Social Sustainability: Theories, Concepts, Practicability

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Abstract

While the concept of sustainability is widely recognized these days, it is questionable how adaptable and how beneficial most of the corporate solutions regarding sustainability management are. It is very likely that most of what passes for mainstream reporting in Corporate Sustainability Management fails to do precisely the one thing it purports to do – which is making it possible for organizations to measure and report on the sustainability of their operations (McElroy, Jorna, van Engelen, 2007).

When it comes to the social aspect of sustainability, this problem is even more imminent. The objective of this paper is to give a solid scientific definition of sustainability to get past the fuzzy understanding of social sustainability and to suggest real methods and solutions on how to get the concept more operational.

Everything can be conceptualized; however there are reasons why, among others, the Global Reporting Initiative struggles with closing on more globally accepted and lasting definitions for social sustainability and ways to promote it. One of them is in the subject itself. Ethical considerations play into the determination of defined quotients of social sustainability and those differ between different countries, cultures, even from one person to another. Crucially, it is not only the definition of social value/capital that is in question, but the fact that its slow progress inhibits strategies and applicable methods from evolving further.

1. Introducing Social Sustainability

1.1. Definition

The advisement of sustainable strategies has become widely known at least since the release of the Brundtland-report in 1987. Following the definition of the report, Sustainable Development is a "development that meets the needs of the present without compromising the ability of future generations to meet their own needs". Two years after the publication of the Brundtland-report, Lynam and Herdt (1989) defined sustainability as: "(…) the capacity of a system to maintain output at a level approximately equal to or greater than its historic average, with the approximation determined by the historical level of variability." Following these definitions and taking into account the social aspect one must ask what the system-output and the needs of future generations are.

The key in defining social sustainability lies therefore in the definition of social values or how the majority of the scientific community calls it: social capital. The question is what has to be protected for future generations and how this can be done. Following common definitions social capital consists of shared knowledge and related organizational networks (e.g., governments, judiciaries, militaries, healthcare systems, banking systems, education systems, charities, etc.) that enhance the potential for effective individual and collective action in human social systems (Coleman, 1990; McElroy et al, 2006; Ostrom and Ahn, 2003; Putnam, 2000). Values like transparency, fairness, balance, equality, well-being, health and safety arise in this context. Social sustainability can therefore be defined as a way to achieve the protection, promotion, and preservation of these values for future generations. This includes human rights, preservation of diversity, protection and promotion of health and safety, intra- and intergenerational equity among many others.

McElroy, Jorna and van Engelen (2007) introduced the term "anthro capital" which incorporates human, social and constructed capital in order to achieve a broader view on the measurability of sustainability. They argue that in order to assess the social and environmental sustainability of a particular ac-

tivity (such as the operations of an organization) one must first understand its impact on non-financial capital. The term of anthro capital may be used to incorporate the effects on all non-financial capital and hence enable a merged view on the effects of operations. That can be necessary as most of the impacts that a particular activity creates, consists of neither just social, nor just environmental consequences. To the extent that such operations can have the effect of preserving or building required levels of such capital, one can say that they are sustainable; if they have the opposite effect, they are un-sustainable. This is essence of the capitals-based theory of sustainability performance. (Chambers et al, 2000), (Daly, 1996), (Elkington, 1998), (Hawken et al, 1999), (McElroy et al, 2006), (Meadows et al, 1992), (Mulder et al, 2006), (Porritt, 2005), (Stern, 1997), (Vemuri and Costanza, 2006), (Wackernagel and Rees, 1996)".

1.2. Importance

According to the Brundtland-report and the general definition of sustainability development, economical, ecological and social aspects are supposed to be given equal weight. Considering their application that is still not the case. Efforts have been made to bring the other two aspects back into balance, but these efforts have not yet been successful (see Figure 1 below). Social sustainability is an emerging concept, although least studied and its dimension is often overlooked (Colantonio, 2009).

Figure 1: Source: Dr. Andrea Colantonio, Oxford Institute for Sustainable Development (OISD), 2009

Public awareness of problems facing us today (population growth, limited resources, etc.) has grown over the past decades; the sociological consequences that derived and will derive from the circumstances however have not been fully taken into consideration yet. This point is intensified through the information technology and the rapid changes in industry and world trade that followed them. Regarding the civil unrest that "globalization events", such as the G8-Summit or the World Economic Forum created in western societies, the process of communicating change and the commitment to social factors bears critical importance.

1.3. Problems

Apart from the problem of defining the term 'sustainability' itself, it is the reporting on sustainability that is still a major problem today. As Gray and Bebbington (2005, p. 7) put it: "Within those reports identified as sustainability reports [...] even those that are in conformance with the Global Reporting Initiative Sustainability Reporting Guideline provide only the most superficial data on the extent of the organisation's sustainability or otherwise. Indeed, sustainability is much more likely to be entirely ignored; it is rare to see any corporation address it all. No reasonable person could make any sensible judgement on the basis of an organisation's reporting in their Sustainability Reports on whether or not the organisation was un-sustainable."

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Initiatives to enhance reporting have made some progress in the recent years, but the problem still exists. Nowadays the attention is there and in addition, with the growing focus on sustainable strategies, new problems have arisen. For example the marketing effect of sustainability is widely abused by companies and political parties. Taking into account the fuzzy definition and the un-practicability, many claim the title of being sustainable these days while the general public does not have the ability or knowledge to verify the righteousness of that claim.

Furthermore, at this day and age when the economy is facing difficult times, social and environmental initiatives are quickly postponed as "too expensive and not focused on the main goal", as a recent study by Booz & Company has shown. The Booz & Company's Economic Crisis survey from December 2008 among managers has shown that 51% of the 828 firms that responded to the survey said that their corporate social agenda (CSR) will be delayed in response to the financial crisis.

Sadly a majority sees and treads social assessment still as an administrative hurdle, not as a planning tool that can aid and enhance project planning and facilitate the integration of projects plans into the surrounding community (Dale et al. 2001).

2. The ethical problem

2.1. The need to quantify

Over the past three decades the dynamic of innovation in information technology has basically eliminated formerly existing distances, thereby creating a single globalized economy. This has led to a situation in which very different logical/cultural/social/societal concepts are clashing (Reissfelder, 1995). One way to guide this process fairly and peacefully is social sustainability. To do this, however, assessments of sustainability must be comparable and the social sustainability of companies and countries measured in a traceable and reproducible way. This leads to another problem, social factors are partly based on ethical values and to quantify and or qualify those poses new problems. To explain this, a scenario can be considered where company A would offer a third country supplier better prizes in the spirit of fairness while company B produces only in its home-country in the spirit of helping people to keep their jobs. Although both strategies are honourable in their own way and may have some impact in a possible social sustainability rating, it is difficult to rate one concept over the other. However, this is exactly what has to be done. Values have to be created for different achievements considering the impacts of acting firms, countries or people to understand the real effort behind their sustainability commitment.

It is important to trace a possible progress in sustainability. This will enable us to understand which concepts are working and which ones are not. Furthermore, such an approach is likely to achieve that people will derive new forms of communicating their results and thus strengthening the understanding of the abstract subject. Lastly, there is a chance to create competition in commitment to social responsibility and therefore once more strengthening the drive to achieve social sustainability.

2.2. The problem of fear and abuse

This leads us right to the next problem, namely that the "numbering" of ethical values might lead to anxiety, considering the outcome of social sustainability and thus inhibiting companies from enforcing detailed concepts. Furthermore, the more sophisticated such a system is the higher the risk lays in its abuse. These are serious problems that will occupy scientists in more than one way. It is almost a paradox that realizing this problem one must ask the same moral responsibility of developers and engineers that one wants to achieve on a larger scale by promoting such a system.

Besides what seems to be a sustainable solution for present conditions bears the risk to become unsustainable when confronted by the tasks of the future (Rammel, et al. 2004). Thus, we face a dynamic process where the starting point cannot just be a fixed idea of sustainability; rather it must be a social consensus what we consider unsustainable and how to respond to it (Wilkinson and Cary, 2002).

3. Main social sustainability Theories

3.1.   Research approaches to Social Sustainability

Table 1.1 below traces the development of different approaches to the subject:

Approach	Main Authors	Timeline
Equity and Human Rights (e.g. poverty studies and unequal development)	Sen (1985, 1992), Sachs (2001)	Since mid-1980s
Capital Stock (e.g. Social Capital, Environmental capital equity and cities' footprint)	Coleman (1988), Putnam (1993), Rees and Wackernagel (1996)	Since late 1980s
Institutional Theory and Governance (e.g. participation and stakeholder analysis)	Chambers (1992) Healey (1992)	Since early 1990s
Business and Corporate studies(e.g. Triple Bottom Line, Corporate Social Responsibility)	Elkington (1994)	Since mid-1990s
Behavioural and Social Sciences(Well-being, health and happiness perspective)	Layard (2005)	Since late 1990s
Transition Theory (Transition, governance)	Rotmans, Loorbach *et al.* (2006)	2000s

Source: Dr. Andrea Colantonio, Oxford Institute for Sustainable Development (OISD), 2009

3.2.   The binary theory

In their essay about "Sustainability Quotients and the Social Footprint" (2007) McElroy, Jorna, and van Engelen are suggesting two more, or rather one combined approach to make social sustainability more "measurable". They use what they call the binary theory in combination with specified quotients to create a social footprint.
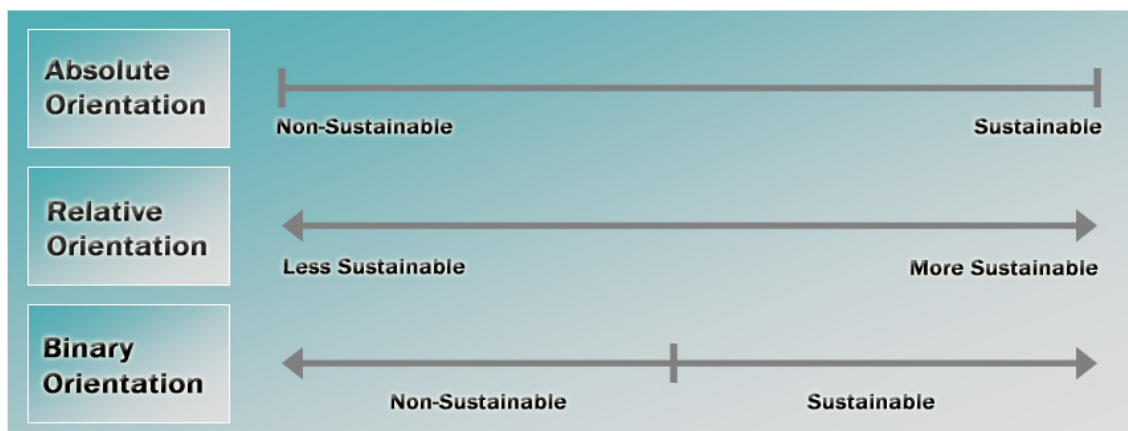

Figure 2: Source: cf. McElroy, Jorna, van Engelen, 2007

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According to it an operation/entity/artefact is sustainable, or not, depending on which side of a demarcation point it falls on a scale of sustainability performance (see Figure 2).

The binary conception of sustainability is, in a sense, a variant of the absolute goal orientation, in that it is completely anti-relativistic. According to the binary orientation, an artefact is either wholly sustainable or not – there is no in-between. Instead, there are only higher or lower scores for sustainability performance, some of which fall on the Sustainable side of a line, and others of which fall on the Non-sustainable side.

Using this orientation they derive quotients for the impacts of actions on sustainability in general, of ecological impacts as well as social impacts. The quotients are then used to create their so called Social Footprint. Considering that this is one of the most applicable scientific approaches to the subject so far, the next section will explore it further.

3.3.   Social Sustainability Footprint

Sustainability as mentioned before can be best understood on the impact that organizations can have on the carrying capacity of non-financial capital. The Social Sustainability Footprint consists now of a quotients-based method for measuring and reporting that impact and hence social sustainability. The context for the quotients can be social, ecological but also much more diversified. The Social Sustainability Footprint is:

1. Conceptually committed to a quantitative quotients approach to sustainability: performance measured relative to standards of performance

2. Activity-based: Sustainability is measured in terms of impacts that arise from organizational operations i.e., their actions

3. Grounded in the principle of personal and collective responsibility, according to which individuals are responsible for their mutual or collective actions, including those of their organizations whose actions they directly support and jointly perform

4. Conceptually committed to anthro capital as the social thing that organizations can have impact on, the effects of which determine whether or not an organization's operations are socially sustainable

5. Practical: Confines measurement and reporting to organizational boundaries, just as financial reports do (McElroy, Jorna, van Engelen, 2007, 2008)

The central questions are how significant and meaningful the quotients are and therefore the whole footprint can be. The fact that the binary system mainly aims to make a (sustainable, non-sustainable, or 0, 1) statement does not reflect the complexity. It may help to simplify it, but it may also lead to an oversimplification from a scientific point of view. Of course that depends on the use of the quotients, but developers should always consider the abuse of their designs. The word binary simply implies a differentiation of type 0 and 1, and hence could be abused to paint the world black and white, while the opposite is intended.

4. From theory to indicators to applications

Looking beyond the theory this paragraph is about the attempt to show how the binary concept is taken a step further, to the point where it is no longer binary, or rather where its main purpose is not to make a differentiation between sustainable and non-sustainable, but to get a real "double" value between -1 and 1. This value is then be used as indicator. Ideas on how to develop quotients or indicators for ideational constructs have recently seen many new and different approaches. They usually evolve over time. (Bell, Morse, 2008) In the following an approach will be visualized.

4.1.   The right indicators

In this context the first question that is crucial to answer is: what are the "right" indicators for a possible measurement of social sustainability? One could think the highest development goals would be the right choice. Considering the United Nations (UN) Millennium Development Goals, or MDGs (UNDP, 2006), these goals are as follows:

1. Eradicate extreme poverty and hunger.

2. Achieve universal primary education.

3. Promote gender equality and empower women.

4. Reduce child mortality.

5. Improve maternal health.

6. Combat HIV/AIDS, Malaria and other diseases.

7. Ensure environmental sustainability.

8. Develop a global partnership for development.

It would be in the interest of social sustainability if the impacts of actions of each company could be assessed according to these goals, but especially for small and medium sized companies that seems unlikely and maybe even counterproductive. The values in the millennium development goals are not all applicable to small and medium sized companies but rather to major industries and global players.

The plan is therefore to derive policies from ideals and theoretic approaches that are more applicable for companies of every size. From these policies themes in questions should be extracted and from them indicators, in form of quotients should be built. The agglomeration of the quotients from the different indicators can then form the assessment of the social sustainability of that company, country or protagonist. It all depends on the themes. To illustrate this approach the idealistic construct fairness is chosen as an example. Figure 3 shows a simplified model of breaking down complex ethical concepts to simpler, more applicable and measurable concepts. One could also use transparency, equity or responsibility as starting-point; and one must if this approach is supposed to give a real overview over the impact of the company in social sustainability. Also when applying this approach, it is important to be detailed and specific with the quotients and the ways in which they are used to extract numbers. In figure 3 the quotients and deductions are strongly simplified and not applicable in this way, the picture simply illustrates the ways in which real applicable values can be deduced from idealistic concepts. Lastly, the ending-points may not be the real end of the deduction line either.

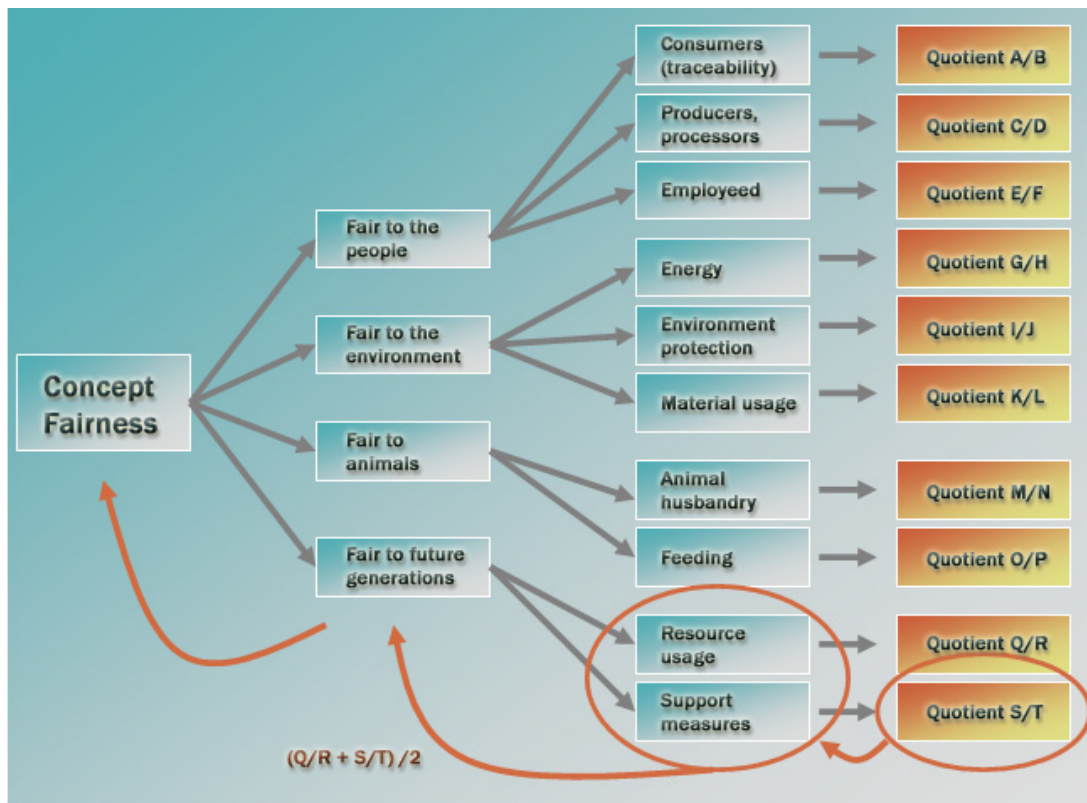## 4.2.   Application of Social Sustainability

Figure 3: Source: Andi Widok, cf. Schermer, Tumler, 2009

The approach on how to deduce indicators from more abstract terms is not new, however it is a fact that to this day there is no widely applicable strategy on how to measure and qualify social sustainability. The Social Sustainability Footprint, as presented above, seems a very promising approach, however it still needs evolution and might become to abstract. The Global Reporting Initiative is making progress and one can only hope that they will take the interests of all parties/stakeholders into account, as what is needed most to finally achieve a working system is consensus.

If we were to imagine for a moment that an agreement can be achieved on a large scale and that after years of political, scientific and sociological debates a system would be implemented and used by the majority of the global players down to small and medium sized companies. Once such a system is in place it would be possible compare its usage to the development of integrated environmental management or quality management. At the end of this long road stands integrated, even software-supported social sustainability management. Through the years that system could then be enhanced and maybe one day even the United Nations (UN) Millennium Development Goals will not seem so very far away anymore.

5. Conclusion / Discussion

The main problem still lays within the definition of social value or capital and in the different approaches for institutions and countries. The wheel has been reinvented several times. Long-term institutional development has been limited. Experience in World Bank has shown that without thorough institutionalization of the social perspective in policy and procedure, the gains made might only be temporary (Dale, Taylor, Lane, 2001).

As seen in the example taken of the societal quotient for a company, the approaches can still vary on a large scale depending on the values one tries to achieve. It does not seem likely to be able to

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break down the impact of all-day work from small and medium sized companies considering the high values in the achievement of the United Nations (UN) Millennium Development Goals, or MDGs (UNDP, 2006). However it may be possible to have a broader consent if corporate social sustainability is measured considering key features that affect every company on this planet. As shown in the example considering fairness. Even the discussion concerning these values and the definition of social capital among global players and countries will very likely have positive effects and thus strengthening the social sustainability initiative.

Nonetheless the integration of the complexity of this concept in its entire dimension is hard to impart concerning the compatibility of quantitative and qualitative content. The ideas presented under point 4 are strongly simplified and were meant to create a broad understanding of the subject. There will not be much success in really implementing integrated systems if no broad consent is reached from industries all over the world to agree on standards. Decision makers will be sought-after to enforce this process.

One of the main problems when conceptualizing these new systems is, if one makes the system to complex people will have difficulties to understand it and hence its introduction is less likely, while if one makes it to easy its outcome may have no real application. As mentioned in the introduction these days can be witnessed both. Companies calling one of their main goals sustainability while it is impossible to verify that claim and on the other hand the introduction or rather mathematically calculation of quotients that a person with no access to the scientific approaches would not be able to understand. One way to solve this problem could be a system of different levels which could be introduced over a longer duration of time. Different levels means that quotients could be extrapolated in a broad view of the company's actions at first and over time being sharpened corresponding to different levels of sustainability deepness. This would allow even smaller companies with less time and budget at their disposal to start monitoring their social sustainability and with time maybe reach another level of deepness. It would also help to promote the idea, if the first concepts would be "small and simple" they could easily be understood and implemented and once a broad acceptance of the first levels would be reached the higher levels could be introduced.

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