between core competencies and purpose is expected to be highly important in defining a strategic approach, which overcomes the limited effectiveness and impact of business activities on societal level.

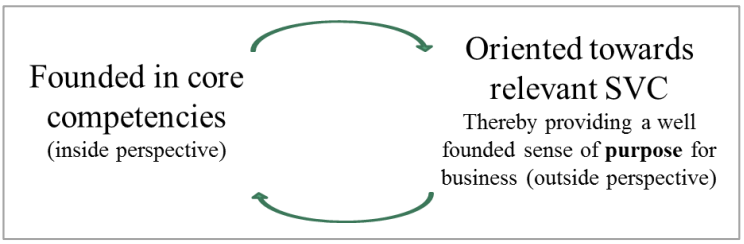


Figure 6: SVCs and strategy - Duality of core competencies and purpose (own illustration)

Although these findings just indicate first results of this research project, they show possibilities how business activities can be linked to societal impact in order to operationalize business contribution to sustainable development.

References

Agarwal, N., Gneiting, U. & Mhlanga, R. (2017). *Raising the bar: Rethinking the role of business in the Sustainable Development Goals*. [Online]. Available from: https://www.oxfam.org/sites/www.oxfam.org/files/dp-raising-the-bar-business-sdgs-130217-en_0.pdf.

AlphaBeta (2016). *Valuing th SDG prize in food and agriculture: Unlocking business opportunities to accelerate sustainable and inclusive groowth*.

von Angerer, A., Boulanger, C., Breitenbruch, L.K., Greye, K., Jolowicz, S., Kolb, M., Knodt, D., Marttila, S., Niewierra, D. & Schwind-Elser, S. (2016). *oekom Corporate Responsibility Review 2016*. Munich.

Banerjee, S.B. (2011). Embedding sustainability across the organization: A critical perspective. *Academy of Management Learning and Education*. 10 (4). p.pp. 719–731.

Baumgartner, R.J. & Korhonen, J. (2010). Strategic thinking for sustainable development. *Sustainable Development*. 18 (2). p.pp. 71–75.

Baumgartner, R.J. & Rauter, R. (2017). Strategic perspectives of corporate sustainability management to develop a sustainable organization. *Journal of Cleaner Production*. 140. p.pp. 81–92.

Bonini, S. & Görner, S. (2011). *McKinsey Global Survey Results. The Business of Sustainability*.

BSR; GlobeScan (2016). *The State of Sustainable Business 2016*. [Online]. Available from: https://www.bsr.org/reports/BSR_GlobeScan_State_of_Sustainable_Business_Survey_2016.pdf.

Van der Byl, C.A. & Slawinski, N. (2015). Embracing Tensions in Corporate Sustainability: A Review of Research From Win-Wins and Trade-Offs to Paradoxes and Beyond. *Organization & Environment*. 28 (1). p.pp. 54–79.

Champions 12.3 (2017). *The business case for reducing food loss and waste*.

Corporate Citizenship (2015). *From My World to Our World*. [Online]. Available from: http://corporate-citizenship.com/our-insights/from-my-world-to-our-world-what-the-sdgs-mean-for-business/.

Crane, A., Pallazo, G., Spence, L. & Matten, D. (2014). Contesting the value of 'Creating Shared Value'. *California Management Review*. 56 (February). p.pp. 130–153.

Dubielzig, F. & Schaltegger, S. (2004). *Methoden transdisziplinärer Forschung und Lehre. Ein zusammenfassender Überblick.* [Online]. Available from: http://www2.leuphana.de/umanagement/csm/content/nama/downloads/download_publikationen/49-8downloadversion.pdf.

Dyllick, T. (2015). *Einführung in die Wissenschaftstheorie und –methodik: Forschungskonzeption*. St. Gallen.

Dyllick, T. & Muff, K. (2016). Clarifying the Meaning of Sustainable Business: Introducing a Typology From Business-as-Usual to True Business Sustainability. *Organization & Environment*. 29 (2). p.pp. 156– 174.

Eccles, R.G., Ioannou, I. & Serafeim, G. (2014). The Impact of Corporate Sustainability on Organizational Processes and Performance. *Management Science*. 60 (11). p.pp. 2835–2857.

Ehrenfeld, J. (2008). *Sustainability by design: a subversive strategy for transforming our*

consumer culture. New Haven, CT: Yale University Press.

Engert, S., Rauter, R. & Baumgartner, R.J. (2016). Exploring the integration of corporate sustainability into strategic management: A literature review. *Journal of Cleaner Production*. 112 p.pp. 2833–2850.

FAO (2015). *The State of Food Insecurity in the World*.

Gibson, C.B. & Birkinshaw, J. (2004). The antecedents, consequences, and mediating role of organizational ambidexterity. *The Academy of Management Journal*. 47 (2). p.pp. 209–226.

GRI, UN Global Compact & WBSCD (2015). *SDG Compass: The guide for business action on the SDGs*. [Online]. Available from: http://sdgcompass.org/download-guide/.

Hahn, T., Figge, F., Pinkse, J. & Preuss, L. (2010). Trade-Offs in Corporate Sustainability: You Can't Have Your Cake and Eat It. *Business Strategy and the Environment*. 19 (4). p.pp. 217–229.

Hahn, T., Pinkse, J., Preuss, L. & Figge, F. (2015). Tensions in Corporate Sustainability: Towards an Integrative Framework. *Journal of Business Ethics*. p.pp. 297–316.

Hahn, T., Preuss, L., Pinkse, J. & Figge, F. (2014). Cognitive frames in corporate sustainability: Managerial sensemaking with paradoxical and business case frames. *Academy of Management Review*. 39 (4). p.pp. 463–487.

Handy, C. (2002). What's a business for? *Harvard Business Review*. 80 (12) p.p. 49.

Henderson, R. & Steen, E. Van Den (2015). Why Do Firms Have 'Purpose'? The Firm's Role as a Carrier of Identity and Reputation. *American Economic Review*. [Online]. 105 (5). p.pp. 326–330. Available from: http://pubs.aeaweb.org/doi/10.1257/aer.p20151072.

Hickel, J. (2015). *Five reasons to think twice about the UN's Sustainable Development Goals*. [Online]. 2015. The London School of Economics and Political Science. Available from: http://blogs.lse.ac.uk/southasia/2015/09/23/five-reasons-to-think-twice-about-the-uns-sustainable-development-goals/.

Holden, E., Linnerud, K. & Banister, D. (2014). Sustainable development: our common future revisited. *Global Environmental Change*. 26. p.pp. 130–139.

Holden, E., Linnerud, K. & Banister, D. (2016). The Imperatives of Sustainable Development. *Sustainable Development*. (October).

Kathrin, Muff, Kapalka, A. & Dyllick, T. (2017). The Gap Frame - Translating the SDGs into relevant national grand challenges for strategic business opportunities. *The International Journal of Management Education*. p.pp. 1–21.

Kiron, D., Unruh, G., Kruschwitz, N., Reeves, M., Rubel, H. & Meyer zum Felde, A. (2017). *Corporate Sustainability at a Corssroads - Progess Toward Our Common Future in Uncertain Times*.

KPMG International (2015). *The KPMG Survey of Corporate Responsibility Reporting 2015*. [Online]. Available from: https://home.kpmg.com/content/dam/kpmg/pdf/2015/12/KPMG-survey-of-CR-reporting-2015.pdf.

Linnerud, K. & Holden, E. (2016). Five criteria for global sustainable development. *International Journal of Global Environmental Issues*. 15 (4).

Margolis, J. & Walsh, J. (2003). Misery Loves Rethinking Companies : Social Initiatives by Business. *Administrative Science Quarterly*. 48 (2). p.pp. 268–305.

Montabon, F., Pagell, M. & Wu, Z. (2016). Making Sustainability Sustainable. *Journal of*

Supply Chain Management. 52 (2). p.pp. 11–27.

Montiel, I. & Delgado-Ceballos, J. (2014). Defining and Measuring Corporate Sustainability: Are We There Yet? *Organization & Environment*. [Online]. p.pp. 1–27. Available from: http://oae.sagepub.com/cgi/doi/10.1177/1086026614526413.

Nielsen (2015). *The Sustainability Imperative - New Insights into Consumer Expectations*.

Nilsson, M., Griggs, D., Visbeck, M. & Ringler, C. (2016). *A draft framework for understanding SDG interactions.*

Orlitzky, M., Schmidt, F.L. & Rynes, S.L. (2003). Corporate Social and Financial Performance: A Meta-Analysis. *Organization Studies*. 24. p.pp. 403–441.

Porter, M. & Kramer, M. (2011). Creating Shared Value: How to reinvent capitalism and unleash a wave of innovation and growth. *Harvard Business Review*. (1). p.pp. 1–17.

PwC (2015). *Make it Your Business : Engaging with the Sustainable Development Goals*. [Online]. Available from: https://www.pwc.com/gx/en/sustainability/SDG/SDG Research_FINAL.pdf.

Schaefer, K., Corner, P.D. & Kearins, K. (2015). Social, Environmental and Sustainable Entrepreneurship Research: What Is Needed for Sustainability-as-Flourishing? *Organization & Environment*. 28 (4). p.pp. 394–413.

Schaltegger, S., Beckmann, M. & Hansen, E.G. (2013). Transdisciplinarity in Corporate Sustainability: Mapping the Field. *Business Strategy and the Environment*. 22 (4). p.pp. 219–229.

Schaltegger, S. & Burritt, R. (2005). Corporate sustainability. *The International Yearbook of Environmental And Resource Economics 2005/2006*. p.pp. 185–222.

Shevchenko, A., Lévesque, M. & Pagell, M. (2016). Why Firms Delay Reaching True Sustainability. *Journal of Management Studies*. 53 (5). p.pp. 911–935.

Slawinski, N. & Bansal, P. (2015). Short on Time: Intertemporal Tensions in Business Sustainability. *Organization Science*. [Online]. 26 (2). p.pp. 531–549. Available from: http://pubsonline.informs.org/doi/10.1287/orsc.2014.0960.

Smith, W. & Lewis, M. (2011). Toward a theory of paradox: A dynamic equilibrium model of organizing. *Academy of Management Review*. 36 (2). p.pp. 381–403.

Stokstad, E. (2015). Sustainable goals from U.N. under fire. *Science*. [Online]. 347 (6223). p.pp. 702–703. Available from: http://www.sciencemag.org/cgi/doi/10.1126/science.347.6223.702.

TruCost (2016). *Environmentally extended input-output (EEI-O) model*.

UN DESA (2015). *World Population Prospects: The 2015 Revision*.

UN Global Compact; KPMG (2015). *SDG Industry Matrix*. [Online]. Available from: https://www.unglobalcompact.org/library/3111.

United Nations (2015). *Transforming our World: The Agenda 2030 for Sustainable Development*.

Upward, A. & Jones, P. (2016). An Ontology for Strongly Sustainable Business Models: Defining an Enterprise Framework Compatible With Natural and Social Science. *Organization & Environment*. 29 (1). p.pp. 97–123.

Whiteman, G., Walker, B. & Perego, P. (2013). Planetary Boundaries: Ecological Foundations for Corporate Sustainability. *Journal of Management Studies*. 50 (2). p.pp. 307–336.

WHO (2015). *Obesity and overweight - WHO Fact Sheet*. [Online]. Available from: http://www.who.int/mediacentre/factsheets/fs311/en/.

World Economic Forum (2017). *Shaping the Future of Global Food Systems: A Scenario Analysis*. geneva.

World Resources Institute (2013). *Creating a Sustainable Food Future - A menu of solutions to sustainably feed more than 9 billion people by 2050*. Washington.

World Resources Institute (2016). *Shifting Diets for a sustainable Food Future*.

Yin, R.K. (2003). Case Study Research design and methods. In: *Case Study Research: design and methods*. Sage Publication Inc., Thousand Oaks.

Zedlmayer, G. (2015). Purpose-Driven Strategy: Creating a Sustainable Business While Solving the World's Challenges. *HuffingtonPost*. [Online]. Available from: http://www.huffingtonpost.com/gabi-zedlmayer/post_9702_b_7702094.html.