Social Actions of Strategic Sustainable Development

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Abstract: Sustainable Development was conceived as a visionary idea to have society meet the needs of the today while also considering those of future generations. The Framework for Strategic Sustainable Development was developed to provide an operational planning methodology to move society towards ecological and social sustainability. While abundant scientific research and project work have been completed in the ecological issues area - a significant gap remains regarding Social Sustainability. This research project sought to identify leading actions of Social Sustainability that might strategically remove the systemic conditions (barriers) to Social Sustainability. Reducing the complexity of Social Sustainability for sustainability practitioners can be helpful for working within Strategic Sustainable Development. Using an assessment tool based on Social Sustainability Actions Criteria, leading actions of Strategic Sustainable Development emerged from case studies and interviews research with Social Sustainability practitioners and experts. Although this research process was successful, the study of Social Sustainability actions also resulted in two aspects of proposed discovery: a means to identify systems barriers within a Social Sustainability Actions Criteria Tool and a model of Core Characteristics of Social Sustainability Actions. Additionally proposed, 3 potential Universal Categories of Social Sustainability Actions.

Keywords: Strategic Sustainable Development, Social Sustainability, Sustainability Practitioners, Social Sustainability Actions

Statement of Collaboration

As students of the 2012 Master's in Strategic Leadership towards Sustainability program we sought new knowledge, experience, and inspiration through the teachings of The Framework for Strategic Sustainable Development. As with many graduate thesis teams, ours is an amazing hybrid of nationality, backgrounds, educations, experiences. We used all these assets and the help of our entire class to move through this challenging thesis investigation, research process, and production work together. We laughed a lot each day in our eternal state of academic humility and constant discovery; we shared the work; we drew on each other's perspectives, critical feedback, creative talents, strengths, care, and humor. We actively transcended geographical, gender, political, age, religious, and economic boundaries to work together in a peaceful, productive, and collective manner during this project. Our thesis team represents a very diverse set of international ambassadors moving towards a sustainable future together with special regard, in this case, for Social Sustainability as a focus and platform of interdisciplinary collaboration.

Each research team member contributed equally to all activities in this thesis research process with these special talents deserving mention: JingJing Guo was particularly skilled at project management, team progress organization, project scheduling, information structuring, and overall thesis content flow. Hamideh Farzaneh contributed significant knowledge of social sciences, academic research methods (qualitative and quantitative), a diverse social issues perspective, and critical analysis of the thesis content. Anthony Guido worked primarily in the acquiring of topic content, research participant liaison and communication, design of project information for documentation and presentations, and project writing.

Although we have now successfully completed the MSLS program, what we truly received from this education was to *learn how to learn*, experience new parts of our lives, and make meaningful global friendships. These are the greatest achievements. To make friends is to change the lives of others (*and* yourself). To make friends is to change the world. To make friends is to live *The Golden Rule*.

Anthony Guido Hamideh Farzaneh JingJing Guo

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Executive Summary

This thesis sought to contribute efforts to the further development of the Social Sustainability area of The Framework for Strategic Sustainable Development. The focus was to discover what leading actions sustainability practitioners use to move towards Social Sustainability and how sustainability practitioners might integrate general strategic Social Sustainability actions into Sustainable Development projects. Although actions are usually considered specific to each context and culture involved in a strategic sustainable development project, the research team focused on finding evidence of general commonalities, patterns, and/or majority of actions that would suggest considering these as main examples for future Social Sustainability work within Strategic Sustainable Development. Once a set of leading actions of Social Sustainability was identified within the scope of this project, the research team organized these actions into an integrated Strategic Sustainable Development planning model based upon backcasting from achieving successful Social Sustainability.

Introduction

As the world has grown in population over time (Hub and Gribble 2011) its ecological resources and the services these resources can provide for humanity have declined in capacity (IPCC 2007). These conditions define the Sustainability Challenge: a complex system of increasing societal need drawing upon decreasing environmental availability (Ny 2006). In addition to the environmental problems of this challenge came very complex issues related to the social system as well (Amnesty International 2009). The interdependent relationship between these social and ecological factors requires using a whole system approach to understanding sustainability and how to move strategically towards it (Robèrt et al. 2002). A whole systems approach to sustainability means that all the components within the system (i.e. social, economic, and ecological) need to be considered. A sustainable society creates human well-being within ecological system boundaries. However, to reach a state of sustainability a society within the complex socio-ecological system will need a highly operational process to transition

from its current unsustainable state. In 1987 the United Nations World Commission on Environment and Development (WCED) defined Sustainable Development in the *Our Common Future* Report (i.e. The Brundtland Report) as a possible process solution for moving to sustainability. In this report Sustainable Development is defined as:

"development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (WCED 1987, 1).

Although this original statement was very inspirational, to many it lacked systematic, scientific, consensus-based definitions, and a planning strategy for operational sustainability. A structured, strategic, and scientific approach to sustainability was needed; *The Framework for Strategic Sustainable Development* (FSSD) was created to do this (Robèrt et al. 2002).

The Framework for Strategic Sustainable Development was developed to provide groups working in a complex system with a shared language when planning and moving towards a society that complies with basic principles that define sustainability. The 5 level FSSD incorporates a best practices in strategic planning approach to defining the global socio-ecological system; establishes a shared vision of success based upon 4 scientifically proven socio-ecological Sustainability Principles (4 SPs); provides a strategic planning process incorporating an approach of 'backcasting from success' by prioritizing of actions; allows for the identification of practical actions needed to move towards global socio-ecological sustainability; and offers identification of the necessary tools to support efforts to reach global sustainability.

Social Sustainability, by its very nature of focusing on humans attempting to meet their needs within a growing society within the world's limited biosphere, involves multiple levels of system complexity and challenge. Understanding human needs appropriately has proved very challenging in the years since the original Sustainable Development definition was released. Actions can provide strategic support to remove conditions that systematically undermine people's capacity to meet their needs (Benaim et

al. 2008). Following is an explanation of the 4th Principle of Sustainability (i.e. Social Sustainability) within the FSSD:

System: The social system: trust/social capital/basic human needs

Success: Removal of all conditions that systematically undermine

people's capacity to meet their needs

Strategic: The Backcasting Process and The Golden Rule / empathy

Actions: Practical activities that help move the social system

towards Social Sustainability

(Note: Actions are typically context and culture specific)

Tools: Tools that support efforts to reach Social Sustainability

The research hypothesis is that by identifying leading actions of Social Sustainability and by offering FSSD guidance in how to use these leading actions strategically in Social Sustainability project work, sustainability practitioners may begin reducing some of the complexity to removing the conditions that systematically undermine people's capacity to meet their needs in practical applications. This thesis will work with the grassroots sustainability practitioners of the Earth Charter Interactional organization as a means of setting functional research data boundaries and establishing scope.

This research project set out to answer 2 research questions:

- 1. What are leading Social Sustainability actions to remove conditions that systematically undermine people's capacity to meet their needs?
- 2. How can sustainability practitioners integrate general strategic social sustainability actions into sustainable development projects?

Methodology

Due to the complexity of the subject topic, this research project focused on using several qualitative and quantitative methods to discover leading actions of Social Sustainability and how they can be best integrated into Strategic Sustainable Development. The research methodology included: extensive literature review, 21 case studies, and 9 interviews with sustainability practitioners and experts. Two independent data sets were constructed that profiled the general actions used in actual grass roots Social Sustainability projects. These data sources also provided important information on the application of these actions in grass roots Social Sustainability project work. The data sets were analyzed using a Social Sustainability Actions Criteria Indicator Tool to score and help find the final leading Actions of Social Sustainability. The results were then placed into a strategic configuration to see how these actions could be best integrated in sustainable development projects and to support Social Sustainability in the Framework for Strategic Sustainable Development.

Results

The final result for research question 1 identified 4 leading actions of Social Sustainability:

Share Information Do Engagement Activities

Have a Meeting Use Education

The final result for research question 2 was a strategic plan for integrating the FSSD (i.e. the ABCD Backcasting Process) into the existing grass roots sustainability project process model:

Before - During (Integration of the ABCD Process here) - After

27 general Social Sustainability actions ranging in composition from simple to compound combinations of actions were strategically mapped into a backcasting from success configuration within the familiar grass roots project process format in order to illustrate strategic planning for sustainability practitioners.

Discussion and Conclusion

With regards to research question 1, identifying leading actions of Social Sustainability was originally envisioned by the research team as a method to potentially decrease complexity for sustainability practitioners when working in the challenging area of grass roots Social Sustainability. This

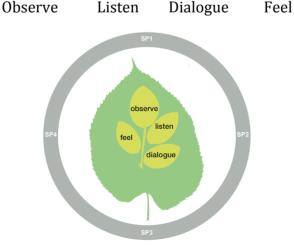
research project's purpose was to support the FSSD through decreasing the complexity and ambiguity of Social Sustainability actions; removing system barriers connected to Social Sustainability; and providing sustainability practitioners with strategic planning guidance.

The research methodology produced substantial topic-related evidence that led to the research results. The final result for research question 1 was determined by comparing and combining the 2 data sets described. With the 27 general actions in a backcasting format these practical activities can be used to move more strategically towards Social Sustainability. This research also offers 3 potential Universal Categories of Social Sustainability Actions for consideration and possible further study. These are: Share, Inspire, Engage.

In addition to successfully answering the original research questions 2 other results with possible FSSD application became apparent:

- 1. A possible system barriers identification feature from within the Social Sustainability Actions Criteria Tool.
- 2. A Social Sustainability Actions Core Characteristics Model.

 This model presents the sub-action components of Social Sustainability actions that can be optimized to support general actions in effectively remove systemic barriers. The 4 core characteristics to consider are:



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Glossary

ABCD: A strategic process for backcasting from an envisioned future.

Actions: An action is a characteristic or process of doing something, usually to achieve an aim. In the FSSD, Actions help move the global socio-ecological system towards sustainability.

Backcasting: A method of planning using an initial vision of the future and then questioning what is needed currently to reach this vision.

Barriers: Constitutes anything blocking people from meeting their needs.

Baseline Assessment: Determining an evaluation or estimation of the nature, quality, or ability of a person, place, or thing for comparison.

Brainstorm: The process of creating several ideas to solve a problem.

Case Study: A case study is a research method that involves documenting an experience, process, or a project over a given time period - typically observed and recorded in real time on the actual site of the study.

Conditions: Any situations or circumstances of well-being or safety that influence the way people work and live.

Earth Charter: A declaration of fundamental ethical principles for building a just, sustainable and peaceful global society in the 21st century.

FSSD: The Framework for Strategic Sustainable Development; the use of a 5 level complex systems planning framework with Sustainability as the successful envisioned goal.

Grass Roots: The most basic level of an activity or organization; ordinary people regarded as the leading body of an organization's membership.

ISO26000: An International Standard Organization (ISO) tool for providing guidance on organizational Social Responsibility within all types of public and private sectors in developed and developing countries.

Prioritization: The analyzing of actions using 3 critical questions so as to designate which is more important and useful than another in regards to moving to a sustainable society.

ROI: Return on Investment (i.e. the yield on an investment of money, time, effort, etc.).

Shared Vision: A shared mental model of a sustainable society based on the FSSD including an inspired goal in accordance with the 4 SPs.

Social Action: A program of socio-economic reform done by an individual or group that involves interaction with other individuals or groups and directed toward some particular institutional change.

Social Sustainability: The removal of all barriers to people so that they are able to meet their basic human needs (i.e. Subsistence, Participation, Understanding, etc.) within a complex socio-ecological system.

Social Sustainability Experts: Academic researchers and professionals who work in the study of Social Sustainability and / or the social action business community.

Sustainable Development: Planning and actions to move from a currently unsustainable global society towards a sustainable society.

Sustainability Practitioner: People whose leading occupation and personal focus is working towards socio-ecological sustainability.

Sustainability Principles (SPs): 4 principles of the FSSD developed from scientific laws and knowledge that define a state of sustainability for society within the biosphere. From the FSSD:

"in a sustainable society, nature is not subject to systematically increasing:

- 1. ...concentrations of substances extracted from the Earth's crust;
- 2. ...concentrations of substances produced by society;
- 3. ...degradation by physical means; and, in that society...
- 4. ...people are not subject to conditions that systematically undermine their capacity to meet their needs" (Robert 2000, 245).

Sustainable Society: A society capable of continuing to develop without eroding its fundamental life support systems while creating human well-being within ecological limits.

The Golden Rule: This universal principal is used to focus on humans' ability to have empathy for others: *You should not do to others what you do not wish them to do to you.*

UN Declaration of Human Rights: The United Nations' common standard of achievement for all peoples and all nations representing the first global expression of rights to which all human beings are inherently entitled.

Undermine: To gradually or insidiously damage or weaken someone or something.

"When asked if I am pessimistic or optimistic about the future, my answer is always the same: If you look at the science about what is happening on earth and aren't pessimistic, you don't understand data. But if you meet the people who are working to restore this earth and the lives of the poor, and you aren't optimistic, you haven't got a pulse.

What I see everywhere in the world are ordinary people willing to confront despair, power, and incalculable odds in order to restore some semblance of grace, justice, and beauty to this world".

Paul Hawken

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1 Introduction

1.1 Sustainability

1.1.1 The Sustainability Challenge

In northern Sweden on a barren patch of rocky hilltop stands the oldest tree in the world. The roots of this tree are 9554 years of age (Parducci et al. 2012). This tree is a model of sustainability. Over this extensive period of time the tree has provided a multitude of socio-ecological services. Trees:

"make oxygen, sequester carbon, fix nitrogen, distil water, provide habitat for hundreds of species, accrue solar energy's fuel, build complex sugars and fuels, make soils, change colors with the seasons, create microclimates and self-replicate" (McDonough 2003).

One could say that, because of the interdependency of all the interrelated parts needed to provide these services, this tree could be viewed as a model of a system as well (Oxford Dictionaries 2010). In its long life it has seen many changes in the world: the end of an ice age, the rise and fall of plant and animal species, wars, famine, the Industrial Revolution, exponential growth of the human population, and climate change. Because this tree exists within the context of other systems - all so interdependent, one could consider these interrelated parts a model of a more complex system. The tree has experienced all this, yet there it stands...solemn, noble, patient...doing what it does best and how it was meant to do this: actions of socio-ecological service as vital part of a larger interconnected system. It has been scientifically determined that there is "something unique in the combination of the tree's genetic material and the context" (Parducci et al. 2012, 1083) to explain how this lone Nordic Spruce has survived for this tremendous time span. Discovery of the unique combination of core characteristics that allows this tree to thrive so long could offer a strategic guidance model for understanding optimal socio-ecological actions of sustainability.

In terms of challenges, this tree has experienced the world getting hotter and more crowded (Mirsky 2008). The world reached a population of more than 7 billion in 2011; this population is expected to grow to 8 billion by 2023 (Haub and Gribble 2011). Ecological resources and the capacity of these resources to provide for humans are decreasing (IPCC 2007). These

conditions define the Sustainability Challenge: a complex system of increasing societal need drawing upon decreasing environmental availability (Ny 2006). In addition to environmental problems such as climate change, loss of biodiversity, soil erosion, increasing water pollution, etc., with this sustainability challenge came inequality, human rights abuse, injustice, food challenges, education issues, healthcare challenges, corruption, economic crisis, and various other forms of social systems problems (Amnesty International 2009). These issues represent an overall decrease in the quality of life in human society. Because the sustainability challenge is comprised of a complex interdependent relationship between social and ecological factors it is important to take a whole systems approach to understanding these subsystems in order to move towards sustainability (Robèrt et al. 2002).

1.1.2 Sustainability: Social, Economic, Ecological Systems

A whole systems approach to sustainability means all the components within a system need to be considered. The system of sustainability is comprised of social, economic, and ecological sub-systems. "The goal of sustainability is to enhance people's well-being while living within the capacity of the eco-system" (Strathcona County 2007, 9). To reach a state of sustainability a society within the complex socio-ecological system requires a process to transition from the current unsustainable state. The concept of Sustainable Development was created as a possible solution to help confront these socio-ecological challenges and move society to sustainability.

"Over the last 2 decades, the concept of sustainable development has emerged as a new development paradigm, combining social, economic, environmental and political aspects of development" (Colantonio 2007, 3).

1.1.3 Sustainable Development

The United Nations' World Commission on Environment and Development defined Sustainable Development in the report *Our Common Future* as:

"Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (WCED 1987, 1).

Although society now had a visionary plan for moving towards sustainability, it was soon discovered that socio-ecological challenges continued to increase: climate change, poverty, loss of biodiversity, water pollution, desertification, eco-toxicity, corruption, overfishing, hunger, acid rain, disease, deforestation, and rights violations continued. Many realized that Sustainable Development and its underlying issues are very complex (Tilbury 2002). The challenges to Sustainable Development could be caused by 2 areas of significant ambiguity in its original statement: a clear definition of human needs (Max-Neef 1991) and the inherent paradox of meeting the needs of the present and of future generations without compromise (Holmberg et al. 1999).

The original statement on Sustainable Development was very inspirational to many, however, it lacked systematic, scientific, and consensus-based definitions and planning strategy for operational sustainability. Sustainable Development was attempting to resolve the interdependent ecological and social complexity of these systems - a growing population with everincreasing consumption levels putting increasing pressure on the earth's systems - without a strategic plan. Many came to believe there was a clear need to use a scientific approach to manage this challenge and avoid large-scale catastrophes (Egmond 2011). A structured, strategic, and scientific approach to sustainability was needed; *The Framework for Strategic Sustainable Development* was created to do this (Robèrt et al. 2002).

1.1.4 The Framework for Strategic Sustainable Development

The Framework for Strategic Sustainable Development (FSSD) was created to provide groups working in a complex system with a shared language when planning and moving towards a society that complies with basic principles that define sustainability (Robèrt et al. 2002). The FSSD provides a clear description of a sustainable society by defining principles needed for that society. After many years of rigorous peer-reviewed development it was determined that defining sustainability within the complex socio-ecological system needed these basic principles to be "scientifically agreed upon, necessary, sufficient, general, concrete, and mutually exclusive" (Ny et al. 2006, 63).

The four Sustainability Principles (4 SPs) that define sustainability in the FSSD are:

"in a sustainable society, nature is not subject to systematically increasing:

- 1. ...concentrations of substances extracted from the Earth's crust;
- 2. ...concentrations of substances produced by society;
- 3. ...degradation by physical means; and, in that society...
- 4. ...people are not subject to conditions that systematically undermine their capacity to meet their needs" (Robèrt 2000, 245).

The 5 level FSSD assists structured thinking by providing a clear and practical approach to strategic planning towards sustainability. In consideration of how to change societal thinking and work strategically towards solving problems of Sustainable Development within this complex system, physicist and systems theorist Fritjof Capra offers the idea of looking at ecological systems as metaphorical learning models in his book *The Web of Life*:

"Reconnecting with the web of life means building and nurturing sustainable communities in which we can satisfy our needs and aspirations without diminishing the chances of further generations. For this task we can learn valuable lessons from the study of ecosystems, which are sustainable communities of plants, animals, and microorganisms. To understand these lessons, we need to learn the basic principles of ecology" (Capra 1996, 297).



Figure 1.1. A Tree as a Sustainable System: Trunk, Branches, and Leaves (Guido 2012).

Related, one might more fully understand the FSSD by thinking of it as a 'tree' to describe a system's basic principles and its detailed parts. The system's basic principles would be considered the trunk and branches of this tree. The system details and practical activities are the leaves of the tree. The trunk and branches (i.e. the FSSD's fundamental ideas) are very stable and sturdy while the leaves (i.e. tangible details and actions) are more flexible and constantly changing (Broman et al. 2000). The basic

concept of a tree is created by understanding all its parts and how they relate to each other. Understanding the FSSD works in the same manner.

System	The global socio-ecological system (Society within the biosphere) An overview of the Sustainability Challenge				
\$					
Success	A Society that complies with 4 Sustainability Principles				
\$					
Strategic	Backcasting from Success (The ABCD Process) The 3 Prioritization Questions				
\$					
Actions The Actions that help move the global socio-ecolo system towards sustainability					
\$					
Tools	Tools that support efforts to reach global sustainability				

Figure 1.2. The Framework for Strategic Sustainable Development.

At the heart of the FSSD is the ABCD Process (i.e. more commonly known as the Backcasting Process) found on the Strategic Level. Backcasting is a process for attaining a desired future (e.g. sustainability) and is highly recommended as part of strategic planning towards a successful result (Dreborg 1996). The ABCD Backcasting Process is intended as a strategic planning tool to implement the FSSD in the real world.

The four steps of the ABCD Backcasting Process are:

A-Step: Building a Shared Understanding and Vision

B-Step: Assessing the Current Reality **C-Step:** Brainstorming possible Actions

D-Step: Actions Prioritization (Ny et al. 2006)

A-Step: Sustainability is considered to be the shared understanding and vision of success for a sustainable society. Creating this shared vision of a successful sustainable future is the A-Step of the ABCD Backcasting Process

B-Step: Once the shared vision of success is created, society then needs to assess its current reality to understand what parts are already in compliance with the 4 SPs, what are not, and what resources are available to move to sustainability. Developing an accurate baseline assessment is the B-Step.

C-Step: In the C-Step, a multitude of unedited highly creative ideas meant to move society towards sustainability are generated in a brainstorming process.

D-Step: Putting the many creative ideas produced in the C-Step into a prioritized structure is the D-Step. To move strategically towards sustainability actions need to be critically evaluated with 3 Prioritization Ouestions:

Right Direction: Does this action idea move society towards sustainability?

Flexibility: Does this action idea provide for flexibility when moving towards sustainability?

Good Return-ROI: Does this action idea provide a sufficient return on investment of collective time, financial, labor, etc. efforts? (Holmberg and Robèrt 2000)

The FSSD provides strategic planning for Sustainable Development by making it more operational in a complex socio-ecological system (Robèrt et al. 2002). The ABCD Process provides a clear process for reaching the shared vision of a sustainable society by using the effective method of backcasting from Success. The 4 Sustainability Principles help society understand what not to do to make the socio-ecological system sustainable. The first 3 principles focus on ecological sustainability; the fourth principle on the social role of humans and their actions in defining sustainability:

"Further, acknowledging that human action is the primary cause of the rapid change we see in nature today, they included a fourth system condition that focuses on the social and economic considerations that drive those actions and the capacity of human beings to meet their basic needs" (The Natural Step 2012).

As humans are the main reason for the dramatic ecological changes (IPCC 2007) with increasing impacts to society, concentrated study of this socioecological sustainability challenge is of critical urgency. Understanding Social Sustainability better should be a key focus to do this (Vallance, Perkins, Dixon 2011).

1.2 Social Sustainability

1.2.1 The Social Sustainability Challenge

"Long-term Social Sustainability depends on understanding and controlling complexity" (Tainter 2006, 91).

An increasing human population attempting to meet its basic human needs within a highly interconnected social system within the system limits of the biosphere could be considered the Social Sustainability Challenge within the overall sustainability challenge. Each day, more people enter a world where currently 80% of the global population lives on less than \$10/day (Chen and Ravallion 2008). Continuing social problems are evidence of the socio-ecological system's decreasing ability to provide needed services to the human population (Amnesty International 2009). The root causes of these issues are known as systemic conditions (i.e. barriers) that cause serious challenge to people in society trying to provide for themselves (Benaim et al. 2008).

Social Sustainability currently has all the symptoms of being a 'wicked problem'; this concept, from design theorists Horst Rittel and Melvin M. Webber, describes a problem with very complex interdependent factors (e.g. conflicting stakeholder issues, unpredictability, vagueness) causing serious challenges or even the impossibility of solution. Evolving, inconsistent and insufficient system understanding and requirements cause these problems to be very difficult to find solutions for using only previous methods (Rittel and Webber 1973).

"The search for scientific bases for confronting problems of social policy is bound to fail, because of the nature of these problems. They are 'wicked' problems, whereas science has developed to deal with 'tame' problems. Policy problems cannot be definitively described. Moreover, in a pluralistic society there is nothing like the undisputable public good; there is no objective definition of equity; policies that respond to social problems cannot be meaningfully correct or false; and it makes no sense to talk about optimal solutions to social problems unless severe qualifications are imposed first. Even worse, there are no solutions in the sense of definitive and objective answers" (Rittel and Webber 1973, 155).

Although originally used to describe climate change policy complexity (Lazarus 2009), the evolved term *super* wicked problem can also apply to Social Sustainability. In addition to the original messy social conditions that constitute a resistant wickedness (i.e. resistance to solution), the following difficult conditions contribute to make this challenge *super* wicked:

- 1. Waiting longer increases the cost. The more time used to deal with the problem; the more difficult it is to do so.
- 2. The people responsible for the problem and who can best work on solutions are also those who are least interested to do so urgently.
- 3. There is no organization or governmental system that can develop, construct, and oversee the necessary legal system to solve a problem of this complexity (Lazarus 2009).

Social Sustainability research is made even more challenging because the system being studied (the social system) cannot be viewed externally (as humans are attempting to do research on themselves) (Missimer et al. 2010).

The largest complex network humans have ever interacted with directly is the earth and its socio-ecological sub-systems. All these systems are highly interconnected. To help with understanding complex systems, a holistic approach to systemic information and how to envision new forms of society based upon ecological models may be needed. Some system researchers focus on inherent web-like structures and the interconnectedness of all the parts in all systems (Pisani 2007):

"The design principles of our future social institutions must be consistent with the principles of organization that nature has evolved to sustain the web of life. A unified conceptual framework for the understanding of material and social structures will be essential for this task..." (Capra 2004, Preface).

The idea of systemic information generated by the relationships among all the parts plays a major role in the character of an entire system (Beaudry 2012). "Social challenges require systemic solutions" (Brown and Wyatt 2010, 34). A core principle of complex systems theory is that one cannot predict what happens when one part is altered, even if there is study towards and understanding of every single component and its function. The social system is an example of just such a complex relationship. Actions within a system can affect the whole system. Because of this complexity and a similar need to use robust methods to effectively develop SPs 1 to 3, the Social Sustainability challenge demands a similar scientific approach (Missimer et al. 2010). Using the scientifically developed FSSD (Broman et al. 2000) as a guide, the complexity of a super wicked problem such as Social Sustainability may have the possibility of being decreased if all aspects of the system are properly defined.

1.2.2 Defining Social Sustainability

Social Sustainability is about people. It is about people relating to each other as individuals and in larger groups collectively:

"social sustainability refers to the personal and societal assets, rules and processes that empower individuals and communities to participate in the long term and fair achievement of adequate and economically achievable standards of life based on self-expressed needs and aspirations within the physical boundaries of places and the planet as a whole" (Colantonio 2007, 7).

Social Sustainability focuses on trying to meet all human needs within the closed system of the Earth's biosphere now and in the future. The social system is the overall context for this activity. Sustainable Development originally aspired to use a balanced approach to intergenerational ecological and social challenges of sustainability (WCED 1987). However, until only recently, environmental and economic dimensions have continued to take precedence over the social dimension within the global sustainability

agenda. Social Sustainability is still an emerging concept; the least studied and often overlooked dimension of Sustainable Development. Academically, there is much difficulty in the understanding of the concept Social Sustainability and there continues to be no general agreement over its definition. As a result, there is limited literature, no systematic study of this concept completed yet, and little attempt to define it as a dimension separate from sustainable development (Colantonio 2007).

Social Sustainability, by its very nature of focusing on humans attempting to meet their needs within a growing society within the world's limited biosphere, is a major part of the overall systemic complexity and sustainability challenge. There has been recent inquiry regarding the FSSD into the need for increased science-based analysis and development with regards to Social Sustainability; to achieve all aspects of Sustainable Development both ecological and Social Sustainability need to be addressed equally (Missimer et al. 2010). Related, there is critical research that challenges the previously heavy focus on ecological issues and specifically points to a new era where Social Sustainability has a substantially increased role in Sustainable Development and its research:

"we challenge the now common reading of sustainable development as an environmental problem and, instead, recast the idea as a social imperative that demands well-informed, theoretically robust yet pragmatic, social solutions" (Vallance, Perkins, Dixon 2011, 347).

1.2.3 Understanding Social Sustainability

This research project considered 3 main areas of content for developing a better understanding of Social Sustainability: the current theoretical framework of topics surrounding Social Sustainability, Social Charters, and the Framework for Strategic Sustainable Development. This led to identification of a set of strategies and central values that guides a worldview of thinking and acting. The theoretical roots of these concepts offer a new interpretation of The Golden Rule. They help define the relationship between people in the context of globalization and multiculturalism. Concepts of globalization and cosmopolitanism developed in these ideas are based on modern concepts and theories of social science. These concepts facilitate and continue the process of proximity of central values and strategic notions in spite of some ethical challenges (Budd et al. 2008).

Equality, empowerment, respect, tolerance, justice, transparency, responsibility, trust, and empathy are the key concepts. Each of these strategies appreciates the other similar values that can help actualize human needs individually and collectively. They enhance the quality of life in a sustainable society at the smallest entity, the individual, all the way up to higher levels of society.

Social Sustainability Theoretical Framework. For achieving a solid understanding of Social Sustainability action within the FSSD, the review and development of another level of theoretical orientation is highly desirable and necessary for effective social research. So, "in a sustainable society...[where] people are not subject to conditions that systematically undermine their capacity to meet their needs" (Robèrt 2000, 245), Social Sustainability is meant "to serve as a foundation for responding to social issues" (Strathcona County 2007, 6). To more fully understand this, a theoretical framework based on reviewed perspectives in Social Sustainability is needed for this project's research. The derivation of this framework and criteria list are expanded upon in Section 2.2 (see Appendix R). The key theoretical paradigms of Social Sustainability of this research are:

Basic Human Needs. The 1987 WCED Report focused on meeting needs with regards to intergenerational Sustainable Development. 4 layers of Maslow's hierarchy of needs include Esteem and Self-Actualization, Friendship/Belongingness and Love, Security, and Physiological Needs (Maslow 1943). Max-Neef classified a transdisciplinary approach: a holistic matrix of human needs, satisfiers, enablers, and barriers. "Human Scale Development is about people and not about objects" (Max-Neef 1991, 16).

Human Rights. This approach to Sustainable Development refers to the elimination of all forms of discrimination and acceptance of human rights "in the idea that every person anywhere in the world, irrespective of citizenship or territorial legislation, has some basic rights, which others should respect" (Sen 2004).

Social Capital. Social Capital refers to belonging to society with the informal and formal relationships of connectedness between people focused on building trust (Coleman 1988). Social Capital is defined as "the aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalized

relationships of mutual acquaintance or recognition" (Bourdieu 1986, 248). Social Capital features "social organization such as networks, norms, and social trust that facilitate coordination and cooperation for mutual benefit" (Putnam 1995, 67).

Well-being and Happiness: From this perspective, the obligation of Sustainable Development is to provide the conditions to achieve a good living standard and equity of access to key services (including health, education, transport, housing, and recreation) (McKenzie 2004). It refers to a "fair achievement of adequate and economically achievable standards of life based on self-expressed needs and aspirations within the physical boundaries of places and the planet as a whole" (Colantonio 2007, 7).

Transition Management: Transition management is a model for sustainable mobility and based on complex systems theory (i.e. variation and selection, emergence, co-evolution, and self-organization). "Fostering sustainability transitions is what we call transition management" (Rotmans and Loorbach 2009).

3 Main Social Charters. 3 main international charters for Social Sustainability provide current protocols, conceptual values, and principles related to Social Sustainability (Lubbers et al. 2008). The collective content of these international protocols were analyzed for possible criteria to use in further application in this study.

The Universal Declaration of Human Rights (UN Charter):

This international document includes resources, principles, ideas on cultural diversity, and basic human rights:

"Therefore, The General Assembly proclaims this Universal Declaration of Human Rights as a common standard of achievement for all peoples and all nations, to the end that every individual and every organ of society, keeping this Declaration constantly in mind, shall strive by teaching and education to promote respect for these rights and freedoms and by progressive measures, national and international, to secure their universal and effective recognition and observance, both among the peoples of Member States themselves and among the peoples of territories under their jurisdiction" (United Nations 2012).

The Earth Charter: The Earth Charter is a fresh, broad conception of what constitutes a global sustainable community and holistic Sustainable Development (see Appendix A):

The Earth Charter is a declaration of fundamental ethical principles for building a just, sustainable and peaceful global society in the 21st century. It seeks to inspire in all people a new sense of global interdependence and shared responsibility for the well-being of the whole human family, the greater community of life, and future generations. It is a vision of hope and a call to action. The Earth Charter is centrally concerned with the transition to sustainable ways of living and sustainable human development (The Earth Charter 2012).

ISO26000: An International Standard Organization (ISO) tool for providing guidance on organizational Social Responsibility within all types of public and private sectors in developed and developing countries:

ISO26000 provides guidance to all types of organizations, regardless of their size or location, on: concepts, terms and definitions related to social responsibility; the background, trends and characteristics of social responsibility; principles and practices relating to social responsibility; the core subjects and issues of social responsibility; integrating, implementing and promoting socially responsible behavior throughout the organization and, through its policies and practices, within its sphere of influence; identifying and engaging with stakeholders; and communicating commitments, performance and other information related to social responsibility (ISO 2010).

Social Sustainability of the FSSD. Social Sustainability of the FSSD is defined by Sustainability Principle 4. Social Sustainability will be achieved within the social system when all the systemic conditions that undermine people's capacity to meet their needs have been removed. The whole system five level approach of the FSSD helps to better understand current Social Sustainability research by reducing complexity through a strategic framework perspective as outlined below:

System: The Social System: trust/social capital/basic human needs

Success: Removal of all conditions that systematically undermine

people's capacity to meet their needs.

Strategic: Backcasting Process and The Golden Rule /empathy

Actions: Practical activities that help move the Social System

towards Social Sustainability.

Tools: Tools that support efforts to reach Social Sustainability

System Level: The Social System

The social system and its subsystems are within the biosphere. The social system is a highly interconnected and interrelated context of individuals and groups formed as organizations. Trust, social capital, and basic human needs are the main concepts that define the Social System. A paradox is present in meeting human needs of the present and future generations and between individual and collective requirements.

Success Level: Elimination of All Social Sustainability Barriers
The Success Level of Social Sustainability is defined as: the removal of all conditions that systematically undermine people's capacity to meet their human needs (Robèrt 2000) in consideration of the other 3 SPs as well.

Strategic Level: Guidelines for Social Sustainability

In addition to guidelines for prioritized strategic future planning (i.e. the ABCD backcasting process) (Holmberg 1998) *The Golden Rule* is used to focus on humans' ability to have empathy for others. Empathy is the ability to understand and share the feelings of another (Oxford Dictionaries 2010).

The Golden Rule: You should not do to others what you do not wish them to do to you.

Action Level: Practical Activities towards Social Sustainability
Social Actions are practical activities that help move the Social System towards Social Sustainability. Social Actions are highly connected to The Golden Rule, empathy, and other core characteristics of Social Sustainability: Cooperation, Transparency, Openness, Inclusiveness, and Involvement (Benaim et al. 2008). Actions are typically context and culturally specific.

Tools Level: Devices to Support Sustainability Efforts
Social Sustainability requires various tools at all levels to move towards
full Sustainability. These tools often are used to directly support
Actions

In a complex socio-ecological system with intergenerational needs, pursuing ecological literacy could be advantageous in creating a sustainable society. Ecological literacy "means understanding the principles of organization of ecological communities (ecosystems) and using those principles creating sustainable human communities" (Capra 1996, 297). If a tree can be considered a model of a sustainable complex system, the FSSD is the strategic plan for this system. To begin understanding Social Sustainability within this complex system, one could start at various points of this scientific investigation: the roots, the trunk or branches, perhaps even - the leaves

1.3 Research Questions

- 1. What are leading Social Sustainability actions to remove conditions that systematically undermine people's capacity to meet their needs?
- 2. How can sustainability practitioners integrate general Strategic Social Sustainability Actions into sustainable development projects?

1.4 Research Purpose, Scope, and Limitations

1.4.1 Research Purpose

The main purposes of this research project are:

Purpose 1: Decrease Complexity in Social Sustainability
Social Sustainability is full of interdependent complexity. Providing
some sense of organization (e.g. categorization of actions) may help
sustainability practitioners to decrease these challenges to moving
towards Sustainability.

Purpose 2: Removing the System Barriers to Social Sustainability In the FSSD, Actions are meant to help society move towards global sustainability. In Social Sustainability, this can be done by strategically organizing these actions to effectively remove all system barriers that undermine people's capacity to meet their basic human needs.

Purpose 3: Further Development and Contribution to the FSSD

The FSSD offers the opportunity for further development in some areas of Social Sustainability (Missimer et al. 2010). This study focuses on continued definition of the Actions Level of SP 4 through identification of the leading Social Sustainability Actions and how to best integrate these into sustainable development projects.

1.4.2 Research Scope

The Scope of this research project is defined as:

Sustainability Practitioners in The Earth Charter Initiative organization doing grass roots Social Sustainability development work. Sustainability Practitioners are defined as a broad range of people who work towards achieving socio-ecological sustainability through governmental, community, educational, and regulatory means in a range of diverse organizations ranging from traditional environmental sustainability settings to organizations focusing on Social Sustainability (New South Wales Australia Government Office of Environment and Heritage 2012).

Scope selection rationale:

The Earth Charter possesses a majority of the elements of the FSSD and the 4 SPs in their organizational principles and values (see Appendix S).

Intended audience:

Sustainability practitioners and leaders who will work towards strategic Social Sustainability.

1.4.3 Limitations

The limitations of this research project are defined as:

• Limited and contradictory literature in Social Sustainability resources.

"As a result, there is limited literature that focuses on social sustainability to the extent that a systematic study of this concept is still missing" (Colantonio 2007, 3).

- No clear definition of Social Sustainability Practitioners. "There are no *Social Sustainability* practitioners. This is ironic because people work in the social sciences and they are doing a job that has some social implication but in my experience, no one defines himself / herself as a Social Sustainability practitioner" (Colantonio 2012).
- Research project time frame: in dealing with a subject as broad and complex as Social Sustainability, the research team found that there was a minimum of time available to dive into deep areas of literature review and case studies. Social Sustainability and its conceptual framework are indeed rich and intriguing in their complexity.
- Inability for travel to case study or interview locations: the research team would have liked to travel to actual Earth Charter affiliate locations and completed the interviews in a live context setting with sustainability practitioners and experts. We believe this would add much to the reliability and value of the research data.
- There are no current standards for Earth Charter case studies documentation.

1.5 The Earth Charter Initiative

"The Earth Charter is an international declaration of fundamental ethical principles for building a just, sustainable and peaceful global society in the 21st century. Developed by thousands of experts and concerned individuals from around the world, it is a vision of hope and a call to action" (Hallsmith 2005).

Following the 1987 United Nations WCED's definition of Sustainable Development, a new type of a charter to clarify the needed principles was developed using extensive multi-stakeholder involvement, international governmental support, and the creation of additional administrative resources to continue guidance of the project (The Earth Charter 2012).

Ecological integrity is one major theme of The Earth Charter. However,

The Earth Charter recognizes that the goals of ecological protection, the eradication of poverty, equitable economic development, respect for human rights, democracy, and peace are interdependent and indivisible. It provides, therefore, a new, inclusive, integrated ethical framework to guide the transition to a sustainable future (The Earth Charter 2012).

...the Earth Charter tries to overcome exaggerated individualism and dangerous short-term thinking... (Lubbers et al. 2008).

1.5.1 Reasons for Earth Charter Inclusion and Scope Selection

Reason 1: Comprehensive suitability for research scope.

In a comparative review of the ISO26000 standard, the UN Charter on Human Rights and the Earth Charter, The Earth Charter was found to be more suitable for this Social Sustainability Actions research because of its full spectrum of socio-ecological content coverage.

The Earth Charter is a universal expression of ethical principles to foster sustainable development (The Earth Charter 2012). It includes comprehensive ecological, economic, and social aspects for defining Social Sustainability for this research project.

The Earth Charter Principles are written as a set of global guidelines listed under the headings of:

I Respect and Care for the Community

II Ecological Integrity

III Social and Economic Justice

IV Democracy, Nonviolence, and Peace (see Appendix A)

The Earth Charter has a shared vision of basic values to provide an ethical foundation for the emerging world community.

"At a time when major changes in how we think and live are urgently needed, the Earth Charter challenges us to examine our values and to choose a better way. It calls on us to search for common ground in the midst of our diversity and to embrace a new ethical vision that is shared by growing numbers of people in many nations and cultures throughout the world" (The Earth Charter 2012).

Reason 2: Alignment with the FSSD socio-ecological approach
Previous research within a recent Blekinge Institute of Technology (BTH)
Master's in Strategic Leadership towards Sustainability (MSLS) course
provided an appropriate and independent academic review of The Earth
Charter to support content and principles supported by the FSSD.
Alignment with the socio-ecological aspects of the FSSD confirmed
suitability of The Earth Charter for a research project focusing on
researching Social Sustainability actions of the FSSD (see Appendix S).

(Sustainable) Development is about being more, not having more.

Alide Roerink

Earth Charter Initiative, The Netherlands

2 Methodology

2.1 Research Methodology Overview

The research methodology was based on finding the best data results and analysis to answer the research questions. Qualitative and quantitative research method approaches were used. These consisted of literature review, questionnaire surveying, case study analysis, and interviews.

Qualitative Methods

The qualitative method of research is a creative, flexible, and interactive process and was deemed suitable for this type of social research project. Due to the specific nature and complexity of understanding Social Sustainability research design it was desirable to use qualitative methods for deep interviews (semi-structured and voluntary interviews) and content analysis.

"Design in qualitative research is an ongoing process that involves 'tacking' back and forth between the different components of the design, assessing the implications of goals, theories, research questions, methods, and validity threats for one another" (Maxwell 2004, 3).

Quantitative Methods:

In quantitative research, surveying is a direct way to get information and data from people about how they think, what they do, and how they act. In this research project, information from sustainability practitioners was gathered through questionnaires, case studies, and interviews using a Social Sustainability Criteria Tool developed by the project research team.

2.2 Social Sustainability Actions Criteria Development

To collect the ample and content-rich data for this research project, the research methodology process required an appropriate criteria list to frame and coordinate all further aspects of data gathering and analysis. The Social Sustainability Actions Criteria list was developed from a careful combination of the Social Sustainability theoretical framework, the 3 main Social Charters, and the FSSD. Continued and expanded review of subject literature was also used to provide additional definitions of Social

Sustainability. "Content analysis is a method for analyzing the content of a variety of data, such as visual and verbal data. It enables the reduction of phenomena or events into defined categories so as to better analyze and interpret them" (Harwood 2003, 479).

Qualitative coding of Social Sustainability concepts was used during the reading of the charter documents and analyzing of the data results. The coding process used units of analysis to tag and highlight criteria concepts. One unit of content could be a single word or symbol (Holsti 1968; White 2006). These units of analysis were addressed and defined by the strategic level of SP 4 as well. This type of coding influenced criteria discovery during the process by linking to similar concepts and words to confirm new ones. Each word (i.e. data collection units) in different documents (i.e. sampling units) was tagged and then categorized into clustered word groups. Emerging categories were listed that embodied the strategic ideas about the interconnected relationships of people within the social system. This type of clustering research approach is common in qualitative content analysis (White 2006).

To avoid the risk of researcher bias, the research project team used a strategy of having more than one person review all research information to improve objectivity and validity (White 2006). The goal of this approach is to achieve the same results from the same documentation by different researchers

Development of the research criteria set consisted of a 3 step process. The first step in searching for criteria started with a review of the 3 Social Charters in the context of the FSSD. The step refocused on The Earth Charter and augmenting it with any missing content an FSSD analysis could provide. The third step included reviewing the previous criteria set through the lens of the Social Sustainability theoretical framework. This 3 step process provided a critical and thorough set of research methodology tests to find and confirm the optimal criteria coverage related to requirements for attaining Social Sustainability within the project scope.

2.2.1 Research Criteria Set 1

Research Criteria Set 1 was created from information gathered from:

- The 3 Main Social Charters
- FSSD

The Social Sustainability Actions Criteria Development review started with the concept of Empathy from the Strategic Level of the FSSD for SP 4. Because the Social System is partially defined by human needs, the 9 categories of basic human needs (Max-Neef 1991) were essential to the criteria search and analysis. The following concepts were also considered as fundamental to Social Sustainability: Equality, Empowerment, Respect, Tolerance, Justice, Transparency, Responsibility, and Trust. 18 initial Social Sustainability Actions Criteria were discovered.

2.2.2 Research Criteria Set 2

Research Criteria Set 2 was created from information gathered from:

- One Main Social Sustainability Charter: The Earth Charter
- FSSD

The research team deemed The Earth Charter most optimal for use within this research project due to its balance of socio-ecological aspects, overlap with the other charters, and the focused project scope on The Earth Charter Sustainability Practitioners. Comparative reading and coding of the entire Earth Charter document plus analytical review against the FSSD for Social Sustainability (i.e. SP4 System, Success, and Strategic levels) were used. 19 Social Sustainability criteria were discovered. These included 15 from The Earth Charter and 4 from the FSSD.

2.2.3 Research Criteria Set 3

Research Criteria Set 3 was created from information gathered from:

- Research Criteria Set 2
- The Social Sustainability Theoretical Framework

Research Criteria Set 2 was then reviewed against the major concept areas of the Social Sustainability Theoretical Framework to check for suitable criteria coverage. This review confirmed that all major topic areas of the Social Sustainability theoretical framework were covered by the final 19 Social Sustainability Action Criteria. These 19 criteria would prove to be invaluable in finding the main actions of Social Sustainability (see Appendix T). These 19 final criteria would hereafter be referred to as The Social Sustainability Actions Criteria:

Table 2.1. The Social Sustainability Actions Criteria

Subsistence	Protection	Respect
Leisure (Idleness)	Integrity	Tolerance
Recognition (Identity)	Freedom	Empowerment
Participation	Trust	Diversity
Love (Affection)	Equality / Justice	Transparency
Understanding	Responsibility	Creation
		Empathy

2.3 Research Data Collection Process

2.3.1 Survey Questionnaire Research Method

The survey questionnaire research method was a web-based survey created from a general set of research questions focusing on gaining knowledge from survey participants about their familiarity with Social Sustainability. This initial method investigated the project process used in actual grass roots Social Sustainability work and the personal views of the participating sustainability practitioners on the 19 Social Sustainability Actions Criteria.

2.3.2 Case Study Research Method

The case study review started with selecting an appropriate sample from published Earth Charter case study documentation. In order to focus on sample diversity and global coverage the selection criteria used was: international location, project scale, and Social Sustainability emphasis (see Appendix B & D). Data was collected from case studies rather than on-site observation due to the parameters of research project time frame, diverse international case study locations, and the ample resource quality of the Earth Charter documentation. The primary case study sources were: *Good Practices using The Earth Charter* (Earth Charter 2007) and The Earth Charter Initiative website's *Areas of Work* section (Earth Charter 2012). The goal of the case study research method was to collect a variety of actual context-specific actions and move towards general actions through data analysis extrapolation (see Appendix B).

Case Study Research Process. Following the research team's selection of final case studies to include in the research sample, a Case Study Actions Collection Template was created to document context-specific actions from each project (see Appendix E). This template documented the case study title, date, project purpose, primary sustainability issues of the case study project context, and a list of the 19 Social Sustainability Action Criteria. Context-specific actions were collected from each selected case study and placed next to the appropriate criteria.

To avoid bias, case studies were first reviewed by each researcher independently. Each researcher collected context-specific actions and recorded them on a separate Case Study Actions Collection Template for each case study. Following this initial collection of actions, the context-specific action sheets were assembled, collectively reviewed by the research team, and an edited non-duplicating set of context-specific actions was created. Next, each case study's set of reviewed context-specific actions was transferred into the General Actions Spreadsheet. The General Actions Spreadsheet listed all the case study project titles and their extrapolated set of context-specific actions in the first vertical column. These actions were then clustered into similar meaning categories under a second column called: General Actions.

The initial context-specific review process revealed overlap of some actions descriptions. General action clustering combined similar action types (e.g. having a meeting, doing a presentation, and doing a training workshop were combined into one clustered action description: *Have a Meeting*). A total count of how many times these general actions occurred in all the case studies was needed to show the quantity value of this action. The general actions were then tallied and documented on one final spreadsheet named The Case Study Actions Value Analysis Spreadsheet (see Appendix J & K).

Actions Coding. Following is an example of the action's coding extrapolation process (i.e. from initial context-specific to general) developed during the case study process and later used on the interviews process as well:

Context-specific Action
Coding Example 1:

Brought the elders of the village together to be introduced to the Earth Charter

General Action Description

Have a Meeting

Coding Example 2:

Held a training workshop in the municipal offices to share the Earth Charter principles

Have a Meeting

The coding extrapolation of the case study process was to produce general actions that would then be analyzed more rigorously with the 19 Social Sustainability Actions Criteria to find the general actions' individual Social Sustainability Action Values. The Case Study Actions Value Analysis Spreadsheet would list each clustered group of general actions and how many times they occurred in all the case studies. The goal of this spreadsheet was to analyze each case study general action for their scored value towards attaining each Social Sustainability Criteria.

The 19 Social Sustainability Action Criteria were placed along an upper horizontal axis of the spreadsheet to prepare a matrix analysis of the general action against each Criteria item. The researchers came to consensus on what extent each General Action supported the Social Sustainability Action Criteria items (e.g. To what extent does Having a Meeting contribute to removing the system conditions that undermine people's capacity to meet their basic need for *Participation*? Vote 0 or 1). A column titled Total Votes documented the overall confidence in that General Action to reach Social Sustainability (e.g. Share Information: 47 votes). With the spreadsheet matrix format it was also possible to calculate the total number of votes for each Social Sustainability Action Criteria easily as well (e.g. Participation votes = 48, Freedom = 32, etc.). To find the overall Social Sustainability Action Value Score, the following equation was used (see Appendix J & K):

Actions Quantity (#) x Voting Score = Social Sustainability
Action Value Score

This value score takes into consideration the confidence for removing barriers to Social Sustainability Criteria (i.e. the voting score) multiplied by the number of times the action was performed in the entire case study sample set. The actions and their final Social Sustainability Action Value Scores were visually translated into a horizontal bar graph to learn which were the leading actions of the case studies method data sample (see Appendix H).

Note: due to substantial time required to process the multiple collection template sheets, the recording of context-specific actions during this

process changed slightly approximately half way through the case study method data collection process. The research team decided to collectively abandon the time consuming recording of initial context-specific actions first onto Case Study Actions Collection Template (see Appendix E) followed by data entry onto a general actions sheet then onto the final value scoring spreadsheet. The research team became instead very efficient at critically examining the original case studies, informally recording the context-specific actions in a digital text document, discussing them collectively, and then recording the decided general actions for each case study directly onto the final The Case Study Actions Value Analysis Spreadsheet ready to be value scored. These actions could now be analyzed against the 19 Social Sustainability Action Criteria in the voting process of the final Case Study Actions Value Analysis Spreadsheet with a minimum of time for data entry processing.

2.3.3 Interviews Research Method

The data collection and scoring for the interviews used a process very similar to the case studies method. Sustainability practitioners and experts in a diverse set of international locations and occupations were interviewed via recorded telephone calls to find Social Sustainability actions (see Appendix D).

Interview Research Method Process. To begin the interviews research, a semi-structured set of interview questions was created from the original research questionnaire (see Appendix F). These interview questions used the 19 Social Sustainability Action Criteria and the FSSD as a content guide (see Appendix S). A list of possible interview candidates were initially provided from The Earth Charter headquarters in Costa Rica. Additional Earth Charter practitioners and experts were identified through Earth Charter literature, the Earth Charter website, case studies, and via their academic or professional affiliation with Social Sustainability (see Appendix C). Similar to the case study criteria for choosing, the participants were selected based on international location diversity and scale of practice. The final list of 9 participants were from India, Africa, The United States, UK, Australia, and the Netherlands. All participants were sent the interview questions before the scheduled interview for preparation. The interviews ranged between 50 to 70 minutes each and focused on defining Social Sustainability, discussion of a recent grass roots Social Sustainability project, and what actions Social Sustainability practitioners use in grass roots Social Sustainability projects.

A full text transcription was completed after each recorded interview. Each team member then read the transcription independently and found specific actions with additional supporting quotes. These actions were clustered and coded based upon the general actions titles used previously. After a comparison of each individual researcher's interview analysis observations, the clustered general interview actions were documented on one final spreadsheet named The Interviews Actions Value Analysis Spreadsheet. This data spreadsheet had the identical matrix format (i.e. general actions list vs. Social Sustainability Actions Criteria) as the previously used Case Study Actions Value Analysis Spreadsheet (see Appendix L & M).

The general actions were then counted by asking: "How many times did this action get stated in these interviews?" The researchers determined that due to the actions being discussed in a conversation style during the interview, any action type mentioned would be counted only once per interview. The total amount of each action per interview was recorded into the Interviews Actions Value Analysis Spreadsheet. The 3 project researchers then critically reviewed these actions against the 19 Social Sustainability Action Criteria in a manner very similar to that used for the scoring evaluation of the case studies data set. The same math formulas used in the case study research analysis were used to determine the Social Sustainability Action Value Score for the interviews (see Appendix L & M). The interviews general actions final Social Sustainability Action Value Scores were also visually translated into a horizontal bar graph to learn which were the leading actions of this data sample (see Appendix H).

Interviews Actions Value Scoring Process. Each researcher voiced consensus with 1 point in this Social Sustainability Action Criteria review as well. The voting range was from 0 to 3 points for each action vs. Social Sustainability Actions Criteria item (see Appendix L). As before, in this step of the interviews method tallying process a vote score of 0 - 3 equated to successful worth for consideration as an action capable of meeting the conditions for that Social Sustainability Action Criteria item. These votes werethen tallied to find the overall Voting Score. The equation used (see Appendix L & M) for the Social Sustainability Action Value Score was:

Actions Quantity (#) x Voting Score = Social Sustainability
Action Value Score

2.3.4 Combined Data Sets Method

Following the generation of the 2 final data sets (i.e. case studies and interviews methods) and their corresponding visual bar graphs depicting the leading actions, one final horizontal bar graph presenting both sets of data in different colors on the same bar graph was created (see Appendix I).

2.3.5 Miscellaneous Data Graphing

To explore different perspectives on the original data sets, 2 additional (i.e. miscellaneous) horizontal bar graphs were created. These depicted:

- General Actions Total Number Counts
- General Actions Social Sustainability Criteria Voting Scores only

2.4 Validity

The research project used a hybrid mix of qualitative and quantitative methodology focusing on these 4 processes: literature review, questionnaire, case studies, and interviews (see Appendix G). This approach combined several methods to improve measures and reliability towards valid conclusions.

"Is the indicator a true reflection of the facts? Was the data collected using scientifically defensible measurement techniques? Is the indicator verifiable and reproducible? Methodological rigor is needed to make the data credible for both experts and laypeople" (Miller 2007, 7).

Independent and asynchronous review of research information was used whenever possible to limit bias.

3 Results

3.1 Research Question 1 Results

The research project methodology produced 2 sets of general actions from different information source types (case studies method and interviews method). Once combined and evaluated, the result was 27 general actions. The 27 general Social Sustainability actions ranged in composition from simple to compound combinations of actions within a general action. Based upon the research, the leading Social Sustainability actions to remove conditions that systematically undermine people's capacity to meet their needs appear to be the following:

Table 3.1. 4 Leading Actions of Social Sustainability

Share Information Do Engagement Activities

Have a Meeting Use Education

The remaining 23 general actions of Social Sustainability from the combined and compared list of 27 total actions are:

Use Decision-Making Do a Comparison / Evaluation Create Shared Vision Make Things Understandable

Do Creative Arts Use Tools
Harvest Information Use Reflection
Consider Local Culture Do Brainstorming

Identify Barriers Use Consultation/Ask Good Questions

Do Real Experiences Do Planning

Use Observation Use Common Language

Use Mapping Stay Connected
Consider New Ideas Make an Investment
Create Space Make Behavior Change
Use Listening

The research results were derived from 198 context-specific case study actions; 8 of the 9 interviews with sustainability practitioners and experts offered actions as well. The final result for research question 1 was determined by comparing leading actions of the 2 research data sets (see Appendix N):

- The case study method resulted in a data set of 17 general actions indicating 3 leading Social Sustainability actions
- The interview method resulted in a data set of 27 general actions indicating 3 leading Social Sustainability actions

The results of the 2 data sets were compared to find any overlap, patterning, or majority relationships between the data. It was found that 17 general actions were common between both data sets. Each data set produced 3 leading actions with very high Social Sustainability Action Criteria Value Scores. The actions data set results were then combined to identify 4 Leading Actions of Social Sustainability based upon the highest overall Social Sustainability Criteria Action Value Scoring. An action was deemed a 'leading' action if its final score showed it to be significantly ahead of other actions (see Appendices H - M).

Following is a basic example of the case study Social Sustainability Action Value Scoring process:

	Actions		Action
Action:	Quantity	Vote Score	Value Score
Sharing Information	50	47	2350 *
Use Engagement Activities	16	45	720

The Value Score for each action was the result of the following equation:

Actions Quantity (#) x Voting Score = Social Sustainability

Action Value Score

The 3 actions with the highest Social Sustainability Action Value Scores were identified as possible leading actions of the case study process. Note: all tentative data results must always be considered with the overall

compliance of all 4 Sustainability Principles SP 1 to 4 (ecological and social). Following is an example of the interview method scoring process:

	Actions		Action
Action:	Quantity	Vote Score	Value Score
Sharing Information	3	47	329
Use Engagement Activities	5	45	225

The Value Score for each action was the result of the following equation:

Actions Quantity (#) x Voting Score = Social Sustainability

Action Value Score

Following this value scoring process yet before processing the data into a visual bar graph, each general action was reviewed with the D-Step Prioritization Questions. In this step of the final analysis process a vote score of at least 2 out of 3 researcher votes equated to successful worth for consideration as an action possibly capable of being a Social Sustainability action. The data sets were then computed into a visual bar graph for each all the data sets (see Appendices H - M). During final comparing and combining of these 2 sets with the visual bar graphs, the data showed the final 4 leading actions by way of comparing the 2 sets of leading actions. The result was that 2 leading actions were common (i.e. had overlap between both data set results) and 2 other actions remained with similar high scores. The result is 4 Leading Actions of Social Sustainability for this project research scope.

3.1.1 The Case Study Results

The case study method of sourcing data was the primary quantitative process used in this study. The documentation of the 21 projects showed sufficient initial evidence of a structured, general purpose, and a community-based approach to actions. It seems that these projects were also highly aligned with the research project needs of focusing on Strategic Sustainable Development: international locations, diversity in scale, and direct local involvement to name only a few (see Appendix B & D). The initial results from the case studies analysis of actions were: *Share Information; Have a Meeting; and Do Engagement Activities*.

3.1.2 The Interviews Results

The interview method was a hybrid of qualitative and quantitative process used in this study. Interviewing was used as a second research method to differentiate between data sets (e.g. vs. the case study approach) to gather relevant Social Sustainability data and build data validity. The interviews sample population was a mix of 9 international sustainability practitioners and Social Sustainability experts (5 Earth Charter Social sustainability practitioners and 4 Social Sustainability experts) (see Appendix C). In total, 7 telephone and 2 written interview surveys were performed. The final number of interviews actually used was 8. The specific results from the interviews analysis are: *Share Information; Do Engagement Activities; Use Education*.

Although the project interviews provided examples of general actions used in recent projects and perspectives on the Social Sustainability Actions Criteria - the most compelling and inspiring aspects of this research method were revealed in the spirited and sincere responses from the interview participants (see Appendix P). Following are some of the key specific insights gained from these personal interviews:

Cynthia E. Smith (2012), Curator of Socially Responsible Design at The Cooper Hewitt National Design Museum and Meredith Beaudry (2012), a partner in The Action Mill, both considered Poverty as the most serious social issue. Meredith offered "Poverty is a systemic issue that we are facing all the time...then cascading down from there is a lot of different things -- whether healthcare - food aspects - education - poverty seems to be - and - economics - seems to be one of the largest overarching things you can point to -- then things cascade down from that..."

Related, Victor Phiri (2012) of COPEZambia said there were 3 main Social Sustainability challenges: corruption, disease, and illiteracy.

Dr. Colantonio (2012) of the Oxford Brooks University offered why people need to pay attention to Social Sustainability aspects: "Social sustainability is essentially about people and how people live together. They live with each other not just as individuals - it is how people are communities and

societies as a whole and is about the way they decide to live with each other together".

Earth Charter educator Louise Erdbacher (2012) offered "Most effective actions occur when people feel part of the solution – they own the issue, clearly identify the lack of justice and see their way clear to taking action in a positive and peaceful way".

3.2 Research Question 2 Results

Based upon direct quotes from the interviews, case study review, and ongoing general literature review of grass roots Social Sustainability project work, it was observed that a basic 3 phase project process is used in most applications. With regards to actions distribution within an overall project, the format for structuring project actions is 'Before-During-After'. To significantly increase the strategic planning capabilities of this humble yet ubiquitous project planning method, the strategic planning approach from the FSSD can be applied to this grass roots scheduling format. Considering the research used in this project, the research team proposes that sustainability practitioners could integrate general strategic Social Sustainability actions into sustainable development projects using the ABCD Process for backcasting from the FSSD. This would be done by integrating the FSSD Backcasting Process into the 'During' phase of the basic 'Before-During-After' project process.

Table 3.2 Strategic Grass Roots Social Sustainability Process Model

Before -- During (the ABCD Backcasting Process) -- After

Before Phase:

The data results showed that a group of actions is required before implementing most social projects. For example, *mapping* the project is needed for creating an initial conceptual framework for the project team. Next, the implementation team may need to *observe* the context (e.g. resources, conditions, etc.) for *identification* of existing challenges and

issues. It was shown that sustainability practitioners may need to collaboratively create an inventory of people's needs versus best possible actions; there is also need to know which people to work with by listening and discussing their needs with them. These actions help sustainability practitioners to recognize the barriers of the problem better, understand real conditions, and identify any gaps. Victor Phiri (2012) of COPEZambia mentioned that "practitioners have to consider and understand what the problems of the people are first instead of imposing social sustainability prescriptively". Sustainability practitioners and the grass roots community can prepare some project prerequisites such as creating physical space or doing investment (e.g. investment of time, finances, efforts, etc.) prior to a project start. They co-create a strategic actions plan together then choose the best methods and actions for that community (related to specific contexts and culture).

Table 3.3. Actions that Occur in the Before Project Phase

Before Phase Actions:

Have A Meeting	Do Planning	Create Space
Engage People	Use Observation	Use Listening
Share Information	Use Common Language	Use Consultation/Ask
Make Understandable	Do Investment	Good Questions
Harvest Information	Consider Local Culture	Identify Barriers

During (the ABCD Backcasting Process) Phase:

Every Social Sustainability project can follow the strategic ABCD Backcasting Process in the grass roots During phase of project implementation.

A-Step: Create a Shared Understanding and Vision of Success

The first step of implementation for a project can be structured by multiple actions for *creating a shared understanding and vision of success*. People are the key element in the Social Sustainability field. *Engaging people* (i.e.

Do Engagement Activities) was mentioned in both interviews and case studies as a very useful action in Social Sustainability work. Because of the research process and this action's high value scores, it can now be considered a leading action of Social Sustainability. Therefore, finding a way to achieve Social Sustainability starts by building a shared vision with the goal of using a common language and with a focus on what can help people to engage to do this.

Other actions such as: *Have a Meeting* and *Use Tools* such as mass media appeared in the research and would also help facilitate Social Sustainability very much as well. *Use Education* would provide a proper process for *building shared vision*. Focusing on Principle 14 of The Earth Charter (see Appendix A), it states: Integrate into formal education and life-long learning the knowledge, values, and skills needed for a sustainable way of life. The Earth Charter principle of *encourage schools and educational systems to use The Earth charter* identifies the action *Use Education* and plays an essential role in strengthening and improving Social Sustainability in the community.

B-Step: Perform a Baseline Assessment of the Current Reality

The second step of the ABCD Backcasting Process is: do a baseline assessment of the current reality. To do this optimally, people will need to Share Information in general. Having people Do Storytelling (e.g. through the use of verbal/ nonverbal communication and engaging all of the senses) can help remove Social Sustainability barriers while Sharing Information. This research offers that all the general actions of Social Sustainability are potentially helpful to successfully removing the barriers that undermine people's capacity to meet their needs. The journey towards Social Sustainability could begin by actions that Use Observation, where observing community without interpretations and stereotyping is the main goal. Related to doing an accurate baseline assessment, Phiri (2012) insists that "sustainability practitioners need to go to the area or village themselves to observe and have a meeting with the local people".

Interview data showed that practitioners need to consider the what, how, and why behind every behavior/ activity related to social sustainability

issues to truly understand their *current reality*. To do this, *Listening* (to the local community and to all stakeholders) was cited as very important by interviewees. UK Earth Charter representative Antony Turner (2012) states "practitioners need to listen to the participants and corroborate information from them". Listening has requirements: "Deep listening requires a calm, receptive state of mind, rather than a frantic, hurried, preoccupied one" (Walters 2005, 6); it also requires an empathetic listener. The goal is to Listen to what people are trying to say. Listening to people helps to share and capture their stories and better understand the problems. Listening is related to actions such as discussing and talking while sustainability practitioners use consultation and ask good questions. The Case Study: Strategic Planning with the Earth Charter City of Joondalup, Australia offered these actions to help people "develop links with affected people by listening to their human stories and recognizing our ecological debt". This action can help to find barriers as well. Finding systemic barriers happens with deep understanding. Although it has been often said, don't talk about it - be about it, before taking action people need to have understanding and a basic plan.

The research offered that social interactions are enhanced by people having consideration for and learning from local culture. Local culture can be a driving force for a bottom-up planning model: "Fundamental to the success of the project has been a bottom-up approach: the needs of the community were clearly defined in order to minimize the imposition of external beliefs or values. It is necessary to be coherent with the premise of acting locally, but thinking globally. Instead of imposing, one learns to share; instead of convincing, one begins to fall in love – with every space, every moment, with every participant, with every expression" (Case Study: Promoting an Environmental Culture for Children through Integral Art and the Earth Charter 2006; Earth Charter 2012).

In the 2009 Earth Charter Case Study: Strengthening Youth Activism on Sustainable Development Using the Earth Charter as Tool for Change it was learned: "Children and youth were excited to participate in the talk for the first time, as there was no such activity before. They said they had never

understood sustainable development before and this was an opportunity to deepen their knowledge. They spent time asking questions on non-violence and also peace and democracy issues in their country. They identified violence as an obstacle to sustainable development. It was offered that through dialogue new ideas can be considered" (Earth Charter 2012).

"Local knowledge is essential to building effective social capital" (Ling 2009, 239); therefore, the Earth Charter asks all to: "consider local culture and The Earth Charter Principles as materials of discussion" (see Appendix A). Alide Roerink (2012) from The Earth Charter - Netherlands suggested that dialogue and discussion "have to start with local level and link to different levels; from the local to global".

It was discovered that the Earth Charter also acts as a powerful tool for sustainability facilitation, guiding discussions, and considering challenging issues. "The Earth Charter has been used as a framework for discussing and analyzing each situation presented in the classrooms. The Charter has helped to introduce and promote the idea of executing sustainability-related activities among parents, teachers and community members" (The Earth Charter as a Guiding Framework-Toronto Region Conservation Authority: Canada; Earth Charter 2012).

Douglas Williamson (2012) offered "The Earth Charter is about expanding your understanding of what your personal responsibility and your community responsibility is; what you should care for".

The following are samples from the research data sets of very powerful actions that can lead to a shared compassion with people; a feeling of empathy. Considering love and empathy was emphasized by all of the interviewees. Cynthia Smith (2012), upon reviewing the long list of Social Sustainability action criteria, recalled the words of a distinguished professor of hers, stating: "at the bottom of all of it is love". Feeling is a process of internalization of social concepts. To achieve this aim more actions and much time are needed. "This ability to arouse feelings and create emotional empathy is an especially important aspect of culture. If sustainable development is to be able to attract people and engage their interest, if it is

to be able to appeal to our feelings and senses, then beauty, as aesthetics or design, as we often hear it described nowadays, must be a fundamental building block; otherwise sustainable development will have no future" (Packalén 2010, 120).

Using creative arts can help people to learn. Doing artistic action can support teaching about principles. One Earth Charter project example cited "Mimic the sounds of animals; write a story about your favorite animal and describe the dangers they face" (Promoting an Environmental Culture for Children through Integral Art and the Earth Charter 2006). These actions helped teach children about love of all living things and respect for animals as shown in Principle 15 of The Earth Charter. Blending arts such as dance and drama, sound and drawing, singing and writing makes relationships between community members more understandable and happen much more easily.

All of these actions can help to develop the stakeholder team and a practitioner's capacities and mindset. These actions make it possible to *change behavior*. An education case study stated: "The [sustainability] door is wide open and it is possible by fostering engaged people to facilitate this process and transition towards sustainability" (Promoting an Environmental Culture for Children through Integral Art and the Earth Charter 2006; Earth Charter 2012). Fundamental change "requires a change of mind and heart, a new sense of global interdependence and universal responsibility" (Case Study: Spiritual Dimensions of Sustainable Development 2012; Earth Charter 2012).

C-Step: Do Creative Brainstorming

The research data collected showed that when the people facilitating a Social Sustainability project (i.e. the sustainability practitioners) *consider* and involve the recipients of the proposed knowledge (i.e. the community) the process is much more participatory and dialectic. The creative brainstorming process happens a lot more easily. After identifying system barriers and having a better understanding of their causes, "an attending group was keen to list ideas on how they could actively contribute to sustainable development" (Strengthening Youth Activism on Sustainable

Development Using the Earth Charter as Tool for Change 2009; Earth Charter 2012). To find a list of possible actions and solutions based on opportunities, strengths, and capacities of the community requires great cooperation with the local people. Research data shows it takes local people playing a crucial role in the entire process towards Social Sustainability. To assist local communities the Natural Step (2004) "develops indicators to represent four conditions for a sustainable society to identify sustainability problems, visions and strategies" (Reed 2006, 408).

D-Step: Prioritization of Possible Ideas

The strategic planning and designing of an ideal model for sustainable action is the main focus of this important prioritization step. Determining which actions are most effective and achievable in moving in the right direction towards sustainability is based on the project related flexibility of capacities, resources, and time. This final planning step of the ABCD backcasting process considers a timeline and works towards a final goal of full sustainability. The prioritization process emphasizes the value of the action: *Doing an Investment* by being critical as to the yield returned on time, money, efforts, resources, etc. invested (Holmberg and Robèrt 2000). This step is very involved with these social sustainability actions: *Sharing Information, Using Consultation/Asking Good Questions, Doing a Comparison/ Evaluation, Using Decisions-making, and Using Mapping*.

After Phase:

Actions after a project are just as important as in the other phases. To improve and enhance the projects, every project could *do a comparison and evaluation*. A measurement / evaluation plan based on current framework is recommended. Process reporting for next similar projects helps. A revising and reviewing process will be based on using reflection and staying connected with participants and local people. Check for people's consensus. It was noted that one of the best After Phase Actions is for the outcome results of a project to get posted on websites, blogs, mass media, and newspapers. *Stay connected* and "keeping in touch with people after training" (Roerink 2012) helps to follow up and continue sharing new information. This can make changing behaviour more accessible and understandable to those interested in participating more.

Table 3.4. After Phase Project Actions

After Phase Actions:

Have A Meeting Share Information Use Consultation Use Decisions-Making	Make Understandable Use Tools Use Reflection	Stay Connected Make Behavior Change Use Listening
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A summary of the During Phase Process shows a strategic plan for grass roots social sustainability project work.

during (ABCD Process)



Figure 3.1. Before - During (the ABCD Process) - After 3 Phase Diagram

4 Discussion

This thesis project used a diligent academic research methodology to produce results for the 2 original research questions. The following section will discuss the results more thoroughly with research process highlights as well as opportunities for improvement cited. In addition to the possibility of successfully answering the 2 main research questions, 2 other unexpected discoveries with possible FSSD application may have emerged during this research project. Additionally, a preliminary prototype proposal for 3 potential Universal Categories of Social Sustainability Actions emerged from the final data analysis and results discussions.

The initial topic research during literature review and building the theoretical framework helped the team very much with greater understanding about the social actions of Social Sustainability. The research team believes the Action Level of FSSD for Social Sustainability could possibly be a very tangible and direct opportunity for grass roots sustainability understanding and efforts. Identification, categorization, and strategic organization of Social Sustainability actions were envisioned as ways to potentially decrease overall complexity of the Actions Level of the Social Sustainability Principle (SP4) of the FSSD.

Following the identification of research criteria, the leading actions of Social Sustainability were searched for in a variety of sources and methods. The project's second goal was to provide a sample of a more strategic plan for these actions (using the FSSD) for current and future sustainability practitioners' use. The research methodology produced the following topic-related evidence (i.e. Research Process Results) from which the final data sets and results were drawn. The 3 sets of data used to determine the final results were derived from: case studies, interviews and the combined data set comparison.

4.1 Research Methodology Assessment

The methodology chosen for this research project functioned fairly well for finding the desired results of leading actions of social sustainability and as a possible means to integrate general strategic Social Sustainability actions into sustainable development projects.

Literature Review Results:

- A set of 19 Social Sustainability Action Criteria and short functional definitions to use in the evaluation of actions.
- A Social Sustainability theoretical framework comprised of several related Social Sustainability sub-topic paradigms appropriate to the project scope. These included several principles of basic human need, social capital, and social science theories related to the social system.
- A critical review of 3 international Social Charters

<u>Research Methodology Assessment:</u> Literature review was found to be a very strong method for finding appropriate information for this type of project.

Surveying Questionnaire Results: Although original preparation for the questionnaire was very important with regards to identifying a core set of 19 Social Sustainability Actions Criteria, the survey questionnaire method used in this specific research ultimately provided insufficient or unsuitable data for use in this report. This may have been due to researcher inexperience with questionnaire development and understanding the communication challenges with web-based surveying. The questionnaire was placed into a web page for online viewing access and easier participation, however, length of survey and invite communications may have limited participation. Although the questionnaire did not produce sufficient results to build a data set for finding leading actions of Social Sustainability, the process of developing the Social Sustainability Action Criteria to do this first step of the research project was deemed a very important step of the research methodology process. This list of 19 Social Sustainability Action Criteria proved to be invaluable in this research project. Having and using good criteria cannot be understated in this (or any) type of research. - no data was included from the questionnaire in this report.

<u>Research Methodology Assessment:</u> The questionnaire method was found to be very weak for finding appropriate data for this type of project.

Case Studies: A review of several published summary reports of recent Earth Charter projects provided clear documentation of Earth Charter project context-specific Social Sustainability actions.

<u>Research Methodology Assessment:</u> The case study method was found to be a very strong method for finding appropriate data for this type of project.

Interviews: The interviews conducted in this research project provided the academic and professional perspectives on the Social Sustainability actions (i.e. practical activities) currently used by Social Sustainability practitioners in related project work.

<u>Research Methodology Assessment:</u> The interview method was found to be a very strong method for finding appropriate data for this type of project.

D-Step Actions Prioritization Analysis: To verify that the results of these research data sets were in compliance with the FSSD in working towards full sustainability, the general actions were consistently reviewed for compliance with the 4 SPs throughout the final scoring. The FSSD D-Step Prioritization Questions (right direction? flexible platform? good ROI?) were used as the final step of analysis for evaluating the 2 data set results.

4.2 Research Question 1 Process Evaluation

What are leading Social Sustainability actions to remove conditions that systematically undermine people's capacity to meet their needs?

As stated earlier, the purpose of this thesis was to find possible ways to begin the process of reducing complexity in the area of Social Sustainability within Strategic Sustainable Development. Currently, actions are determined by the context and culture involved with a Social Sustainability project. The list of actions in use is very extensive; the list of potential actions is limited only by stakeholder creativity in these projects. The vast diversity of these actions and an absence of organization can add to ineffective Social Sustainability practice. As a sustainability practitioner working in a multitude of geographical and cultural environments, all full of complexity at times, it could be very easy to become confused as to how to proceed in Social Sustainability project work. Grass roots sustainability

practitioners and the communities they serve will probably need actions that are effective, appropriate, *and strategic* in solving the Social Sustainability challenges they face. Decreasing complexity in this system (i.e. Social Sustainability) seemed to the research team as a strategic way towards sustainability. Identification and organization of actions may be an advantageous way to possibly create valuable clarity for grass roots sustainability practitioners and their community stakeholders.

Bringing order and organization to something unstructured can help with its understanding, functionality, value, and use. According to Canadian information technology specialist Chris Holdsworth (2012):

"Bringing order to information (e.g. an action) depends on - first - understanding what you want to do with it. What are the priorities related to that information (i.e. action)? What is the goal for that data (i.e. action)?"

The goal of all Social Sustainability actions is the successful removal of all system barriers to actualizing basic human needs now and into the future. The priority related to these actions achieving Social Sustainability success is that they always do so in compliance with the other Sustainability Principles (SPs 1 to 3) so as to ultimately strengthen the overall social system within the biosphere.

Possibly discovering 4 Leading Actions of Social Sustainability was quite illuminating with regards to what areas are focused on. The 4 leading actions: Share Information, Do Engagement Activities, Have a Meeting, and Use Education could also mean: participate with, have meaningful contact with, connect with, and learn with. The key idea is with; with other people. Doing these actions with others implies a level of trust is needed. Trust is a fundamental element of the overall social system (Rothstein 2005). Trust between people - individually and collectively - helps to remove abuses of power (political, economic, and environmental) and move towards Social Sustainability (Benaim et al. 2008). Having knowledge of these 4 leading actions could be one way to decrease some of the complexity in the Social Sustainability area of Strategic Sustainable

Development. Answering the first research question also provided 23 other general actions for Social Sustainability as well. All these actions have the potential ability to remove various system barriers of Social Sustainability. These general actions could be arranged in multiple ways to create a *context-specific* strategic plan by sustainability practitioners to work towards successful results in grass roots Social Sustainability projects in a unique local culture setting.

In summary, achieving an answer for this first research question was very much appreciated by the research team as a way to possibly begin decreasing complexity in the Social Sustainability area of Strategic Sustainable Development. However, it was felt by the researchers that having 4 leading actions provided by this project process may provide sustainability practitioners with a limited perspective and possibly superficial view of what is required to respect the complexity of any work within the Social Sustainability area. It was decided by the research team that more information with other critical areas of Social Sustainability included would also be needed.

4.3 Research Question 2 Process Evaluation

How can sustainability practitioners integrate general strategic Social Sustainability actions into sustainable development projects?

Organizing actions into a Before-During-After configuration is how grass roots sustainable development planning is currently done. Integrating the FSSD ABCD Backcasting Process into the During Phase of the ubiquitous planning schedule used by Earth Charter sustainability practitioners could transform this process into a Strategic Sustainable Development planning model for grass roots Social Sustainability projects.

4.4 3 Potential Universal Social Sustainability Actions Categories

The possibility of making the Social Sustainability Action Level of the FSSD even more understandable for sustainability practitioners was investigated further during the critical review of this project. 3 potential Universal Categories for Social Sustainability Action emerged during a final review of the project data sets and process results. The 27 general actions of this research project were reviewed again for some type of possible 'main' or 'meta' categories to represent them all in a simple, functional, and FSSD related manner. These categories would be more optimal if they were as 'universal' to any Social Sustainability project location, scale, or number of participants as possible. These universal categories presented a semantic paradox for the research team trying to create a comprehensive category organization of the 27 general Social Sustainability actions. First, the categories needed to be very flexible to allow for practical use in any context and culture yet - had to have the ability to be specific to any context and culture as well. The categories could potentially be open to reconfiguration of actions within or under their domain based upon how the specific context or culture defines the Social Sustainability action together with grass roots sustainability practitioners. For example, Have a Meeting might have one meaning in one context/ culture (e.g. Share) but, have a totally different meaning or role in another (i.e. Engage). This opportunity for local interpretation was deemed very important to respecting the participants' own way of performing a Social Sustainability action in their community. The titles of the potential Universal Social Sustainability Actions Categories were kept very high order intentionally to allow for wider coverage of the 27 general actions within their reach of meaning. Based upon additional review by the research team of the project data sets, the 3 potential Universal Categories of Social Sustainability Actions that may offer additional organization to the SP4 Action Level are:

Share Inspire Engage

These emerging categories are meant to align with the key parameters of this project:

- reduce the complexity and ambiguity of Social Sustainability actions;
- remove the system barriers connected to Social Sustainability; and
- guide sustainability practitioners with a strategic and scientific approach.

It seems to the research team that all Social Sustainability actions have to pass through these 3 potential Universal Categories of Social Sustainability Action to constructively overcome issues, barriers, and change behavior to move towards Sustainability. These categories could also be representative of increasing awareness, internalizing, and practicing of sustainable principles/criteria involved with Social Sustainability thinking and practice. Within the Social System, these categories seem to be needed for an interdisciplinary and holistic perspective of understanding sustainability. The 3 potential Universal Actions Categories are defined in this research project as:

Share

Share means transforming what we/ they know in an on-going interaction or experience. The importance of knowledge sharing (e.g. sharing sustainability values) refers to the need for expansion of knowledge to improve abilities and opportunities. Sharing is organized through people's information giving and experiences for change. It is also related to embracing awareness in society as a fundamental step toward sustainability.

Inspire

Inspire refers a set of actions for gaining deeper knowledge and internalization to govern social challenges. It facilitates ways of knowing and understanding Social Sustainability - especially dialogue - and the enhancement of practical actions to lead to a sustainable future. Actions that inspire will help create a culture of sustainability.

Engage

Engage is a form of Social Sustainability action that focuses on doing. It is based on people acting with regards to sustainability purposes to empower themselves and others on the way towards sustainability.

Engaged people consider all opportunities to get involved, to create, and to move towards a sustainable society. People learn to actualize Social Sustainability criteria through a variety of participatory actions that build on each other. Using these actions help societies to achieve their greater sustainability purposes and to balance between higher order principles/criteria. Actions based on local contexts and culture foster a more genuine bottom—up process that is participatory and collaborative. The capacity of doing a true participatory process within strategic sustainable development depends on creating real opportunities.

Creating organization through identifying what leading actions are and the most strategic plan for how to use these actions was a way to provide partial clarity towards Social Sustainability. It was decided by the research team that a closer look at 'the tree' was needed to find out more about the unique combination of actions and contexts.

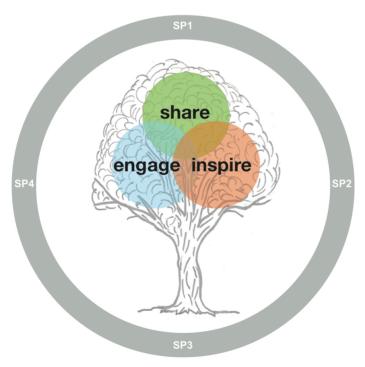


Figure 4.1. 3 Potential Universal Categories of Social Sustainability Action

4.5 Research Process Emergent Discoveries

In addition to answering the main research questions, 2 other major results emerged with possible FSSD application:

- A System Barriers identifying feature within the Social Sustainability Actions Criteria Tool
- Social Sustainability Actions Core Characteristic Model

4.5.1 Emergent Hypothesis 1

A Potential System Barriers Indicator

A possible system barriers identification feature from within the Social Sustainability Actions Criteria Tool emerged from the spreadsheet where the case studies and interviews data sets were combined to get a final evaluation of the collected actions (see Appendix O). Upon closer review of the Social Sustainability Actions Criteria summary scores an enlightening discovery was made.

The design of the spreadsheet was originally intended to organize the actions and Social Sustainability criteria into an X and Y axis format to document the combined quantity of actions used in case studies and interviews, the votes of confidence for each action in regards to meeting Social Sustainability, and an overall score for each action. All the Social Sustainability actions were listed along the left vertical (Y) axis creating 27 horizontal rows for documenting the votes of confidence by the researchers for that action to successfully remove barriers to the 19 necessary Social Sustainability concepts needed to reach Social Sustainability. Along the top horizontal (X) axis of this spreadsheet-based Indicator Tool the 19 Social Sustainability Actions Criteria were listed as the criteria to evaluate the collected actions. The actions were evaluated in relation to each of the 19 Social Sustainability Actions Criteria and a 'vote' (e.g. yes = 1 and no = 0) registered for each action under each Social Sustainability Action Criteria (see Appendix O). Scores for actions varied between 0 (no vote of confidence that this action would help to remove barriers to a specific

Social Sustainability Action Criteria) and 3 (a vote of full confidence that this action would be very helpful in removing barriers to that specific Social Sustainability Action Criteria).

By listing these 19 Social Sustainability Actions Criteria side by side across the top horizontal axis, vertical columns were unintentionally created under each Social Sustainability Action Criteria as well. Although the research team was initially more interested in the *horizontal row* summaries showing how each action performed overall against other actions (i.e. the action's final Social Sustainability value score) to ultimately find leading Actions of Social Sustainability, the *vertical columns* offered additional information when a total sum for each criteria was calculated.

The total sum for each vertical row of criteria unintentionally showed how much confidence the researchers had in the overall actions to achieve that single Social Sustainability Action Criteria. While reviewing the summary totals of these vertical columns under each Social Sustainability Action Criteria the research team became aware that some of the criteria had higher and lower total scores related to them. Initially, the research team did not consider this very important; it was thought the research was supposed to be about actions (value scores) only. However, it became more intriguing to the researchers over time to consider why some of the criteria scored very high in terms of Social Sustainability and some rather low overall. This spreadsheet indicated that the low scores can also mean a lot. This additional analysis communicated that low scores for Social Sustainability Action Criteria might possibly mean there are not enough actions happening in this criteria area or that the actions happening were not sufficient enough to contribute to removing the systemic conditions for that Actions Criteria of Social Sustainability. The research team had a realization that this may possibly identify where sustainability practitioners might need to focus more on in their actions.

Upon further reflection, the research team created a High Scores vs. Low Score definition: A high criteria score meant that practitioners are doing the correct actions and they are doing enough of the correct actions in that

criteria area to move towards Social Sustainability. If a Social Sustainability Action Criteria has a low score it could mean the actions chosen, the amount, or the quality of those actions may be insufficient to contribute towards full Social Sustainability.

It appears to the researchers that if any of the 27 general actions are not sufficient to achieve Social Sustainability it might mean that rebalancing of some of the Social Sustainability actions may need to be made. If all 19 Social Sustainability Actions Criteria final scores are not maximized it could mean a challenge getting to full Social Sustainability.

The researchers noticed that some Social Sustainability areas they initially thought would have been achieved by the general actions showed signs of insufficient action coverage. Also, when the idea to exchange some actions with new actions was discussed there was immediate concern as to what affect these changes would have on the overall scores of *other* Social Sustainability Action Criteria areas. If any of the actions were changed it could have tremendous affect on meeting other areas of Social Sustainability performance. Care was needed in understanding how to proceed in correcting the low scores in any of the deficient criteria areas. The research team realized that if any of the 19 Social Sustainability Action Criteria areas were less than 100% in their sum total that full Social Sustainability might not be achieved. In other words, all of the 19 Social Sustainability Action Criteria areas may need to be achieved by the actions to reach a state of Social Sustainability for that project context. This led to an emergent hypothesis 1:

it seems that there might be some possible system barriers identified in the Social Sustainability Actions Criteria Tool when low criteria scores are present.

It was determined that a low score for any of the 19 Social Sustainability Action Criteria areas could mean that systemic barriers may exist in that specific criteria area that could be undermining the capacity of people in meeting the needs. Changing or enhancing the actions seemed appropriate.

possible systems barrier indicator

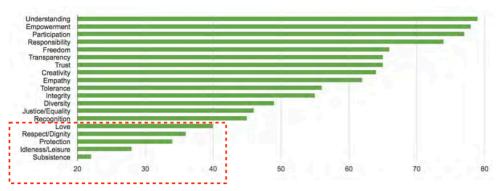


Figure 4.2. Possible Systems Barrier Indicator Bar Graph

Based upon interest by the research team to find out how to appropriately change or enhance the actions to achieve full sustainability, 4 initial options were developed for recalibrating the overall criteria area scores to maximum potential. If a Social Sustainability Action Criteria score is low it could mean:

1) There is a need to exchange the action with a new one so it will possibly meet the requirements of that Social Sustainability Action Criteria area (but hopefully not affect the other overall Social Sustainability scores).

01

2) There is a need to add more actions that will meet the requirements of that Social Sustainability Action Criteria area (but hopefully not affect the other Social Sustainability overall scores).

or

3) There is a need to create new actions that will meet the requirements of that Social Sustainability Action Criteria area (but hopefully not affect the other Social Sustainability overall scores).

01

4) There is a need to enhance the actions that are already there to meet the requirements of that Social Sustainability Action Criteria area to bring it to a maximum score without affecting the scores of the other successful Actions Criteria

A good amount of precaution must be used at this point when considering any change to the array of general Social Sustainability actions. In this research scenario, Social Sustainability actions can have a great synergetic affect on other actions. Changes to the *amount* of any actions can affect the overall score of other criteria as well, and this could be detrimental to achieving overall Social Sustainability. Using *different* actions will also affect the composition of the overall Social Sustainability project. The researchers felt that the best option was to leave the other actions as is and only enhance actions to improve the Criteria scores. So, how can a Social Sustainability action be enhanced? How does one *enhance* an action? It was determined by the researchers to look further at understanding what an action is *made up of*. This deduction led the research team to a second emergent hypothesis of:

it seems that a Social Sustainability Actions Core Characteristics Model could present the sub-action components of a Social Sustainability action that can be optimized to support general actions in effectively remove systemic barriers.

4.5.2 Emergent Hypothesis 2

Social Sustainability Actions' Core Characteristics Model

In this model it is proposed that a Social Sustainability action should possess 4 components (characteristics or qualities) to effectively remove the conditions that systematically undermine people's capacity to meet their basic needs. It was found that, in addition to learning what leading actions of Social Sustainability are and how to use these actions in a strategic planning manner, actions could possibly be analyzed for optimum performance from the discoveries related to the system barriers indication scoring described in Emergent Hypothesis 1. The information provided in Emergent Hypothesis 1 led the project researchers to further thinking about how an action can be exchanged / added to / created / enhanced to assist sustainability practitioners to more optimally remove conditions that undermine people's capacity to meet their needs in the 19 Social Sustainability Action Criteria areas. Cross examination of earlier literature review, case studies, and interviews results led to discovery of these

characteristic components of Social Sustainability actions to make them optimal for removing barriers towards Social Sustainability. The components that emerged from this re-review are the core characteristics of an action that make it optimal for removing conditions that undermine people's capacity to meet their basic needs. These core characteristic components for optimum Social Sustainability actions that emerged are:

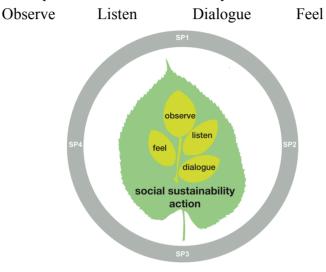


Figure 4.3. Social Sustainability Actions Core Characteristics Model

Review of data from the literature and 2 data sets showed that all general Social Sustainability actions possessed varying degrees of these core characteristics. The 4 Leading Social Sustainability Actions (*Share Information, Do Engagement Activities, Have a Meeting, Use Education*) all possessed high levels of these core characteristics. It was then assumed that if an area of the 19 Social Sustainability Action Criteria was showing low overall scores and this was perhaps caused by the actions chosen - *and* -the strategy chosen was to identify the deficient actions -- perhaps an analysis of these 4 core characteristics of that action could provide insight into how to correct the action to be more effective towards Social Sustainability. A rebalancing of these core characteristics of a specific action would be a way to optimize that action to the needs of that specific Social Sustainability context.

If we were to revisit the example of the stoic Nordic Pine tree here - the unique combination of genetic material (the DNA building blocks of a living system) and the context are the optimal combination for allowing it to thrive for so long. Understanding this systemic formula for the Social Actions of Strategic Sustainable Development would be of tremendous value to optimizing sustainable practitioners' grass roots work. With this discovery, one part of this formula may have been determined; the unique combination of genetic material is the combination of these core characteristic components balanced to the needs of the associated context of that specific Social Sustainability project work.

In summary, the previously determined Social Sustainability Action Criteria were seen to be necessary by the research team to possibly attain Social Sustainability. The thesis team strongly believe these criteria might all need to be met to their maximum to achieve Social Sustainability. The researchers believe that if any of the 19 Social Sustainability Action Criteria have not achieved a full score of confidence in the combinations of the actions, Social Sustainability cannot be achieved. It emerged that the following core characteristics have a great probability to be necessary to create an optimal formula for a Social Sustainability action. Just as genetic material performs actions of service within other biological actions, it is proposed that a Social Sustainability action can become optimal for removing conditions that undermine people's capacity to meet their basic needs if these *core quality characteristics within an action* are used as well:

Observe Listen Dialogue Feel

Additionally, this research team believes that these core characteristics of Social Sustainability actions may need to be performed at all levels of the ABCD Backcasting process when using this optimal Social Sustainability action. Each core characteristic helps, monitors, and enhances the other core characteristics. Related to the definition of Synergic Satisfiers (Max-Neef 1991) of basic human needs, these Core Characteristics could also be described as synergic and integral to Social Sustainability Actions and their goals:

"Synergic satisfiers are those that satisfy a given need, simultaneously stimulating and contributing to the fulfillment of other needs. They share the attribute of being anti-authoritarian in the sense that they constitute a reversal of predominant values, such as competition and coerciveness" (Max-Neef 1991, 34).

These Core Characteristics of Social Sustainability Actions are proposed for use in all levels of a strategic grass roots project process:

Before - During (the ABCD Backcasting Process) - After

Performing these Core Characteristic Actions simultaneously may help to identify barriers to choosing and doing subsequent actions; in addition to being full of complexity, the Social Sustainability system must remain flexible and relative. Use of these Core Characteristic actions within other specific Social Sustainability actions can help to better understand local and cultural contexts and their requirements. These are possibly the unique genetic material of actions.

4.6 Actions of Sustainable Leadership

Regarding the role of actions in sustainability leadership, the results of this research and the new emergent discoveries have the potential to offer strategic guidance in working towards socio-ecological sustainability (see Appendix U). The research team envisions that the Social Sustainability Actions Core Characteristics might influence sustainability practitioners to work simultaneously in a project context. An optimal Social Sustainability action may ask the practitioners to do the Core Characteristic sub-actions (i.e. *Observe, Listen, Dialogue, Feel*) while also doing other general Social Sustainability actions (e.g. Having a Meeting, Sharing Information). A sustainability practitioner with leadership abilities may also need to do these dual actions in the Before - During (the ABCD Backcasting Process) - After process of a Social Sustainability project to be most effective. Working together with the local community and culture, a social sustainability leader coordinates the higher order actions to move towards

sustainability. To keep things simple when starting a Social Sustainability project, it may be helpful for the practitioner to start with 3 potential Universal Categories of Social Sustainability Actions (*Share, Inspire, and Engage*).

Using the *actions as leaves* metaphor offers a sustainable leader a way to understand a whole system (i.e. a tree) if one looks closer at the unique combination of genetic material of an action. Dissecting an action (i.e. a leaf) can help with understanding the higher levels of the FSSD (System, Success, Strategic). It can also help with understanding Social Sustainability within the greater biosphere. Understanding the behavior of this singular leaf in relation to other leaves, to the branch, to the trunk, to the roots, to the soil, to the local context, to the culture brings more meaning and clarity for moving towards sustainability strategically.

Leaders may see something unique in the combination of the tree's genetic material and the local context with regards to universal FSSD actions being integrated into grass roots contexts. Core characteristics of actions can help leaders to collaborate with stakeholders to use actions optimally towards a sustainable society one day. Sustainability practitioners can get there using the FSSD; just don't get lost in the leaves of the tree.

4.7 Research Project Highlights

The Research Journey. This thesis project started, somewhat naively, with the very large, very complex, yet utterly fascinating topic of Social Sustainability. The project team was highly encouraged to dramatically reduce the scope several times during the research process to successfully find its results. Along this demanding academic journey, the research team learned first-hand a tremendous amount about the deeper meanings and complex reality of actual Social Sustainability.

In retrospect, there seems to have been a fundamental topic growing through the entire research process trying to be solved. The original study focus was a search for what common element could help with understanding the collective role humans need to play in the strategic move toward sustainability. Initially, the research team considered investigating how the comprehensive concept of Global Sustainable Citizenship might help bring society closer to understanding the worldwide empathy needed to reach sustainability. Following this proposal, there was a refocusing on defining Principles for Success for Social Sustainability (i.e. a Charter for Strategic Social Sustainability) to provide universal guidance towards a clear and shared vision based on universal Social Sustainability principles. Still more refocusing of the project research scope led to how the FSSD might be used in an expanded participatory manner in local contexts with local culture. The Action Level of Social Sustainability was considered as a great place to possibly decrease complexity for sustainability practitioners.

FSSD Review of the Earth Charter. It was very engaging for this research team to have used the FSSD as a tool to strategically analyze other socioecological tools with very strong principles (see Appendix S). Finding a way to elegantly bridge between the Earth Charter and the FSSD's very strong, but different, sustainable development approaches was fascinating. As described earlier, placing the 27 actions into a Before--During (the ABCD Backcasting Process)--After planning configuration illuminated possibilities for strategic planning integration with other peer sustainability organizations. With the ABCD Backcasting Process integrated into the During phase a bridge for FSSD planning of grass roots Social Sustainability actions became more realistic.

The Interviews Method. The most rewarding aspect of this project was by far talking with actual Social Sustainability practitioners and experts who work tirelessly in real life for peace, justice, and the value of humanity (see Appendix C & P). To the research team, they are the most genuine of leaders. They don't talk about it - they be about it. We extend our most sincere appreciation to all those that participated and contributed so much real life to this research project.

5 Conclusion

A tree is a model of a sustainable system. Strategic sustainable actions could be envisioned as the leaves on this tree. This research journey into Social Sustainability within Strategic Sustainable Development was made so much more meaningful by the realization that to understand a universe perhaps one just needs to look at a simple leaf. The emergence of subtle but powerful aspects of the actions of Social Sustainability came when the research team looked at the macro (the whole system) and the micro (actions) at the same time. It was very inspirational to have this momentary experience of the infinite within the detail of the web of connections in the FSSD.

This thesis sought to answer what are the leading actions sustainability practitioners use to move towards Social Sustainability and how might these general strategic Social Sustainability actions be integrated into Sustainable Development projects. Once a set of leading Social Sustainability actions was identified within the scope of this project, the research team organized these actions into an integrated Strategic Sustainable Development planning model based upon backcasting from achieving successful Social Sustainability. This research project's purpose was to support the FSSD through decreasing the complexity and ambiguity of Social Sustainability actions; removing system barriers connected to Social Sustainability; and providing sustainability practitioners with strategic planning guidance.

Social Sustainability is about people and this causes it to be more complex. The research hypothesis is that by identifying leading actions of Social Sustainability and by offering FSSD guidance in how to use these leading actions strategically in Sustainable Development projects sustainability practitioners can reduce some of the complexity to removing the conditions that systematically undermine people's capacity to meet their needs in practical applications with this strategic guidance.

The research methodology included literature review, case studies, and interviews with sustainability practitioners and experts. Research data was analyzed using Social Sustainability criteria to help find leading actions of Social Sustainability. A strategic configuration of general actions provided integrated grass roots sustainable development planning.

4 leading Social Sustainability actions (Share Information, Do Engagement Activities, Have a Meeting, Use Education) and 23 general actions emerged in this project. A strategic plan for integrating the FSSD into the existing grass roots sustainability project process model could be:

Before - During (Integration of the ABCD Backcasting Process) - After

This research also offers 3 potential Universal Categories of Social Sustainability Actions; these are Share, Inspire, Engage. Additional results with potential FSSD application found in this research are: a possible System Barriers identification feature from within the Social Sustainability Actions Criteria Tool and a Social Sustainability Actions Core Characteristics Model. This model presents the sub-action components to support effectively removing systemic barriers. The 4 core characteristics to consider are: Observe, Listen, Dialogue, Feel.

The research process revealed that perhaps it's not about solving complexity...but about adapting to it via thinking strategically.

Future Research Recommendations

The research team highly advocates the need for doing actual grass roots *Action Research* to test the leading and general Social Sustainability actions. Additionally, the Before - During (the ABCD Backcasting Process) - After strategic plan model would be a wonderful way to engage a local community with a grass roots FSSD project process. We also highly recommend further research and testing of the 2 emergent hypotheses of this project: the Possible Systemic Barriers Indicator Tool, the Social Sustainability Actions' Core Characteristics Model, and the final proposal of 3 potential Universal Categories for Social Sustainability Actions.

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Appendices

Appendix A: The Earth Charter Text



THE EARTH CHARTER

Preamble

We stand at a critical moment in Earth's history, a time when humanity must choose its future. As the world becomes increasingly interdependent and fragile, the future at once holds great peril and great promise. To move forward we must recognize that in the midst of a magnificent diversity of cultures and life forms we are one human family and one Earth community with a common destiny. We must join together to bring forth a sustainable global society founded on respect for nature, universal human rights, economic justice, and a culture of peace. Towards this end, it is imperative that we, the peoples of Earth, declare our responsibility to one another, to the greater community of life, and to future generations.

Earth, Our Home

Humanity is part of a vast evolving universe. Earth, our home, is alive with a unique community of life. The forces of nature make existence a demanding and uncertain adventure, but Earth has provided the conditions essential to life's evolution. The resilience of the community of life and the well-being of humanity depend upon preserving a healthy biosphere with all its ecological systems, a rich variety of plants and animals, fertile soils, pure waters, and clean air. The global environment with its finite resources is a common concern of all peoples. The protection of Earth's vitality, diversity, and beauty is a sacred trust.

The Global Situation

The dominant patterns of production and consumption are causing environmental devastation, the depletion of resources, and a massive extinction of species. Communities are being undermined. The benefits of development are not shared equitably and the gap between rich and poor is widening. Injustice, poverty, ignorance, and violent conflict are widespread and the cause of great suffering. An unprecedented rise in human population has overburdened ecological and social systems. The foundations of global security are threatened. These trends are perilous—but not inevitable.

The Challenges Ahead

The choice is ours: form a global partnership to care for Earth and one another or risk the destruction of ourselves and the diversity of life. Fundamental changes are needed in our values, institutions, and ways of living. We must realize that when basic needs have been met, human development is primarily about being more, not having more. We have the knowledge and technology to provide for all and to reduce our impacts on the environment. The emergence of a global civil society is creating new opportunities to build a democratic and humane world. Our environmental, economic, political, social, and spiritual challenges are interconnected, and together we can forge inclusive solutions.

Universal Responsibility

To realize these aspirations, we must decide to live with a sense of universal responsibility, identifying ourselves with the whole Earth community as well as our local communities. We are at once citizens of different nations and of one world in which the local and global are linked. Everyone shares responsibility for the present and future well-being of the human family and the larger living world. The spirit of human solidarity and kinship with all life is strengthened when we live with reverence for the mystery of being, gratitude for the gift of life, and humility regarding the human place in nature. We urgently need a shared vision of basic values to provide an ethical foundation for the emerging world community. Therefore, together in hope we affirm the following interdependent principles for a sustainable way of life as a common standard by which the conduct of all individuals, organizations, businesses, governments, and transnational institutions is to be guided and assessed.

Principles

I. RESPECT AND CARE FOR THE COMMUNITY OF LIFE

- 1. Respect Earth and life in all its diversity. 1a. Recognize that all beings are interdependent and every form of life has value regardless of its worth to human beings. 1b. Affirm faith in the inherent dignity of all human beings and in the intellectual, artistic, ethical, and spiritual potential of humanity.
- 2. Care for the community of life with understanding, compassion, and love. 2a. Accept that with the right to own, manage, and use natural resources comes the duty to prevent environmental harm and to protect the rights of people. 2b. Affirm that with increased freedom, knowledge, and power comes increased responsibility to promote the common good.
- 3. Build democratic societies that are just, participatory, sustainable, and peaceful. 3a. Ensure that communities at all levels guarantee human rights and fundamental freedoms and provide everyone an opportunity to realize his or her full potential. 3b. Promote social and economic justice, enabling all to achieve a secure and meaningful livelihood that is ecologically responsible.
- 4. Secure Earth's bounty and beauty for present and future generations.

4a. Recognize that the freedom of action of each generation is qualified by the needs of future generations. 4b. Transmit to future generations values, traditions, and institutions that support the long-term flourishing of Earth's human and ecological communities.

In order to fulfill these four broad commitments, it is necessary to:

II. ECOLOGICAL INTEGRITY

- 5. Protect and restore the integrity of Earth's ecological systems, with special concern for biological diversity and the natural processes that sustain life. 5a. Adopt at all levels sustainable development plans and regulations that make environmental conservation and rehabilitation integral to all development initiatives. 5b. Establish and safeguard viable nature and biosphere reserves, including wild lands and marine areas, to protect Earth's life support systems, maintain biodiversity, and preserve our natural heritage. 5c. Promote the recovery of endangered species and ecosystems. 5d. Control and eradicate non-native or genetically modified organisms harmful to native species and the environment, and prevent introduction of such harmful organisms. 5e. Manage the use of renewable resources such as water, soil, forest products, and marine life in ways that do not exceed rates of regeneration and that protect the health of ecosystems. 5f. Manage the extraction and use of non-renewable resources such as minerals and fossil fuels in ways that minimize depletion and cause no serious environmental damage.
- 6. Prevent harm as the best method of environmental protection and, when knowledge is limited, apply a precautionary approach. 6a. Take action to avoid the possibility of serious or irreversible environmental harm even when scientific knowledge is incomplete or inconclusive. 6b. Place the burden of proof on those who argue that a proposed activity will not cause significant harm, and make the responsible parties liable for environmental harm. 6c. Ensure that decision making addresses the cumulative, long-term, indirect, long distance, and global consequences of human activities. 6d. Prevent pollution of any part of the environment and allow no build-up of radioactive, toxic, or other hazardous substances. 6e. Avoid military activities damaging to the environment.
- 7. Adopt patterns of production, consumption, and reproduction that safeguard Earth's regenerative capacities, human rights, and community well-being. a. Reduce, reuse, and recycle the materials used in production and consumption systems, and ensure that residual waste can be assimilated by ecological systems.
- b. Act with restraint and efficiency when using energy, and rely increasingly on renewable energy sources such as solar and wind. c. Promote the development, adoption, and equitable transfer of environmentally sound technologies. d. Internalize the full environmental and social costs of goods and services in the selling price, and enable consumers to identify products that meet the highest social and environmental standards. e. Ensure universal access to health care that fosters reproductive health and responsible reproduction. f. Adopt lifestyles that emphasize the quality of life and material sufficiency in a finite world.

8. Advance the study of ecological sustainability and promote the open exchange and wide application of the knowledge acquired. a. Support international scientific and technical cooperation on sustainability, with special attention to the needs of developing nations. b. Recognize and preserve the traditional knowledge and spiritual wisdom in all cultures that contribute to environmental protection and human well-being. c. Ensure that information of vital importance to human health and environmental protection, including genetic information, remains available in the public domain.

III. SOCIAL AND ECONOMIC JUSTICE

- 9. Eradicate poverty as an ethical, social, and environmental imperative. a. Guarantee the right to potable water, clean air, food security, uncontaminated soil, shelter, and safe sanitation, allocating the national and international resources required. b. Empower every human being with the education and resources to secure a sustainable livelihood, and provide social security and safety nets for those who are unable to support themselves. c. Recognize the ignored, protect the vulnerable, serve those who suffer, and enable them to develop their capacities and to pursue their aspirations.
- 10. Ensure that economic activities and institutions at all levels promote human development in an equitable and sustainable manner. a. Promote the equitable distribution of wealth within nations and among nations. b. Enhance the intellectual, financial, technical, and social resources of developing nations, and relieve them of onerous international debt. c. Ensure that all trade supports sustainable resource use, environmental protection, and progressive labor standards. d. Require multinational corporations and international financial organizations to act transparently in the public good, and hold them accountable for the consequences of their activities.
- 11. Affirm gender equality and equity as prerequisites to sustainable development and ensure universal access to education, health care, and economic opportunity. a. Secure the human rights of women and girls and end all violence against them. b. Promote the active participation of women in all aspects of economic, political, civil, social, and cultural life as full and equal partners, decision makers, leaders, and beneficiaries. c. Strengthen families and ensure the safety and loving nurture of all family members.
- 12. Uphold the right of all, without discrimination, to a natural and social environment supportive of human dignity, bodily health, and spiritual well-being, with special attention to the rights of indigenous peoples and minorities. a. Eliminate discrimination in all its forms, such as that based on race, color, sex, sexual orientation, religion, language, and national, ethnic or social origin. b. Affirm the right of indigenous peoples to their spirituality, knowledge, lands and resources and to their related practice of sustainable livelihoods. c. Honor and support the young people of our communities, enabling them to fulfill their essential role in creating sustainable societies. d. Protect and restore outstanding places of cultural and spiritual significance.

IV. DEMOCRACY, NONVIOLENCE, AND PEACE

- 13. Strengthen democratic institutions at all levels, and provide transparency and accountability in governance, inclusive participation in decision making, and access to justice. a. Uphold the right of everyone to receive clear and timely information on environmental matters and all development plans and activities which are likely to affect them or in which they have an interest. b. Support local, regional and global civil society, and promote the meaningful participation of all interested individuals and organizations in decision making. c. Protect the rights to freedom of opinion, expression, peaceful assembly, association, and dissent. d. Institute effective and efficient access to administrative and independent judicial procedures, including remedies and redress for environmental harm and the threat of such harm. e. Eliminate corruption in all public and private institutions. f. Strengthen local communities, enabling them to care for their environments, and assign environmental responsibilities to the levels of government where they can be carried out most effectively.
- 14. Integrate into formal education and life-long learning the knowledge, values, and skills needed for a sustainable way of life. a. Provide all, especially children and youth, with educational opportunities that empower them to contribute actively to sustainable development. b. Promote the contribution of the arts and humanities as well as the sciences in sustainability education. c. Enhance the role of the mass media in raising awareness of ecological and social challenges. d. Recognize the importance of moral and spiritual education for sustainable living.
- 15. Treat all living beings with respect and consideration. a. Prevent cruelty to animals kept in human societies and protect them from suffering. b. Protect wild animals from methods of hunting, trapping, and fishing that cause extreme, prolonged, or avoidable suffering. c. Avoid or eliminate to the full extent possible the taking or destruction of non-targeted species.
- 16. Promote a culture of tolerance, nonviolence, and peace. a. Encourage and support mutual understanding, solidarity, and cooperation among all peoples and within and among nations. b. Implement comprehensive strategies to prevent violent conflict and use collaborative problem solving to manage and resolve environmental conflicts and other disputes. c. Demilitarize national security systems to the level of a non-provocative defense posture, and convert military resources to peaceful purposes, including ecological restoration. d. Eliminate nuclear, biological, and toxic weapons and other weapons of mass destruction. e. Ensure that the use of orbital and outer space supports environmental protection and peace. f. Recognize that peace is the wholeness created by right relationships with oneself, other persons, other cultures, other life, Earth, and the larger whole of which all are a part.

The Way Forward

As never before in history, common destiny beckons us to seek a new beginning. Such renewal is the promise of these Earth Charter principles. To fulfill this promise, we must commit ourselves to adopt and promote the values and

objectives of the Charter.

This requires a change of mind and heart. It requires a new sense of global interdependence and universal responsibility. We must imaginatively develop and apply the vision of a sustainable way of life locally, nationally, regionally, and globally. Our cultural diversity is a precious heritage and different cultures will find their own distinctive ways to realize the vision. We must deepen and expand the global dialogue that generated the Earth Charter, for we have much to learn from the ongoing collaborative search for truth and wisdom.

Life often involves tensions between important values. This can mean difficult choices. However, we must find ways to harmonize diversity with unity, the exercise of freedom with the common good, short-term objectives with long-term goals. Every individual, family, organization, and community has a vital role to play. The arts, sciences, religions, educational institutions, media, businesses, nongovernmental organizations, and governments are all called to offer creative leadership. The partnership of government, civil society, and business is essential for effective governance. In order to build a sustainable global community, the nations of the world must renew their commitment to the United Nations, fulfill their obligations under existing international agreements, and support the implementation of Earth Charter principles with an international legally binding instrument on environment and development.

Let ours be a time remembered for the awakening of a new reverence for life, the firm resolve to achieve sustainability, the quickening of the struggle for justice and peace, and the joyful celebration of life.

Persian poetry over the entrance of The United Nations headquarters in New York City:

Human beings are members of a whole, in creation of one essence and soul. If one member is afflicted with pain, other members uneasy will remain. If you've no sympathy for human pain, the name of human you cannot retain!

Saadi

Appendix B: Case Study Projects List

Amézcua Luna, Candela. 2006-2007. Promoting an Environmental Culture for Children through Integral Art and the Earth Charter, Prod Anza and Echeri, Mexico.

Earth Charter Initiative Secretariat. 2005. An Earth Charter-Based Approach for Local Governments Foundation Desarrolloy Naturaleza, Deyna, Spain.

Earth Charter Initiative Secretariat. 2003-5. A Tool for Communities to Implement the Earth Charter Partnership for Sustainable Communities, USA. Earth Charter Initiative Secretariat.

Earth Charter Initiative Secretariat. 2002. Developing a Local Earth Charter Municipality of Alajuela, Costa Rica. Earth Charter Initiative Secretariat.

Earth Charter International secretariat. 2008. Earth Charter Global Learning Opportunity. Online International, Earth Charter International secretariat.

Earth Charter Initiative Secretariat. 2001- 2002. Strategic Planning with the Earth Charter City of Joondalup. Australia.

Earth Charter Youth Initiative.2009. Strengthening Youth Activism on sustainable development using the Earth Charter as tool for change, Pointe-Noire, Congo. AZUR Development and Earth Charter Group in Congo.

Earth Charter Initiative Secretariat. 2002- 2003. The Earth Charter as a Guiding Framework Toronto & Region Conservation Authority, Canada.

Earth Charter Initiative Secretariat. 1999. The Earth Charter as an Organizing Framework for the Republic of Tatarstan, Russia, Earth Charter Initiative Secretariat

Earth Charter Initiative Secretariat. 1999-2000. Training Municipal Workers with the Earth Charter City of San José, Costa Rica, Earth Charter Initiative Secretariat.

Earth Charter Initiative Secretariat. 2001-2002. The Vermont Town Meetings Campaign Global Community Initiative, Vermont, USA. Earth Charter Initiative Secretariat.

Fair Trade Futures: Working with the Earth Charter. 2011. EC UK.

Jiménez, Alicia and Louise Robbards. 2006. Education for Eco-justice at The Edmund Rice Centre. Australia. Edmund Rice Centre.

Lacerda Silva, Aieska Marinho and Tarcisio Cardieri. 2006. Improving the quality of life in the communities of Sao Paulo, The Bioma Institute, Brazil.

Liu, Yunhua and Alicia Constable. 2008. Education for Sustainable Development and Chinese Philosophical Traditions. Bejing, China, Shangri-la Institute for Sustainable Communities.

Local Community For Sustainability. 2010. Operationalising the Melbourne Principles for Sustainable Cities: Melbourne, Australia. UN Environment Programme, Division of Technology, Industry and Economics.

Matos Almeida, Fátima. 2006-2007. The Earth Charter: Environmental Education and Sustainability Tool, Portuguese Association of Environmental Education (ASPEA), Portugal.

Olvitt, Lausanne, Huila Sisitka and Ingrid Schudel. 2004. Using the Earth Charter as a thinking tool and a talking point: Reflections on environmental education courses, Rhodes University, South Africa.

Shania Súcar Súcar and Magdalena Sandoval. 2005-2007. For youth, by youth: Using The Earth Charter to raise awareness among university students. University of Guanajuato, Mexico.

The Brink Expedition. 2003-2010. Brink Expedition Carries the Earth Charter around the World. Multiple International Locations.

The Earth Charter Task Force. 2012. Spiritual Dimensions of Sustainable Development. Ahmedabad, India. The Earth Charter Task Force.

Appendix C: Interviews Participants List

Social Sustainability Practitioners:

Alide Roerink (Earth Charter Affiliate, Netherlands)

Antony Turner (Carbonsense CEO/ Earth Charter, UK)

Louise Erbacher (Earth Charter Educator, Australia)

Victor Phiri (Earth Charter Affiliate, Zambia-Africa)

P.J.Sodhi (CEE / Center for Environmental Education, India)

Social Sustainability Experts:

Dr. Andrea Colantonio (Oxford Brooks University, UK)

Cynthia Smith (Curator of Socially Responsible Design, *Cooper-Hewitt* National Design Museum, USA)

Jeremy and Meredith Beaudry (The Action Mill: Social Action Firm, USA)

Douglas Williamson (Earth Charter International, Costa Rica)

Appendix D: Case Studies and Interviews Locations



40 documented case studies reviewed: 21 final chosen case studies method



5 sustainable practitioners + 4 experts interviews method

Appendix E: Case Study Actions Collection Template (Sample)

Project Title: Location: Project Date: Population (Quantity): Audience: Thesis Reviewer: Case Study Review Date:				
Project Description / Purpose:				
Sustainability Problem:				
Action Criteria	Actions	В	D	Α
Understanding - to make clear to everyone				
Love - to be compassionate to everyone				
Freedom - to fully express their ideas				
Participation - to collaboratively participate				
Protection - to feel secure				
Recognition - to describe themselves				
Responsibility - to be responsible				
Transparency - to be transparent				
Justice/Equality - to be equal				
Respect/Dignity - to be ethical				
Tolerant - to be tolerant				
Empowerment - to be empowered				
Integrity - to be honest to others and one's self				
Diversity - to welcome difference				
Trust - to be reliable and responsible				
Empathy - to understand /share feelings of				
Subsistence - to take care of one's self				
Idleness/Leisure - allow for relaxation / fun				
Creativity - to be creative				

Appendix F: Social Sustainability Interview Questions

- 1. What is your definition of Social Sustainability?
- 2. What are the main Social Sustainability issues/ in your location? What is causing this Social Sustainability issue? What Actions are needed to remove these causes?
- 3. Could you describe one Social Sustainability project? (*Practitioners*) In your opinion, please describe a successful Social Sustainability project (*Experts*).

What were the actions BEFORE the project? What were the actions DURING the project? What were the actions AFTER the project?

- 3. What roles did people (you and the community) take into your Social Sustainability project process? (*Practitioners*)
 What are the key actions of a Social Sustainability practitioner in a Social Sustainability project? (*Experts*)
- 4. What was your dream result when you did the project? Did the project reach your purpose? If yes, please explain some positive conditions to help to get your dream purpose. If not, please explain the reason. What are the barriers to prevent moving to the dream purpose? (*Practitioners*)
- 5. Could you describe the differences between Social Sustainability Actions and Ecological Actions?(*Experts*)
- 6. For your next Social Sustainability project, would it be helpful to have some general action categories to help you do your project? (*Practitioners*)

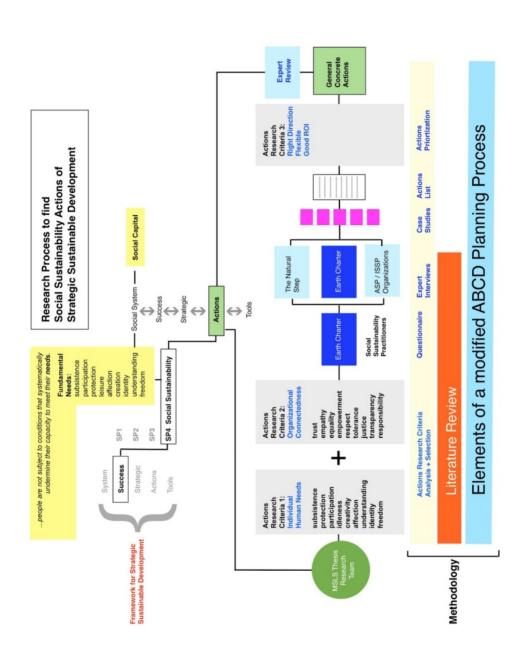
Regarding the Social Sustainability issues you mentioned ...

- 7. What are the most effective actions to solve this Social Sustainability issue?
- 8. If there were NO constraints on you or your next sustainability project, what would you do to have people completely and successfully: (please provide one action for each Concept / Goal following)

Concept	Goal Action
Understanding	to make clear to everyone
Love	to be compassionate to everyone
Freedom	to fully express their ideas
Participation	to collaboratively participate
Protection	to feel secure
Recognition	to describe themselves
Responsibility	to be responsible
Transparency	to be transparent
Justice/Equality	to be equal
Respect / Dignity	to be ethical
Tolerance	to be tolerant
Empowerment	to be empowered
Integrity	to be honest to others and one's self
Diversity	to welcome difference
Subsistence	to take care of themselves
Trust	to be reliable and responsible
Empathy	to understand and share the feeling of another
Idleness	allow for relaxation / fun
Creativity	to be creative

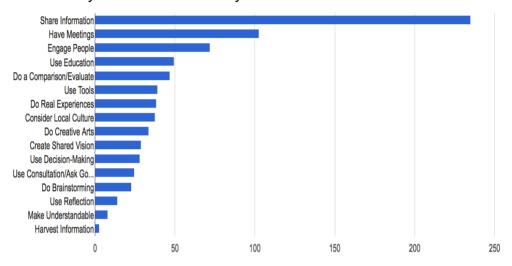
- 9. What are the best criteria to prioritize general Social Sustainability Actions?
- 10. How best can sustainability practitioners use concrete social sustainability Actions to remove conditions that systematically undermine people's capacity to meet their needs?

Appendix G: Research Methodology Process Chart

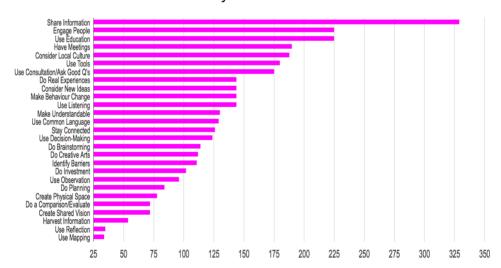


Appendix H: Social Sustainability Actions Value Scores Case Studies and Interviews

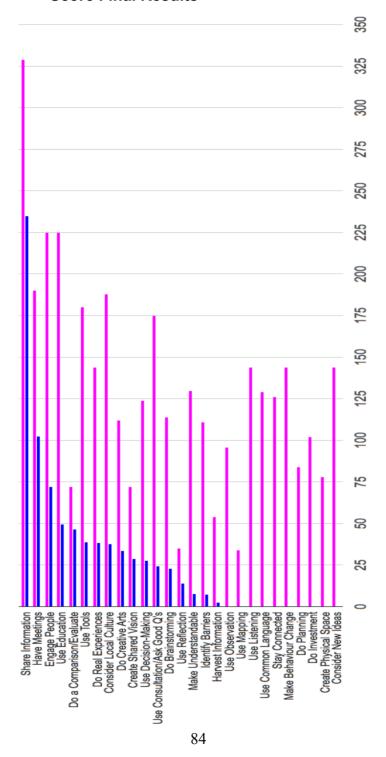
Case Study Social Sustainability Action Value Final Score Results



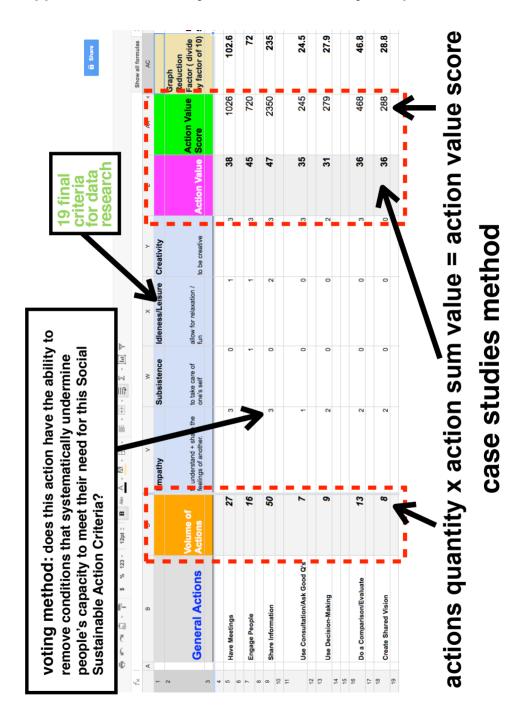
Interviews Social Sustainability Action Value Final Score Results



Appendix I: Combined Social Sustainability Actions Value Score Final Results



Appendix J: Case Study Actions Value Analysis Spreadsheet



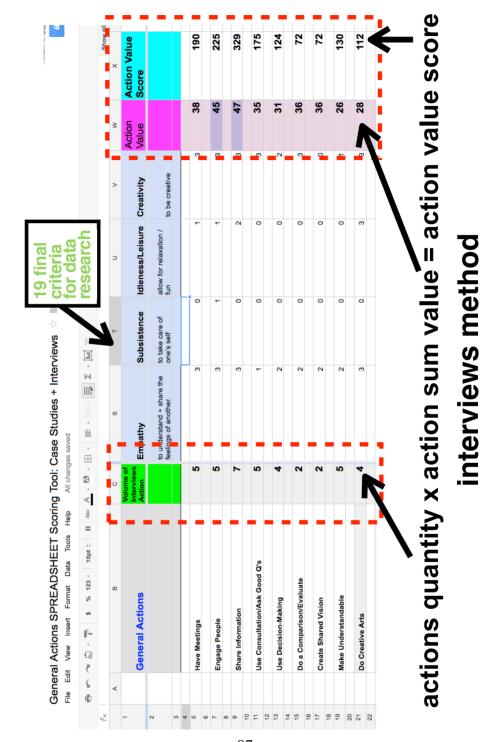
Appendix K: Case Study Actions Value Analysis Spreadsheet

Actions	#	Social. Sustainability Criteria Vote Score	Final Social Sustainability Action Score # quantity x vote score = final score	Final Social Sustainability Action Score Scale Reduction 10% factoring*
Have a Meeting (Do Presentations / Do Workshops)	27	38	1026	102.6
Use Engagement Activities	16	45	720	72
Share Information (Do Story-Telling / Use Communications)	50	47	2350	235
Use Consultation / Ask Good Questions	7	35	245	24.5
Use Decision-Making (Get Commitment)	9	31	279	27.9
Do a Comparison / Evaluation	13	36	468	46.8
Create Shared Vision	8	36	288	28.8
Make Understandable	3	26	78	7.8
Do Creative Arts (Use Design)	12	28	336	33.6
Use Tools (Use Technology)	13	30	390	39
Collect Information	1	27	27	2.7
Use Education	11	45	495	49.5
Use Reflection	4	45	180	18
Consider Local Culture	8	47	376	37.6
Do Brainstorming	6	38	228	22.8
Identify Barriers	2	37	74	7.4
Do Real Experiences	8	48	384	38.4

^{# =} Quantity of Actions in this research study method

^{*}Note: Final Scores scaled down by a factor of 10 to be of appropriate size for bar graph and visual graph comparison with Interviews Data.

Appendix L: Interviews Actions Value Analysis Spreadsheet



Appendix M: Interviews Actions Value Analysis Spreadsheet

Actions	#	Social. Sustainability Criteria Vote Score	Final Social Sustainability Action Score # quantity x vote score = final score
Have a Meeting (Do Workshops and Workshops)	5	38	190
Use Engagement Activities	5	45	225
Share Information (Story-Telling and Use Communications)	7	47	329
Use Consultation / Ask Good Questions	5	35	175
Use Decision-Making (Get Commitment)	4	31	124
Do a Comparison / Evaluation	2	36	72
Create Shared Vision	2	36	72
Make Understandable	5	26	130
Do Creative Arts (Use Design)	4	28	112
Use Tools (Use Technology)	6	30	180
Collect Information	2	27	54
Use Education	5	45	225
Use Reflection	1	45	35
Consider Local Culture	4	47	188
Do Brainstorming	3	38	114
Identify Barriers	3	37	111
Do Real Experiences	3	48	144
Do Planning	3	28	84
Use Observation	2	48	96
Use Common Language	3	43	129

Use Mapping	1	34	34
Stay Connected	3	42	126
Consider New Ideas	3	48	144
Make an Investment	3	34	102
Create Space	2	39	78
Make Behavior Change	3	48	144
Use Listening	3	48	144

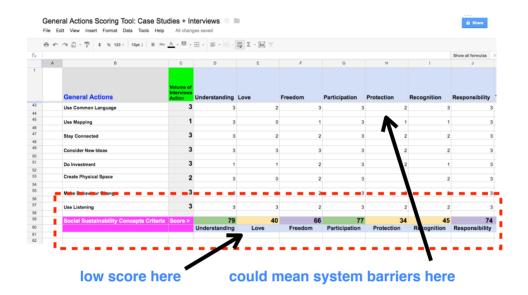
^{# =} Quantity of Actions in this research study method

Appendix N: Comparison of Final 3 Leading Action Sets

Case Studies: Leading 3 Actions	Interviews: Leading 3 Actions	
Share Information	Share Information	
Use Engagement Activities	Use Engagement Activities	
Have a Meeting	Use Education	

Appendix O: Potential System Barriers Indicator

A possible system barriers identification feature from within the Social Sustainability Actions Criteria Tool



possible system barriers indicator

very low	low	medium	high	very high
0-16	17-32	33-49	50-66	67-81
	subsistence idleness	love protection respect recognition justice/equality	freedom transparency tolerance integrity diversity trust empathy creativity	understanding participation responsibility empowerment

Appendix P: Interview Participants' Quotes

Douglas Williamson - Earth Charter International - Costa Rica

Sustainability is mostly a social challenge - ecological aspects are not outside the social. Sustainability is primarily a behavioral challenge - a human behavior challenge. Primarily due to Modernism for the last 400 years - human behavior has become divorced from Nature. Not being holistic -- doing things piecemeal has led to these problems...and there are hundreds of symptoms -- primarily philosophical issues are at the root. What actions are needed? We need to shift our thinking - we need a new - (actually, a very old) way of thinking - a new paradigm is needed. We need to not be divorced from Nature or each other anymore -- it is a great challenge to change how we think about the world.

There is probably difference between Social Sustainability actions and ecological sustainability actions, but real sustainability is all about the interconnection - the relationships between the 2 and looking at a holistic perspective.

Consensus building is important to decision making.

The Earth Charter is about expanding your understanding of what your personal and community responsibility is and what you should care for.

People should feel comfortable to trust the group to participate and have their voice heard.

Louise Erdbacher - Earth Charter International – Australia

Most effective actions occur when people feel part of the solution – they own the issue, clearly identify the lack of justice and see their way clear to taking action in a positive and peaceful way.

By ensuring that the actions meet with the criteria of Social Sustainability – walk the talk, involve people in the solution, work peacefully with the power brokers to help them to see how their actions are impacting on others.

Victor Phiri - CopeZambia - Africa

People should be empowered with education. With education you can become empowered and an employer. So, government should come up with deliberate policy - to give money or resources for poverty reduction and skill centers for youth and encourage the youth to go to school and to invest a lot of money in education - because educated citizens -- even if you are not employed he/she can do something creative.

Planning - (get organized) have a good plan before you go to the community or come up with a good plan together.

You need to include people in everything you do.

People should understand the value of love and understand the importance of love.

Participation should be able to change. It starts at the family level up to the community level - down to up-.

Cynthia Smith -The Cooper - Hewitt Design Museum - USA *Projects start with building trust.*

The main Social Sustainability issues are increasingly limited resources around the world and the number of people living in poverty.

To remove the causes of these issues, actions need to look systemically; looking to share this information and inspire people to come up with new ways to approach working collaboratively across sectors (academic fields, public sector, etc.).

Central idea in Social Sustainability is people and communities.

Jeremy and Meredith Beaudry - The Action Mill - USA

When you are talking about Social Sustainability issues - you quickly find it's not just about one isolated issue, it's the interconnectivity of issues that we are facing as a people, the planet, the universe - and so it becomes very much about a set of relationships and the complexity is inherent inside those relationships.

The Action Mill believes that the root causes of Social Sustainability issues are the lack of empathy in many cases. If you can't empathize with someone who is not you - about their situation, about their condition, about their experience of the world, you are not going to get very far in trying to understand what and how you do impacts them, others, the planet, the universe, and therefore how you might change your behavior.

If you take empathy as one of the root issues, it's about connecting people to each other-face to face- just as much as digital. it is about a willingness to be in front of another person and have a conversation - and always making sure we have spaces where you can do that freely without fear - increasingly in the US and all over the world there is less and less physical space to speak - where people can meet together and speak together.

For understanding, use communication and give people a voice.

Alide Roerink - Earth Charter International - The Netherlands

More knowledge and more awareness are ways to solve social sustainability problems; our awareness will impact our choices.

A practitioner's role in the project is as a facilitator; he/she shares their experience with people and responds to people's questions. He/she doesn't push people to do something.

We have to do some exercises. After experience, it's easy for us to understand.

We should never separate social sustainability, ecological sustainability, and economic

sustainability because they have a close relationship. But it's good to start with social sustainability.

To understand tolerance you need to love your enemy.

Prabhjot Sodhi - Center for Environmental Education - India

We can see in the words of Mahatma Gandhi when he said "Man has enough for his needs, but not for his greed". If the resources are sustainably utilized, people will find alternate means of earning as earth has enough for the needs of mankind. Social sustainability means that all people should have opportunities to earn and have respect in life.

The drivers of change need to focus on communications and education, access to resources, reduced vulnerabilities. There are enough rules, guidelines, technologies available, financial mechanisms, laws, regulatory mechanisms etc and schemes to protect the natural resources, forests, species and environmental degradation, but we need the common people to learn of the existence (of information) and ways to access it. Social Sustainability occurs through good community dialogues, continuity, and institutionalization. The main issue is social dialogue.

The most effective actions to solve Social Sustainability issues on the local level are: knowing the capacities of the people, the resources available to them, and bringing in their ownership by involving them in the planning and execution of plans from the beginning; these are the important components of sustainability.

Trust-building with communities, their participation in the planning process and using management techniques of project implementation, starting from the stage of planning, monitoring (mid-term assessment and mid-course corrections), up to the conclusion, with proper impact assessment, followed by advocacy activities for encouraging replication elsewhere, are the essential sustainable actions for any successful project.

Antony Turner – Carbonsense / The Earth Charter International – UK

Practitioners need to be good listeners and collaborate on information with the audience. Also, they need to be a good speaker to explain concepts to help people understand. Another important thing is to use good images to tell a great story (like our new sustainability outreach project project called Pictures of Success http://picturesofsuccess.org/).

Practitioners need to keep in touch with the community after the project and make a good relationship with the local community.

The best way that social practitioners shall learn - is to understand the people's problems - listen to the problems from the people. Do not put yourself as an expert - let the people or the community be the expert -- and learn the culture or context you want Social Sustainability projects to take place - look at other interfaces look at political, ecological, social - they are all interrelated.

Dr. Andrea Colantonio - Oxford Brooks University - UK

Social sustainability is not just about individuals; essentially it is about people and how people live together; the way they decide to live their lives.

Social Sustainability is a continuum- there is no zero (no sustainability) and / or one (full sustainability) approach, but for the Social Sustainability of people - what you need to take into consideration is their happiness.

The main challenge in Social Sustainability is still the definition.

Social Sustainability is essentially about people...
and is about how people live together, how they live with each other;
not just about individuals - it is how people are communities and societies as a whole
and it's about the way they decide to live with each other together.

Social Sustainability is about what they want to do with their lives and what they want to achieve according to development models that they have chosen for themselves.

There are also other physical elements to sustainability -- people can decide they want to achieve something but they need to take into account the physical boundaries of where they live and the places the communities where they live and the planet earth as whole.

Is Sustainable Development the process to achieve Social Sustainability or do we need Social Sustainability to achieve Sustainable Development?

In my view - Social Sustainability is a continuum - there is no 0 to 1 approach -- but much more of a continuum -- which means -- you have different levels of Social Sustainability which depends on a mix of hard and soft things -- its a mix - you have a complex notion of Social Sustainability which essentially extends from different domains, different actions - different things -- these things - these domains deal in the social realm and also in the environmental and economic realms. These hard + soft social factors are linked: hard factors are more established factors: basic needs - housing, water shelter - basic human needs but also education, skills, employment, human rights, and so on merged with...

softer domains, which are more difficult to understand - to quantify - and to measure -- and policy relating to these issues is more difficult to implement.

... about identity - sense of place - culture - well being - happiness -- there is a big debate across all but several European governments about measuring 'happiness' - in the UK -- a national survey about happiness -in Italy, the Italian government has begun promoting some sort of a pilot in terms of measuring happiness...what scholars -what policy makers and the general public is beginning to say - for the Social Sustainability of people -what you need to take into consideration is their happiness.

Appendix Q: Earth Charter FSSD Analysis Tools and Concepts Course Project

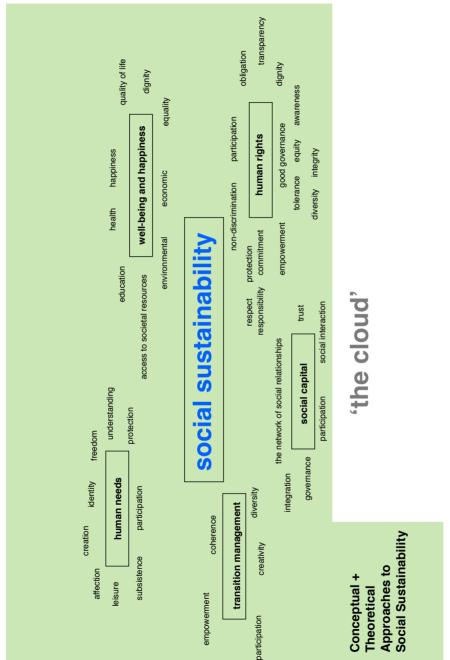
Following are selected excerpts from a FSSD Tools and Concepts research project:

Some themes in the Earth Charter (EC) Preamble are clearly similar to those used in the FSSD System Level (constitutional principles) even though they are not used to create a system's view of the socio-ecological links and interaction.

The EC Principles & Preamble describe the global system, earth as we know it, and how we should live within this system. The FSSD is a planning framework with 5 interrelated levels. The Earth Charter relates to several of the levels, and works well in conjunction with other tools and concepts to meet the remaining levels as part of a strategic approach to Sustainable Development.

- 1. System: in the preamble the assumption is that the earth is in peril, the world is increasingly interdependent and fragile, etc., because that is the specific contribution in understanding of the system.
- 2. Success: The EC Principles stand for a just and sustainable society and determine favorable outcomes in a system. They describe success through a series of instructional principles.
- 3. Strategy: Other EC Principles describe how to reach a favorable outcome in the system i.e. Strategic Sustainable Development (process) principles, especially when integrated into the FSSD framework. Other principles are much weaker in their ability to tell you how to achieve success.
- 4. Action: The EC Principles and Values are used by the EC's members to guide their actions and highlight areas in need of improvement; however it is not the action itself.
- 5. Tools: The EC is used as an educational tool, to promote understanding of what an ethical society would mean.

Appendix R: Social Sustainability Theoretical Framework



understanding social sustainability

Appendix S: Final 19 Social Sustainability Action Criteria FSSD Gap Review Analysis

Final 19 Social Sustainability Action Criteria FSSD Gap Review Analysis	Action Criteria (from Earth Charter)
System Max-Neef Needs 9 categories: Subsistence, Protection, Participation, Idleness, Creativity, Affection, Understanding, Identity, Freedom. Social Capital Trust	Understanding Love (Affection) Freedom Participation Protection Recognition (Identity) Subsistence
Success SP4: NOT systematically undermining of people's capacity to meet their needs.	Respect / Dignity Integrity Diversity
Strategic The Golden Rule Empathy Social Dimension Factors: Cooperation Involvement Inclusiveness Openness Transparency Participation Responsibility / Accountability Honesty	Transparency Responsibility Justice / Equality Tolerance Empowerment
Actions	
Tools	

Appendix T: Social Sustainability Concepts

Understanding refers to the need for acknowledging and understanding to build a shared understanding (Principle 2).

Love refers to people's care for love and actualizing the need for affection (Principle 2).

Freedom implies the protection of rights for expression of ideas and opinions (Principle 3, 13.c).

Participation refers to the participatory interactions of all individuals and organizations in decision making process (Principle 13.c).

Protection is the need for social security and the safety all persons to feel secure - including those who are unable to support themselves (Principles 4; 9.b)

Recognition (Identity) refers to a way of recognizing and expressing of oneself to contribute with communities (Principle 8.b).

Social **Responsibility** defines the key roles of people in acceptance of engagement and the decision making process (Principle 12.c).

Transparency is the right of access to clear information and ideas that can influence people's activities (Principle 13.a).

Equality (Justice) is an equitable policy process for all persons and their activities. (Principles 10, 11)

Dignity (Respect) refers to the inherent right of all human beings for life without discrimination and a quality of being worthy of respect and honor (Principle 12, 1.b).

Empowerment means the opportunity to strengthen all persons and communities by providing responsibilities within sustainable society (Principles 13.f; 14.a).

Diversity refers to the respect of difference (Principle 1).

Tolerance is the ability for respecting multiculturalism, nonviolence, and peaceful perspectives (Principle 16).

Integrity is an ability to be honest to others and one's self.

Creation is related to the opportunities and abilities for creating, designing, and building (Max-Neef).

Leisure (Idleness) is an opportunity for tranquility and fun (Max-Neef).

Subsistence refers to care and the guarantee to the right of physical and mental health (Principle 9.a).

Trust defines the relationship and social networks between people in society by considering the social purposes (Social Capital).

Empathy is the ability of understanding the feelings of another (The Golden Rule).

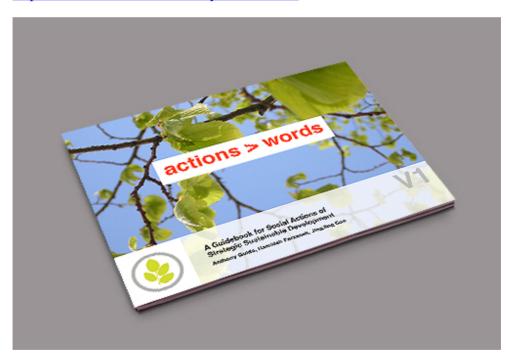
Appendix U: A Guidebook for Social Actions of Strategic Sustainable Development Version 1

A Guidebook for Social Actions of Strategic Sustainable Development V1 offers sustainability practitioners informal information, guidance, and links for possible:

- decreasing the complexity and ambiguity of Social Sustainability actions
- removing the system barriers connected to Social Sustainability
- basic Strategic Sustainable Development concepts and planning

A downloadable pdf version of

A Guidebook for Social Actions of Strategic Sustainable Development will be available Fall 2012 (approximately September) at: http://www.social-sustainability-actions.info



Actions speak louder than words
Anne Isabella Ritchie

It means a lot more if we act on our beliefs than if we just talk about them.