A Holistic Approach to Sustainable Community Development in the Developing World

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Abstract: There is an overall consensus that the poor governance and corruption plaguing many developing nations are main inhibitors to progress. These inhibitors also lead to the overwhelming feelings of desperation, apathy, and determinism. International development assistance programs utilizing capacity building have been created to deal with sustainable development issues in the developing world. Often these programs are fragmented and address results, not the causes, of problems. This study assesses how existing community development approaches could be aided through a strategic sustainable development perspective. A majority of the research involved creation of a holistic innovative community development approach, which encourages transformational change and effective leadership, and comparison of that to an existing community development approach. Strengths and limitations were observed through this comparison and generic recommendations were created to support current approaches. The study found that existing development assistance strategies are effective at building capacity and helping communities, but encompassing a more holistic perspective could align planning and decision-making with socio-ecological sustainability and thereby support mid- and long-term progress.

Keywords: capacity building, community development, developing nations, transformational change, governance mechanisms, socio-ecological sustainability, strategic sustainable development

Statement of Contribution

Despite the cultural discrepancies, the generational gap, and the diversity of educational backgrounds that appeared to be challenging in the beginning, this research study was completed with a towering spirit of unity.

Inspired by the insight provided through this program, we saw the group discrepancies as strengths to pioneer a new perspective that bridges divides and forges ahead with a new vision of empathy and mutual understanding. This constructive understanding manifested itself through logical reasoning, mental and emotional maturity, social intelligence, and more importantly, altruism. This reinforced each of our academic contributions by providing a communication vessel that guided us to create a collective process helping to address difficulties and achieve the desired result.

Apart from some occasional situations and initiatives, the greatest part of this research was conducted in a unified group. Nevertheless, we still recognized equal-individual contribution through our mutual perspective. Each member brought differing perspectives based on past personal experience. Ali, an Iraqi/Swedish citizen with a Sociology background, was engaged in providing the guiding parameters as well as the conceptual background supported by stories and evidences based on the cultural, religious and socioeconomic reality in developing countries. Hye-Jeong, a Korean citizen with a background in Economic Geography, provided the overall methods approach, paper formatting, distilling, keeping the work within the tracks of the defined methods, and brought visual reinforcement to the research. Nick, an American citizen with an Environmental Conservation background, synthesized and merged - refined, distilled, and typed the data with high focus of conciseness and concentration.

If there is word of appreciation to be said in this regard, we would like to express our highest gratitude to the program team who provided us with great insight to practice genuinely and expand our own perspective of leadership.

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Executive Summary

This thesis was undertaken as part of the *Strategic Leadership toward Sustainability Masters program* at the Blekinge Institute of Technology, Sweden.

Introduction

As human populations place ever-increasing amounts of stress on natural systems, the very existence of global life-sustaining resources is threatened. This can be referred to as the global sustainability challenge. Within the developing nations, a greater pressure is placed on poverty stricken rural populations (UN 1995). It is difficult to point blame at a single cause of widespread poverty in developing countries, however there is a broad consensus that bad governance and corruption in particular are progress inhibitors (Eberlei and Führmann 2004). In the absence of democracy and transparent strategies, corruption dominates these societies and erodes the trust that eventually distorts the focus toward a better future.

As an effort to address these problems, many international initiatives have emerged and evolved. The Brundtland definition of sustainability and Agenda 21 led to a shift in the international development assistance community toward development strategies that focused on developing the community's capacity to meet their own needs. However, often these community development strategies focus on capacity building without considering a holistic perspective as a necessary way to achieve sustainability. This limited understanding miscalculates the socio-ecological complexity, therefore typically results in fragmented, downstream, and short-term solutions (Dobie 2002).

The issue of complexity within socio-ecological systems has been addressed by international group of scientists from an array of disciplines. The resultant outcome was the creation of a concrete, scientific based framework for planning and decision-making. It has come to be known as The Natural Step Framework or the Framework for Strategic Sustainable Development (FSSD) (Robèrt et al. 1997).

The FSSD is composed of 5 levels: System, Success, Strategic, Action, and Tools. In an effort to create a structured comprehension, each level analyzes certain parts of a situation to understand the complexity. A tool unique to

the FSSD, used in conjunction with the backcasting strategy, is the ABCD tool. This is a step-by-step planning procedure that helps to ensure that the proposed actions are aligned with the vision of success.

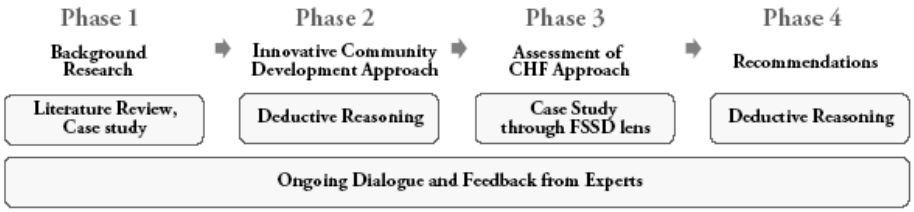
The scope of this study focused on building community driven capacity, through robust governance structure, to create endogenous methods of sustainable resource mobilization aimed at food, water and energy self-sufficient communities. The primary objective of this study is to assess whether or not the ongoing efforts of the international development assistance community can be reinforced by providing a clear definition of socio-ecological sustainability, within a structured framework, to help people and communities in the developing world move toward a prosperous future. In order to achieve the research objective, this research examined a community development approach implemented by CHF International; an NGO working in developing countries.

For the objective of this study, the following primary question is explored:

In what ways can a strategic sustainable development perspective further efforts to shift communities, in the developing world, toward a more sustainable future?

Methods

The figure below summarizes the methods completed for information collection, information analysis and application of results. In order to answer the primary research question, the study included visualizing an innovative community development approach, identifying strengths and limitations of the CHF approach, and suggested recommendations to further the CHF approach in the context of sustainable development.



Results

Results were accomplished by analyzing the information gathered during the research methods. This section consists of six parts including background information for results section. It includes an innovative community development approach focused on empowerment and capacity building toward sustainability and meeting the current demands of the international development community for a new holistic approach. The innovative approach also realizes the importance of functional governance structures in leading communities toward a prosperous future and proposes social governance mechanisms aimed at creating transparent and participatory decision-making processes.

The innovative approach helps to establish a holistic understanding of the socio-ecological system in which a community exists and looks to integrate a deeper awareness and consciousness into international development organizations and communities. Socio-ecological success is also defined in the approach by providing a principle-based definition of sustainability. The strategic guidelines include backcasting, prioritization criteria, diverse participation and cooperation, transparency, consideration of societal idiosyncrasies, and proposed social governance mechanisms. The overall aim of the strategic level is to eliminate barriers to the development process, by establishing an atmosphere of empowerment, responsibility, motivation, and trust. This new transparent atmosphere will help to change deterministic mindsets and create the necessary environment for a transformational change. The specific actions identified to help with this societal shift include ongoing education and training of community members and self-sufficient sustainable resource mobilization methods. Ongoing education and training is essential for the continuation of the established democratic processes and empowerment and motivation of the community members. The need for tools to monitor and evaluate the development process of the community has also been identified through the innovative model. These can take the form of ecosystem service indicators, which can be used to aid the establishment self-sufficient sustainable resource mobilization methods. The model also communicates the need for individual communities to establish their own monitoring and evaluation tools. This can help create a set of best practices that are tailored to the distinctive elements of a community.

Following the innovative approach is a summary of the 8 key elements of the CHF approach and a summary that follows the structure of the generic 5 level framework. Strengths and weaknesses of the CHF approach are then analyzed in comparison to the innovative approach based on the FSSD. This was done in an effort to identify any limitations of the CHF approach, in regards to socio-ecological sustainability and provide a basis for recommendations relevant to practitioners and people directly affected by the community development approach. Finally, the results include suggested generic recommendations to strengthen CHF approach to encompass a more holistic understanding of sustainability. The generic recommendations are as follows:

- Adopt a holistic understanding of the socio-ecological system
- Help the community to build vision of success based on Sustainability Principles and rooted in the cultural heritage
- Integrate backcasting from an envisioned future into the existing strategic approach, that incorporates project prioritization criteria and considers the cultural idiosyncrasies
- Enhance the existing leadership, governance, and resource mobilization structures to ensure actions of the community align with the strategic vision
- Create and/or integrate monitoring and evaluation tools (e.g. ABCD tool)

Discussion

These recommendations are not specific to the CHF approach. They can be seen as overarching strategic guidelines toward sustainable development perspective that can further efforts to shift communities, in the developing world, toward a more prosperous and self-sufficient future.

Adopting a holistic understanding of the socio-ecological system will build an awareness and consciousness in the community. This understanding is critical in order to communicate the importance of a sustainable community and its role within the socio-ecological system, which can help build individual consciousness that leads to a realization of the root cause of community problems. Building a vision of success based on a principle-based definition of sustainability and rooted in the cultural heritage will help to establish ownership and trust throughout the development process

while moving the community toward a more sustainable future. Incorporating backcasting into the strategic approach of development will provide community members with a desired future that can then be used as a vision from which to plan proposed actions. This will provide a method to better plan actions and visualize how actions can build of one another. Lastly, this study recommends that the current approach further develop monitoring and evaluation tools to help community members observe the progress of the community. These can come in many forms, but should focus on tools created by the community and are specific to their situation. A general recommendation is also made that is targeting the larger international development community. It suggests that communities and development organizations are not subject to strict timelines that do not allow for the intrinsic-endogenous development process of the community.

The research emphasizes why a holistic understanding of socio-ecological complexity within a community can be used to create a future vision of success that is based on ecosystem constraints and rooted in the existing community idiosyncrasies. It also discusses the power of this vision in building community consciousness and trust to mobilize available resources toward a self-sufficient future on the pathway to sustainability. Lastly, this study emphasizes the importance of developing in a sustainable manner and avoiding the traditional trends set by developed countries that have contributed significantly to the global sustainability challenge.

Conclusion

The overall outcome of this research established a generic conceptual structure, through which a chronological progression of community driven capacity building can utilize the socio-ecological complexity and turn it into a powerful-strategic thrust for transformational change that drives the community toward a sustainable, self-reliant, self-sufficient, and prosperous future.

This study recognizes the potential of the FSSD to provide a holistic approach and structured understanding to the complexities that exist in the developing world in regards to the persistent problems. It is a result of this study that a robust, transparent, democratic governance structure is necessary to bring essential change that establishes hope and trust among individuals. This shift in mindset, in conjunction with a holistic approach, will provide the conditions for a community to develop toward a more sustainable future.

Glossary

ABCD tool: A strategic planning process for systemically applying backcasting from basic principles of success. It includes four logical steps: (A) understanding the system, (B) assessing the current reality, (C) creating a vision of success and brainstorming solutions, and (D) prioritizing strategic actions (Holmberg and Robèrt 2000).

Apathy: a state of indifference of the suppression of emotions such as concern, excitement, motivation, or passion. It can be seen as a main factor of poverty and dependency and sometimes related to a fatalistic philosophy (SCN 2009).

Backcasting: A planning method that starts with the desired outcome in mind and then determining the steps required to achieve that outcome (Dreborg 1996; Holmberg and Robèrt 2000).

Capacity: The ability of people, organizations, and society to manage their affairs successfully (Gwin 2005). Examples of community capacity are supportive institutions, good leadership, participation structures, motivation to act, and people willing to be involved (Frank and Smith 1999).

Capacity Building / Development: "Enhancement of the ability to evaluate and address the crucial questions related to policy choices and modes of implementation among development options, based on an understanding of environmental potential and limits of needs perceived by the people of the country concerned" (UNCED 1992).

CHF International: The Cooperative Housing Foundation, which is an international development and humanitarian aid organization to help low and moderate-income communities around the world improve their social, economic and environmental conditions (www.chfinternational.org).

Collaboration: A process where people work together towards a common goal, by sharing knowledge and consensus.

Community: Defined as people living in a particular area with common interests and shared concerns.

Community Development: "The planned evolution of all aspects of community well-being (economic, social, environmental, and cultural). Process whereby community members come together to take collective action and generate solution to common problems" (Frank and Smith 1999).

Complexity: The sophisticated web of interactions and feedback among the atmosphere, land, water, biodiversity and human society (Carr 2007).

Creative Tension: The gap between the current reality and the desired future.

Diversity: Variety; composed of distinct or unlike elements or qualities (Renckly 2004, 246).

Development Practitioner: Any person or entity that works with communities to build individual and community capacity to enhance the community's performance.

Empowerment: Enabling individuals and communities to take more and better control of their life and rights.

Framework for Strategic Sustainable Development (FSSD): Systematic model used to understand and plan progress towards a sustainable society. The FSSD is composed of 5 levels: System, Success, Strategic, Action, and Tools (Robèrt et al. 1997).

Governance System (Mechanism): It is the institutional filters, mediating between human actions and biophysical processes (Kotchen and Young 2007).

Idiosyncrasies: A community's multiple and interrelated core cultural values, religious beliefs, and social and political structures.

Integrated Community Sustainability Plan: A community development plan that focuses on sustainability strategies and initiatives. It also includes achievement targets and performance-tracking indicators.

Interdependence: A dynamic of being mutually and physically responsible to and sharing a common set of principles with others.

Participation: The process by which stakeholders engage in making-decision and taking action such as policymaking, resource mobilizations, project planning, and/or project implementation.

Participatory Action for Community Enhancement (PACE): CHF international Program for building the capacity of individuals within a community to be catalysts for positive change, by engaging community members at every level in projects to construct physical infrastructure and improve their environmental or economic conditions, communities learn accountability, conflict resolution, business skills, and resource mobilization (www.chfinternational.org).

Self-organization: A process of attraction and repulsion in which the internal organization of a system, normally an open system, increases in complexity without being guided or managed by an outside source.

Self-sufficient: Needing little to no outside assistance in satisfying one's basic needs, especially in regards to food production, water and energy usage.

Sustainability Challenge: As human populations place ever-increasing amounts of stress on natural systems, the very existence of global life-sustaining resources is threatened.

Sustainability Principles: Principles based on a set of minimum requirements of a socio-ecological sustainable society. In a sustainable society, nature is not subject to systematically increasing… (Robèrt et al. 1997; Ny et al. 2006)

1. Concentrations of substances extracted from the Earth's crust
2. Concentrations of substances produced by society
3. Degradation of physical means

and in the society..

4. People are not subject to conditions that systematically undermine

their capacity to meet their needs.

Sustainable Development: The Brundtland definition indicates meeting

the needs of today without compromising the ability of future generations to meet their needs (WCED 1987).

Transformational change: Defines the fundamental shifts in individual, organizational, community or societal values and perspectives that are emergent over time. (World Bank 2008)

Transparency: Open and honest processes within planning and decision-making.

The Natural Step: An international non-governmental organization of Swedish origin which developed and promotes The Natural Step Framework for strategic planning towards sustainability.

Eight Key Elements of PACE model: Main elements that are central to effective implementation of the CHF approach in developing countries which are as following: participation, elected committee, representation of diverse interest, wide collaboration, resource mobilization, agility, transparency, and training.

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1 Introduction

1.1 Sustainability Challenge

As human populations place ever-increasing amounts of stress on natural systems, the very existence of global life-sustaining resources is threatened. The pressures can come in many forms such as escalating atmospheric emissions, rapid population growth, and over consumption of natural resources. These pressures result in environmental and social epidemics including ozone layer depletion, climate change, food and freshwater scarcity, and widespread poverty, corruption, disease, and violence. Together these can be referred to as the global sustainability challenge. The global sustainability challenge has an effect on the entire world, but has a greater significance in developing nations because, by definition, their institutional and infrastructural capacities are even less equipped to effectively deal with complex and dynamic situations. Within the developing nations, a greater pressure is placed on poverty stricken rural populations who typically create subsistence from marginal agricultural or pastoral lands (UN 1995). Within this context misuse of natural resources, such as soil degradation, depletion of nutrients, and deforestation, contribute to extreme poverty. In addition to regional issues, this poor governance surrounding natural resource management leads to diminishing the carbon stock, biodiversity, and associated ecosystem services on the global level.

Global climate change is one result of the global sustainability challenge that places a significant impact on communities in the developing world. Although it is not the cause of the perpetual cycle of poverty that exists in many developing areas, it remains a critical issue for development with significant social and financial impacts. Because climate change can rapidly reverse tangible results of development that took decades to achieve, hard-earned gains of development need to be protected (World Bank 2007). Consistent flows of available resources play a key role in reducing poverty, as people rely on them for food, shelter, energy, and medicines (DFID 2008). This dependence combined with inadequate infrastructures and the threat of increasing environmental pressures such as flooding, landslides, and drought can place communities in developing countries in a state of crisis.

In addition to the growing environmental threat, people in the developing countries have witnessed a decline in political, social, economic, and environmental conditions within their communities (Valentine 1998). Many of the basic building blocks of society, such as government transparency, publicly accessible information, public involvement in decision-making processes, free-market economy, non-enforcement or existence of environmental laws, are limited or missing (Hecht 1999). It is difficult to point blame at a single cause of widespread poverty, however there is a broad consensus that bad governance and corruption in particular are progress inhibitors. Corruption generates structural economic, political, individual, and social repercussions that can cause or exacerbate situations of poverty (Eberlei and Führmann 2004).

Much of the developing world is in a state of crisis. However, as the Chinese language acknowledges, in a situation of crisis there may also be potential opportunity; *crisis* is made up of two characters, 危機 (wei ji), the first means "danger" and the second "opportunity" (Harsch 2009).

Bearing in mind the poverty-related dangers that persist for millions in the developing world, opportunities exist for the infrastructural development processes and operations to be established more attune with the balance of natural systems. This will assure that developing countries not follow the example set by developed countries, which have contributed significantly to the global sustainability challenge. These opportunities can provide enhancement of energy security; improvement of the local environment; promotion of more sustainable land use and agricultural practices; increase resilience to natural disasters; create carbon market revenues; and facilitation of the availability and use of clean technology (World Bank 2007).

1.2 Community Development in Developing Countries

As an effort to address development issues, associated with social and environmental degradation in developing countries, the international development assistance community started to implement development assistance programs. However, often these programs addressed development too narrowly and did not consider the broader context (Stiglitz 1998). Therefore they were designed to react to the effects rather than the causes of the problems. This resulted in programs that where fragmented,

project-based, donor controlled and focused on short-term results (Dobie 2002). Moreover, when the international staff left, the local staff was often lacking the experience, confidence, or institutional capacity to take over. This created demand for additional projects and resulted in a cycle of dependency (Dobie 2002).

The growing debate on sustainability has lead to the emergence and evolution of many community development strategies. In 1987 the World Commission on Environment and Development, popularly referred to as Brundtland Commission, came forward with a definition of sustainability; "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (WCED 1987). Then in 1992 Agenda 21 built on the Brundtland definition and identified capacity building as an approach to achieve sustainability. According to the United Nations, a country's ability to follow a sustainable development path is determined largely by the capacity of citizens, institutions, as well as ecological and geographical environments (UNCED 1992). This led to an overall shift in the international development assistance community toward development strategies that focused on building the community's capacity to meet their own needs and achieve sustainability (Dobie 2002).

The UNDP recognizes that "capacity building is a long-term, continuing process, in which all stakeholders participate (ministries, local authorities, non-governmental organizations, water user groups, professional associations, academics and others)" (UN 2006). Despite the emphasis the UN places on capacity development and environmental stewardship there are still arguments among the international development community on whether or not long-term processes should be considered for implementation (OECD 2005).

It is agreed upon that capacity development is an important aspect to lead communities in the developing world toward a more prosperous future. However, often the focus is on capacity building without considering a long-term holistic perspective (Domeisen and Sousa 2006). This limited understanding miscalculates the socio-ecological complexity that exists within a community and still leads to insufficient solutions regarding strategic sustainable development. By ignoring the complexity and uncertainty involved with long-term structural change across societal boundaries, inadequate knowledge is produced to solve problems surrounding socio-ecological sustainability (Voß 2003).

1.3 Strategic Sustainable Development

This limited understanding of the interrelated socio-ecological complexities remains high and affects the implementation of community development models. In response to this, sustainability practitioners have begun looking upstream to the root causes of the global issues and taking a holistic approach to create effective solutions led to a thorough-structured understanding of the sustainability challenge. This structured understanding was developed by an international group of scientists from an array of disciplines. The resulting outcome was the creation of a concrete, scientific based framework for planning and decision-making. The strategic framework is rigorous and very applicable for assessing complex situations that have the possibility of multiple outcomes. It divides the complexity into five separate, but interrelated, sections that make the situation more approachable. The framework has come to be known as The Natural Step Framework or the Framework for Strategic Sustainable Development (FSSD) (Robèrt et al. 1997).

1.3.1 Framework for a Strategic Sustainable Development (FSSD)

The FSSD is composed of 5 levels: System, Success, Strategic, Action, and Tools. In an effort to create a structured comprehension of complexity, each level analyzes certain parts of a given situation. Below are elaborations of the individual levels and an example of how they fit into the context of sustainable community development.

System Level

The system level identifies the context of relevant variables related to the situation. In the context of sustainable community development this refers to the individuals, existing within their community, as part of a larger society. This includes social laws, norms, values, and rules that allow for self-organization, diversity, and interdependence among individuals and communities. Society depends on the global biosphere including the ecological system defined by scientific laws and rules.

This helps to visualize the societal arrangement and clearly assess the interrelated complexity between the society and environment, by

highlighting and creating a consciousness of the internal and external aspects.

Success Level

The success level identifies the desired goal. The goal of the FSSD is sustainability, as defined by the four Sustainability Principles explained below. In regards to sustainable community development, this is a community that is compliant with the set of conditions for socio-ecological sustainability (i.e. the four Sustainability Principles). The Sustainability Principles are as follows (Holmberg and Robèrt 2000; Ny et al. 2006):

"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 (e.g. from the abuse of political, structural and economic power)."

These principles are unique because they encompass a scientifically agreed upon understanding of the world, they are necessary and sufficient to achieve sustainability, general to organize all activities relevant to sustainability, concrete to channel action and serve as directional aids in problem analysis and solutions, and non-overlapping or mutually exclusive in order to enable comprehension and structured assessment of the issue (Robèrt et al. 1997). Through a clear definition of sustainability, these principles allow for creativity within defined constraints, establish conditions for consensus, and help to build and guide a community vision.

Backcasting is a collective participatory process which empowers and liberates people creating a genuine ownership. The sustainability constraints are yet adding further challenge for the people to unite their efforts on one shared vision of future. This shared vision of success energizes the propelling drivers of creativity through a dynamic creative

tension. Therefore it is the sustainability principles that stimulate creativity because it helps to at the larger scale of a problem and all of the overarching variables. This brings realization to all the possibilities that exist and helps to build consensus around solutions by providing clear limits that define success. This creative enhancement and basis for consensus lead to the establishment and guidance of a community vision. Backcasting is more effective than solely relying on forecasting, which tends to introduce a more limited range of options, hence stifling creativity.

Strategic Level

The strategic level includes guidelines that assist with selecting actions. In relation to sustainable community development, this refers to planning procedures that help to estimate the effectiveness and prioritize proposed actions that lead a community toward a sustainable vision of success.

The main strategic guideline of the FSSD is backcasting. Backcasting is a planning procedure by which a successful future outcome is imagined and then actions are planned with this outcome in mind. In general backcasting is especially effective when (Dreborg1996):

- The issue being addressed is complex, such as considering all of the factors associated with the development of a community
- There is a need for major change, which is the case in many developing nations regarding overarching mindsets
- Dominant trends are part of the problem, for example oppression, corruption, and poor governance
- When there is a need for a long time horizon

This strategy also provides a number of benefits to the planning and decision-making process such as (Robèrt et al. 2007):

- Helping decision-makers highlight key aspects within the current planning operations that should be emphasized and developed further, through completion of a current reality assessment
- Helping decision-makers recognize the possible solutions that can be strategic steps toward the goal, by creating a vision of the desired future

- Helping decision-makers to identify measures that solve current problems without creating additional future problems, by knowing the current situation and having a clear vision of the desired future
- Making it possible to connect short-term measures with the long-term vision, when used in conjunction with the prioritization questions listed below

Within this level, there are three basic prioritization questions that help to select actions that are aligned with the vision of a sustainable future. More questions can be added depending on the specifics of a given situation. The three basic questions are as follows (Holmberg and Robèrt 2000):

- Does this action move the community in the right direction toward its vision of sustainability?
- Does this action provide a flexible platform for further improvements in the community?
- Does this action provide a return on the initial investment, in terms of capacity development, financial returns, or any other type of positive return?

Action Level

The action level includes the efforts necessary to achieve success. In sustainable community development this refers to every tangible activity helping to move the community toward success. Examples here could include educating the community about the sustainability challenge, providing training of trade skills, or implementing actual projects, such as a waste management system, within the community.

Tools Level

The tools level includes any indicators and monitoring procedures that help support the efforts of the other 4 levels. In terms of sustainable community development this refers any method or mechanism that measures the current community system, helps the community plan, or evaluates the progression of the community.

A tool unique to the FSSD, used in conjunction with the backcasting strategy, is the ABCD tool. This is a step-by-step planning procedure that

helps to create an awareness of the whole system (A-step), provide a current assessment of the situation (B-step), create a desired future vision (C-step), and help to prioritize proposed actions and create an implementation plan to reach that desired future vision (D-step). The D-step utilizes the three-prioritization questions listed above in the strategic level. These ensure that the proposed actions are helping the community reach their vision of success.

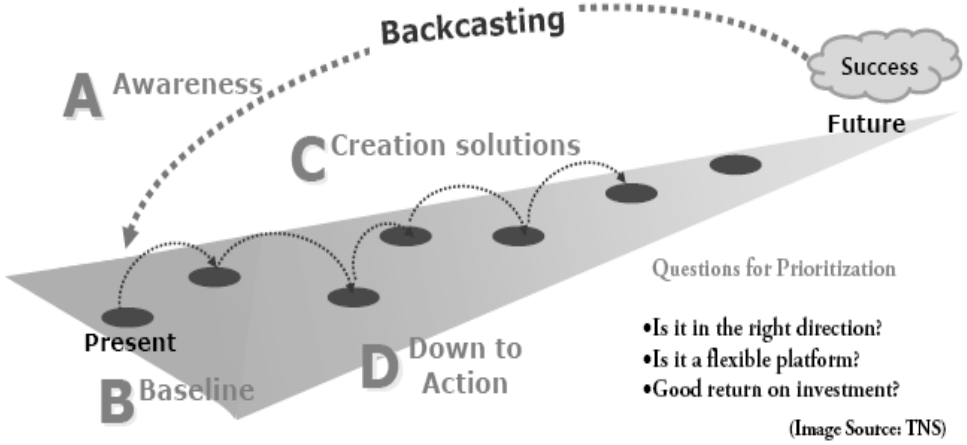

Figure 1.1. ABCD Process

The FSSD is a framework that creates a structured understanding of complex situations and helps to lead planning and decision-making processes in the direction of sustainability. Strengths associated with the FSSD that help lead toward sustainability are providing a common language, through the Sustainability Principles, and helping to visualize a shared mental model of the situation, by creating an envisioned future and a current reality assessment. Creating a common language around a complex situation ensures every stakeholder has a similar understanding when issues are identified and solution are proposed. This shared understanding also leads to the development of better communication channels among stakeholders. Through establishment of a shared mental model the FSSD helps to build collective awareness of the existing situational variables, results in a single understanding of the situational context, and helps to establish clear-shared goals that help move an entity toward sustainability. As long as the system requirements are understood, a vision of success is created within the constraints of the Sustainability Principles, and

backcasting is used as a strategy for aligning actions with the vision, the innovative and creative possibilities are endless.

1.3.2 Integrated Community Sustainability Plan (ICSP)

An example of a community development model that uses the FSSD as a structure is the Integrated Community Sustainability Plan (ICSP) developed by the Natural Step. ICSP model is a community development model that has evolved over 20 years of proven success in Canada, USA and some EU countries. It demonstrates the contrast between traditional and innovative approaches and helped to design a model especially tailored for developing countries. This model uses the FSSD to create an effective strategy aimed at moving communities in the developed world toward a sustainable future. The ICSP helps communities identify short, medium, and long-term goals, create a holistic plan, monitor progress, and provide guidance for sustainable development. It consists of 5 major phases including (Baxter and Purcell 2007):

- Phase 1: Structuring the Planning Process
- Phase 2: Creating a Shared Understanding of Sustainable Community Success
- Phase 3: Determining and Analyzing Strategy Areas for Community Success
- Phase 4: Identify Initiatives to Move From Current Reality to Success
- Phase 5: Ongoing Monitoring and Implementation

Since the ICSP model was created to address communities in the developed world it operates under the assumption that adequately functional democratic governance and municipal structures exist. The ICSP is a strategy that helps align the vision and actions of established entities with the sustainability principles. However in the context of many developing countries inflicted by corruption and bad governance, there are inadequate democratic structures and/or institutional capacities. In order to address the concern of not having adequate institutional and infrastructural structures,

another innovative community development approach is necessary and is the focus of this research.

1.4 Research Objective

We have reached now so deep into un-sustainability that no project or plan for the future should be contemplated outside the realm of sustainability. As discussed in the previous sections, the current approaches are evolving to include capacity development as a strategy to address the upstream causes of community degradation. However, the current capacity development strategies are still neglecting the holistic socio-ecological perspective (Domeisen and Sousa 2006) that encompasses a long-term vision for the community. Moreover, both the traditional and current models are not considering the sustainability realm as a main focus. Therefore the question remains, is a capacity development strategy enough to ensure a community develops in a socially and ecologically sustainable way?

The primary objective of this study is to assess whether or not the ongoing efforts of the international development assistance community can be reinforced by providing a clear definition of socio-ecological sustainability, within a structured framework, to help people and communities in the developing world move toward a prosperous and truly sustainable future.

1.5 Research Scope

In order to achieve the research objective, this research examined a community development approach implemented by CHF International, an international non-governmental organization working in developing countries. The community development approach discussed in this research will focus on empowering individual capacity within developing communities. However, this research will not cover the influence that regional and national governments place on communities in developing nations because as stated earlier, national governments are often too disconnected for meaningful participation within the transformational development process (Stiglitz 1998).

1.6 Research Questions

For the objective of this study, within the research scope, the following primary question is explored:

In what ways can a strategic sustainable development perspective further efforts to shift communities, in the developing world, toward a more sustainable future?

To answer the above primary question, the following secondary questions were posed:

1. *What would an innovative sustainable community development approach, being implemented in developing countries, look like?*
2. *What are the current strengths and limitations, in regards to socio-ecological sustainability, of the CHF approach?*
3. *What recommendations can be made to strengthen the CHF approach to encompass socio-ecological sustainability?*

2 Methods

This section describes the research procedures and strategies for the purpose of this study. Several research methods resulted from completion of the research design and exploration of the research phases. The methods included all procedures and techniques needed for information collection, information analysis and application of results. Section 2.1 describes the research approach used to elicit information collection methods/techniques and also outlines the entire research process. Section 2.2 explains each method/technique needed to fulfill the research approach and objective.

2.1 Research Approach

2.1.1 Research Design

As a general guideline, focus will be placed on qualitative research, indicators, and conclusions, because in many cases qualitative measures have provided a more realistic assessment of community development progress in developing countries (Vermaak 2001).

A research design is an integral part of the research process, because it is the logical plan in the process of collecting, analyzing and interpreting information, which can help avoid the situation in which the evidence does not address the initial research questions (Yin 2003). In this research design, five main components were considered: research questions, relevant data, data collection methods, data analysis techniques, and validity.

During the research design, the issue of information validity was considered in each phase. In particular, using the knowledge of practitioners can raise questions of validity. So this information must be weighed to eliminate fictitious or false statements as well as personal opinions and biases of both the information supplier and recipient (Stake 1994). Therefore in each phase a number of different methods were used to crosscheck information, control bias and secure validity of results. Combining multiple methods can help strengthen the possible weaknesses within the individual methods (Golafshani 2003).

2.1.2 Research Phases

Four phases resulted from the research design to fulfill the research objective, including background research, creation of innovative approach, assessment of current approach, and recommendations. Below figure 2.1 describes the research phases and methods needed in each phase.

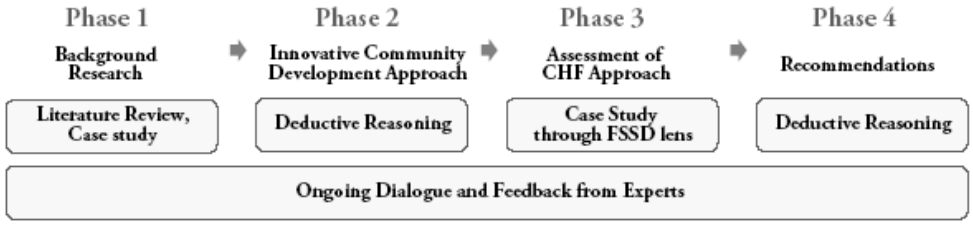

Figure 2.1. Research Phases and Methods

Phase 1: Background Research

The objective of this initial phase was to gain a general understanding of the information necessary to complete the study. Through this general understanding, the research objective, scope, and questions were defined. This information came in the form of a literature review, a case study, and dialogue with experts and practitioners in the community development field.

Phase 2: Innovative Community Development Approach

Phase 2 was comprised of creating an innovative approach that is built around a vision for sustainable community development and encompassed the definition and strategy associated with socio-ecological sustainability as described by the FSSD. This was completed by group brainstorming, deductive reasoning, and dialogue with experts and practitioners in the field.

Phase 3: Assessment of CHF Approach

Phase 3 was an analytic procedure and interpretative process used to generate results. This phase consisted of analyzing the information from the research findings, i.e. literature review, case study and dialogues, to identify the strengths and limitations of the current CHF approach by comparison to the innovative approach from Phase 2. Backcasting was used as a strategy to assess the current approach from the perspective of the envisioned

innovative approach. This involved deductive reasoning and dialogue with field experts.

Phase 4: Recommendations

Phase 4 was providing recommendations to strengthen the CHF approach suggested by the innovative approach. These practical recommendations can act as guidelines to make the current CHF approach more strategic in regards to the holistic perspective of socio-ecological sustainability. This was completed group brainstorming, deductive reasoning, and dialogue with experts.

2.2 Research Methods

2.2.1 Literature Review

The objective of the literature review is to gain an overall understanding of the international development assistance community, including history and current trends. This study reviewed various community-capacity development literatures produced by researchers, practitioners, international development assistance community, and the NGO community.

This included information from relevant materials such as books, journal articles, and other academic and practical documents. These were primarily gathered from online archives such as: BTH Library Catalogue, Libris (provided by the National Library of Sweden), ebrary®, ScienceDirect, Google, and Springerlink. The main keywords for obtaining the research literature included: community development, developing countries, capacity building policies, capacity development, sustainable community development and strategic sustainable development.

The literature review was completed early in the process and the knowledge and understanding gained was used throughout the study, including phases 2, 3, and 4.

2.2.2 Case Studies

The objective of the case studies was to better understand the dynamics of an actual international development assistance organization and to understand the conceptual frameworks of community-capacity development

models including, the interrelationships of its structural key features and operational processes.

First to gain an understanding of how a strategic sustainable perspective can be integrated into a community development approach, the processes of the ICSP model were explored with Mr. Stanley Nyoni, senior advisor of The Natural Step International. The next step in this method included a review of CHF International, its current community-capacity development approach known as the PACE model, and example communities where PACE has been implemented. The purpose of looking at actual communities in developing countries was to deepen our understanding of the process of capacity development under different circumstances. This was completed by searching the CHF website <chfinternational.org> and speaking Mr. John Chromy, vice-president of CHF International, who provided much of the information. This step was also completed early in the process and the information gained helped throughout the remainder of the project, specifically during the assessment of the CHF approach.

2.2.3 Deductive Reasoning

Deductive reasoning was present throughout the entire project procedure. However this was used as a key method in creating the innovative approach, assessing current CHF approach through the FSSD lens, and recommending generic guidelines to strengthen the CHF approach. This process was based on the understanding of information gained in previous methods and involved group dialogue, brainstorming, and intellectual abstract thought.

This process highlighted key points of the current CHF approach that can be developed and emphasized, highlight the future possibilities that can act as strategic steps, and identified what short-term measures can be taken to create a more strategic community development approach for developing countries.

2.2.4 Ongoing Dialogue and Feedback from Experts

The objective of the ongoing dialogue was to help guide the entire project process and gain a better understanding of the issues associated with international community development and the specifics of the CHF approach.

The dialogue involved questioning and discussing issues, related to findings from previous research, with people who work in the field of community development and have knowledge and experience in many regions and cultures around the world. The process involved frequent conversations among the project team and field practitioners and experts including, Mr. John Chromy, vice-president of CHF International, Mr. Stanley Nyoni, senior advisor at The Natural Step International, Ms. Fillipa Odevall, fundraiser and project leader of The Hunger Project – Sweden, and Dr. Kelly Cain, director of the St. Croix Institute for Sustainable Community Development and professor at the University of Wisconsin at River Falls.

The ongoing dialogues were completed in a variety of settings; Voice over Internet Protocol applications and face-to-face interviews. The dialogue began early in the project and continued throughout, by providing insight into phases 2, 3, and 4. The feedback occurred near the end of the study and was especially helpful to outline the strengths and help structure the innovative approach.

3 Results

This section consists of six parts and presents the data gathered, using the previously described methods. First, section 3.1, includes background information regarding the importance of transformational change and the issues of governance. Following that, section 3.2 explains an innovative community development approach focused on empowerment and capacity building toward sustainability and meeting the current demands for a new holistic approach. Section 3.3 consists of a summary of the CHF approach and an assessment of the approach through the structure of the 5 level framework. Section 3.4 includes an assessment of the strengths and weaknesses of the CHF approach in regards to a strategic perspective that recognizes the level of socio-ecological complexity. Section 3.5 consists of suggested generic recommendations to strengthen CHF approach to encompass a more strategic understanding of sustainability. Lastly, section 3.6 has a general recommendation for the international development society. The first and second research secondary questions were answered through completion of sections 3.2 and 3.4 respectively. The third research secondary question and primary research question will be answered in section 3.5.

3.1 Background

3.1.1 Transformational Change

"Transformational change is at its essence about changing values. The process includes critically examining the prevailing underlying assumptions, habits and priorities that exist in government – and protecting what's valuable and discarding what no longer is useful. Through the transformation process a culture of constraint, bureaucracy, resignation, and mediocrity can be interrupted and replaced by a culture that supports action, initiative, innovation, accountability, participation, and commitment" (World Bank 2008).

As stated in the introduction (section1.1), many developing countries have witnessed a decline in political, social, economic, and environmental conditions (Valentine 1998). This leads to the degradation of many building blocks of society, such as government transparency and public involvement in the decision-making processes (Hecht 1999). This ongoing degradation

has a long history and has lead people to a state of desperation, creating an overarching sense of cynicism, apathy and dependency (Jreisat 2002). This dominant mindset adds to the existing complexity of community development. Therefore there is a need to alter the peoples' convictions before lasting development can occur.

The idea of developing nations shifting their mindsets and finding their own direction for development can be referred to as a transformational change. A transformational change occurs when individuals begin to realize and understand the limitations in their overarching societal structures and adequate support exists to alter the existing trends to a new arrangement that is more practical and desirable for the members of society (World Bank 2008). Transformational change is not an end, but rather a means to other objectives. Within the context of development, individuals and societies can have more control over their destinies through understanding broader personal horizons. "This includes identifying the barriers to, as well as potential catalysts for, change. Approaching development from the perspective of transforming society has profound implications not only for what governments and aid agencies do, but how they proceed -- how they engage, for instance, in participation and partnership" (Stiglitz 1998). Often the most effective agents of transformational change within societies are communities. Effective leadership is also necessary to instigate transformational change. Leadership goes far beyond individuals. Patterns of relationships and the structures that shape them are often considered more important than individuals. The cohesion built through the patterns of relationships is a crucial aspect for ownership and responsibility of the development results. However building cohesion, ownership, and responsibility is not adequate to provide direction to the development. "In calling for a transformation, a central issue has to be addressed: transformation to what kind of society, and for what ends?" (Stiglitz 1998) This is where a vision of sustainability can establish a target for the community and act as a main driver for transformational change.

3.1.2 Governance Issues in the Developing World

This realization to the significance of new patterns of relationships and structures that emerges through effective community leadership calls for a dynamic governance. National governments do have influence over societies; however they are often too remote and disconnected for meaningful participation to occur (Stiglitz 1998). Governance approaches

that are flexible, collaborative and learning-based may be responsive, adaptive, and better able to cope with the challenges of integrating environment and development (Carr 2007).

Furthermore, when the United Nations list of Least Developed Countries (UN 2005) is compared to The Economist Intelligence Unit's Index of Democracy (The Economist 2008), a strong correlation can be seen. Many of the nations with low democracy ratings can also be identified as least developed. This evidence can be seen as a link between poor governance and social decline, adding more evidence to the strong consensus that corruption and poor governance can cause or aggravate situations of poverty and impede development (Eberlei and Führmann 2004). So there is an identified need to establish some type of community level governance structure in many developing countries that tackles local planning, decision-making, and sustainable development. As will be seen in section 3.3, the current CHF approach establishes a basic democratic structure within communities that is aimed at meeting community needs identified by community members.

Governance specifically aimed at sustainable development requires effective administrative executive bodies and enabling frameworks (Carr 2007). Bob Doppelt, executive director of the Center for Watershed and Community Health – a sustainability research and technical assistance program, echoes this need for an effective governance structure. He looks at governance and its relation to creating transformational change toward sustainability. He refers more on organizational transformation toward sustainability, than transformational change within communities, but the identified governance mechanisms are very similar and therefore can be applied in this context. He states that in order for any kind of transformation to be "truly sustainable, power and authority must be skilfully distributed among... stakeholders through effective information-sharing, decision-making, and resource allocation mechanisms" (Doppelt 2003, 6).

The strategic level (section 3.2.3) within the innovative approach below (section 3.2) looks to integrate the governance mechanisms, adapted from Bob Doppelt's work, into the current method used in the current CHF approach. From the research methods, this study has created basic social governance mechanisms that are conditions for effective implementation of sustainable development.

In addition to a governance structure addressing the need for a more organized community decision-making system, an effective democratic governance structure will bring many other benefits to members of the community. It will create a transparent-participatory method for community members to express and work to fulfill their needs. This builds a sense of ownership, trust, and motivation in the development process. While also helping to dismiss ingrained feelings of apathy, desperation, determinism, and a lack of justice that plague many of the communities in the developing world. Together these are aimed at created the necessary elements to seed a transformational change within the community.

3.2 Innovative Community Development Approach

This research has outlined in the introduction, a community development approach that encompasses a holistic understanding is necessary for strategic sustainable community development.

The innovative community development approach is described below. The structure utilizes the FSSD because it is very effective when dealing with high levels complexity that surrounds community development. This innovative approach is meant to provide a structured understanding of how communities in developing countries can work to establish a holistic, socially and ecologically, sustainable planning and decision-making processes, aimed at life quality improvement and self-sufficiency.

3.2.1 System Level

The innovative approach works under the premise that a community system is defined as individuals living and interacting within a group, as part of a larger society that depends on resources provided by the biosphere. A functional community system must be void of development barriers and also provide planning and decision-making processes that allow for self-organization, diversity, and interdependence through their existing social, economical, environmental, and cultural structures. A community striving toward a sustainable future within the defined functional system possesses a holistic understanding of their social and ecological constraints, thereby creating a consciousness of their effects, together with the effects of other communities, on the natural environment. This understanding is important because the natural system provides all the sustenance for life to exist,

therefore an individual must understand their role and how their actions can fit within the natural constraints of the system.

This approach emphasizes the need for understanding and analyzing the community's internal social structures, cultural aspects, indigenous knowledge, and core values. These are critical elements to gain support and trust within the community while determining the best method of implementing transformational change strategies aimed at generating new mindsets within an open-collaborative community. This will also allow the community to integrate sustainable ideals into their existing cultural understanding.

3.2.2 Success Level

The innovative approach has a definition of success that is based on constraints defined by the Sustainability Principles (section 1.2.1). The principles create a common language to easily communicate the limits of the natural environment to people and help create a definition of self-sufficiency. Environmental sustainability is achieved as long as the vision and actions of the community comply with Sustainability Principle one, two, and three. Social sustainability is achieved, at a minimum, if the community structures are not formed in such a way that undermines the community members' capacity to meet their needs; as defined by Sustainability Principle four. A community that is striving toward socio-ecological sustainability is therefore going in the direction of resource self-sufficiency, including but not limited to food, water, and energy usage. Resource self-sufficiency creates a community that is more resilient to negative external influences, while strengthening the internal infrastructure and building trust within the community social networks.

It is important for citizens to explain their common aspirations and create a community vision of the future. This will develop a community mindset of purpose, empowerment, and trust that facilitates creative tension leading to transformational solutions for development. In order to create a principle-based vision of a sustainable community, specific criterion must be met. First, the vision must contain an understanding of the system level and help to establish a participatory, collaborative, and transparent strategy. Secondly, the vision must be aligned with the Sustainability Principles. Finally it is necessary that the vision widely represents the community, this

ensures adequate community participation and consensus during vision formation process.

3.2.3 Strategic Level

The overall strategic approach of this innovative approach is to build the capacity of individuals and empower them to create an endogenous change in their community. In order for the community to achieve its vision, as described above, there are certain strategic guidelines that should be integrated into the planning and decision-making processes. These include backcasting, prioritization criteria, diverse participation of community members, diverse cooperation with external community stakeholders, transparency throughout the development process, and considering the community idiosyncrasies.

Backcasting

Backcasting is an important strategic guideline to help link the cultural heritage and current reality of the community with their future vision. As stated in section 1.2.1, backcasting carries many advantages to the planning and decision-making process. It can be used in conjunction with the other strategic guidelines as a way to establish other desired outcomes such as identifying the mindsets necessary for transformational change toward a self-sufficient future, volume of community member engagement, amount of external stakeholder cooperation, and extent of transparent development processes. Incorporating backcasting, as a central aspect of the community's strategy, will help ensure the development process continues to evolve and progress after the development assistance organization has left the community.

Prioritization Criteria

Prioritizing the proposed actions or projects is important because this helps to identify the sequence of community efforts, so that the projects can build off of one another and work can be more effective. Through prioritization the most urgent and easily accessible needs are met and will help to catalyze further short, medium, and long-term results. It is essential that the criteria is formulated and agreed upon by the community as a technique to gain broader consensus over how the proposed actions are to be implemented. These criteria can be unique to individual communities, but should as a minimum contain the three basic prioritization questions:

- Does this action move the community in the right direction toward its vision of sustainability (i.e. build trust and move toward self-sufficiency)?

- Does this action provide a flexible platform for further improvements in the community?

- Does this action provide a return on the initial investment, in terms of capacity development, financial returns, or any other type of positive return?

The community can add more criteria that are relevant to their specific situation, such as risk assessment, political sanctions, or corruption susceptibility. After the actions are prioritized, an implementation plan is created to organize the proposed actions into short, medium, and long-term programs for change. These programs can also be used as platforms for collaboration, to create a sense of contribution and ownership to the development process.

Diverse participation of community members

Diverse participation is meant to ensure adequate representation of all internal stakeholders in the community. This is a necessary aspect of community development because this ensures that the concerns of every individual are heard and shows recognition that every citizen has a contribution to the planning and decision-making processes. To ensure that the participation of community members is effective, they must have access to learning and information relevant to their community and participate in dialogues about the sustainable development of their community. This builds personal capacity, trust, and creates a sense of ownership in the community decisions, self-confidence of personal opinions, and a sense of inclusion or interdependence among the community.

Diverse cooperation

Diverse cooperation is meant to establish interdependence with external community stakeholders in order to enhance the availability and optimize potentials of natural, human, and financial resources. External stakeholders, e.g. other communities and NGOs, must also understand the sustainable vision of the community in order to help the community work strategically toward that vision. Cooperating with external stakeholders also helps to

build community consciousness of its role within the wider context of the socio-ecological system.

Transparency

Transparency is aimed at building trust among the community members and confidence in the ongoing process of development. By educating the importance of transparency to community members, this will reinforce trust among themselves and their leaders, leading to further empowerment. Creating transparent processes, meaning people have access to information and can monitor the progression of development, will bring a sense of accountability and responsibility to both community members and those leading the development of the community. This guideline also includes opening the decision-making process to reasonable scrutiny. This is completed by communicating the ongoing processes to individuals within the community, for example through open community meetings and media.

Consideration of societal idiosyncrasies

Because this approach can be implemented in a variety of countries, cultural consideration will identify unique aspects of the community that can be used as strategies to support and accelerate the development process. Through this consideration the practitioner will be able to discover and understand the psychological idiosyncrasies that exist among the core cultural values, religious beliefs, and social and political structures of the community. It is the responsibility of the community to harness their own development; therefore establishing a development strategy on the cultural and psychological idiosyncrasies will build ownership and empower individuals to take an active role in their development process.

Proposed Social Governance Mechanisms

The innovative approach recognizes that the strategic implementation process will be unique for each community; depending on the idiosyncrasies among the ecological, economical, political, cultural and religious conditions. The approach recognizes the need for three main functions to be completed in order to effectively manage resources and lead the community to self-sufficiency. From information in the literature review, this study has created three general mechanisms aimed at developing a functional governance structure. The three main functions include:

- Leading and managing project implementation
- Monitoring and evaluation aspects of development
- Communication and education among community stakeholders

The innovative approach suggests that these three main functions are to be fulfilled through separate, but complimentary, mechanisms. These three mechanisms share responsibility to ensure the system requirements are met, progress toward the vision is maintained, and all activities are aligned with the strategic guidelines. Creating three separate mechanisms will establish a continuous process of checks and balances to ensure transparency, accountability, and responsibility; thereby ensuring honesty and building trust among the community members and the leadership. See figure 3.1 for graphic representation of the proposed governance mechanisms.

Leading and managing project implementation: This mechanism looks to establish leadership aimed at representing the community's aspirations to achieve success. The processes of project implementation must be carried out in a transparent way that guarantees wide spread participation, acceptable levels of scrutiny, responsibility, and diversity of perspectives within the community. Successful completion of community development projects will build a sense of ownership, empowerment, and trust within the community because community members will be involved in utilizing available community resources to better their community.

This mechanism should include leadership that is capable of inducing transformational change and is supported by a wide majority of community members. It is also intended to be responsible for technical and financial planning and decision-making surrounding the community development projects. Responsibilities of this mechanism include, conducting current resource assessments, creating self-sufficient sustainable resource mobilization methods, creating a long-term action plan that considers the overall community vision, and planning, prioritizing, and implementing community projects based on pre-determined criteria.

Monitoring and Evaluation aspects of development: The purpose of monitoring and evaluating aspects of the development process is to ensure the strategic guidelines are met throughout the development process. This mechanism is also intended to monitor the financial aspects of the community, evaluate completed projects, record lessons learned from

completed projects to create future evaluation tools, create best practices or benchmarks for future projects, and ensure diverse participation occurs throughout the development process. The presence of this mechanism will ensure accountability, responsibility, and build trust among members by acting as an objective-supervisory entity.

Communication and education among community stakeholders: The purpose of this mechanism is to expand education to encompass the entire community, which builds awareness, consciousness, and motivation among community members. It also acts as a communication channel among the internal and external community stakeholders, which helps communicate the vision of the community. This increased awareness and empowerment within the community is aimed at helping community members to recognize the upstream causes of issues pertaining to their community. Being able to assess issues within their own community, can introduce community members to the potentials they exhibit to demonstrate their own understanding in creative and innovative ways. This will encourage self-organization within the community, build trust, and motivate community members to recognize their intrinsic role in the development process.

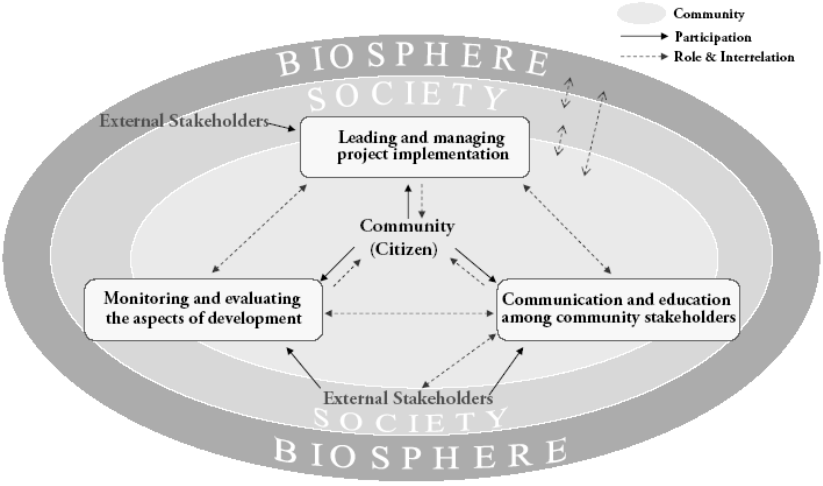

Figure 3.1. Social Governance Mechanisms

3.2.4 Action Level

Specific actions will be unique to every community, based on existing amounts of individual capacity, community infrastructure, and cultural

characteristics. However, listed below are general categories of actions that are necessary at every level of development to provide community members opportunities to build their individual capacities.

Ongoing Education and Training

Ongoing education and training is intended to help community members build rationale and significance behind the sustainable development of the community. As well as create a sense of consciousness of personal actions, a sense of self-esteem, provide knowledge to those who are incapable of communicating their needs, and provide the motivation to change. This education is also meant to help community members identify root causes of their socio-ecological problems. Self-identification of problems furthers the sense of responsibility and consciousness among community members. This step is completed through workshops and community-wide meetings and will lead people to a better understanding of their role in the socio-ecological system and in the development process. Educational topics will vary based on the current status and needs of the community. However, every community should have an understanding of the global sustainability challenge and the definition of sustainability, through the Sustainability Principles. Examples of more specialized topics could include ecosystem services, environmental conservation, best practices for agriculture and animal grazing in the region, women entrepreneurship, small business training, microfinance benefits, and trade skills, e.g. carpentry and masonry. This could also include more process-oriented topics such as negotiation techniques, human and resource management, interpersonal communication, problem solving, educational methods regarding environmental issues and systematic thinking, analytical skills, archival and documentation skills, long-term planning skills, and public speaking. These skills would benefit the internal community processes as well as the communications with internal and external stakeholders. This training is especially important for community leaders, by helping them to recognize their role and utilize the knowledge given to them to respond to community aspirations and aid progression toward the vision.

Leadership is also an important training aspect that builds cohesion and promotes collective community aspirations. Training citizens in leadership techniques will help them build individual capacity, in terms of problem solving and self-confidence, which will also help develop community capacity, in terms of motivation and aptitude. Through effective leadership

techniques, the sense of urgency to create self-sufficient resource mobilization methods can be communicated to the community.

Sustainable Self-Sufficient Resource Mobilization Methods

The creation of sustainable self-sufficient resource mobilization methods is especially important because in order to be sustainable, resources must not be exploited beyond their regenerative abilities. If the resource is overexploited, then it will not be available in the future. In order to create sustainable resource mobilization methods, a current assessment of the abundance and the acceptable limits of use for a resource must be completed. These mobilization methods must also incorporate transparency. This will ensure accountability of all resources, whether natural, human, or financial. This can be completed by envisioning the resource use in the future and then backcasting from that vision to plan the best possible usage of available resources.

Resource mobilization is of special importance due to the expected results of global climate change. As climate and weather patterns begin to shift, resource availability can be affected. It is necessary for communities to develop self-sufficient methods of utilizing available food, water, and energy resources.

3.2.5 Tools Level

This innovative approach will use many tools to aid each of the above-mentioned four levels. The tools will be used to assess and monitor the progress of the community's actions, ensuring they are in line with the planning and implementation strategies, which contribute to the vision of success within the socio-ecological system. The tools will come in many forms, from general tools used in many situations to situation specific tools used for unique circumstances.

The ABCD process, see section 1.2.1, is used as an overall planning and decision-making tool for the community. The A-step initially provides an understanding of the socio-ecological system in which the community exists. Educating the system level to the community will complete this. The B-step creates a baseline or current reality of the community's available natural, infrastructural, financial, and human resources; as well as an assessment of the community's current level of capacity and aptitude. The C-step creates a list of proposed actions aligned with the community's

vision of success. This is completed by brainstorming a list of desired solutions to meet the needs as identified by the community. Finally, the D-step prioritizes the proposed solutions by scrutinizing them against a set of pre-determined criteria.

It can also be used as a tool for specific projects. One example could be if a community decides to build an irrigation system for crops. The community can use the ABCD tool to first understand the resource limits of the watershed (A-step), and then they can assess the current situation such as available water, number of stakeholders, and desired amount of irrigation water (B-step). A vision of success can then made to depict the ideal situation (C-step), from which the community can backcast to create a plan and prioritize actions to obtain that ideal situation (D-step). This is one example of how the tool can be used throughout the progression of the community toward in vision of sustainability.

In conjunction with the ABCD tool, an analysis of Strengths, Weaknesses and Opportunities, Threats (SWOT) can be completed. This can be used to assess and list the internal strengths and weaknesses together with the external opportunities and threats of each phase within a specific project. This will provide a better understanding of the project's impacts on the stakeholders and help to analyze the project's compliance with the strategic vision. The SWOT can also used to ensure individual projects contribute to the community's compliance with the Sustainability Principles.

In addition to those specific tools, there are three general categories of tools that should be considered depending on the community's situation. They include tools that control actions, for example project monitoring systems, tools that build capacity of individuals, for example education and training programs, and tools that measure impacts of development, for example living standard and ecosystem indicators.

As stated in the strategic level, because this approach can be implemented in a variety of countries and cultures, there is a need to assess the current governing, institutional, cultural, and societal idiosyncrasies that exist within the community. This should be completed before the approach is implemented, during the initial stages of community evaluation. This is completed in an effort to understand the current community structures and how the approach can best fit. This will help to build further partnership and acceptance within the community. From this understanding, the community can take the initiative to develop their own monitoring and

evaluation tools to help address the specific situations of their community. These tools can help assess the internal processes and progression of the entire community toward their vision. As a result of documenting the monitoring and evaluation techniques, the community will learn to develop their own methods of how to best implement further community projects.

3.2.6 Reflections: The Innovative Community Development Approach

Mr. Stanley Nyoni, Senior Advisor of The Natural Step International emphasized the boundary of this approach. Mr. Nyoni reaffirmed the scope of the approach that creates separation between building capacity for community development and building capacity for regional or national governments was an effective method to focus on individuals and communities. In the context of regional and national governments, the ICSP is an existing method to move planning and decision-making toward a more sustainable objective (Baxter and Purcell 2007). Mr. Nyoni also emphasized the importance of keeping the strategic approach of the innovative approach at a generic principle-based level. This allows the model to operate in multiple cultural and geographic situations to lead a community down a sustainable development path.

Ms. Fillipa Odevall, Fundraiser and Project Leader of The Hunger Project – Sweden, reinforced the relevance of the innovative approach's underlying principles of building capacity. The Hunger Project's Epicenter Strategy is similar to the CHF approach in that the focus is on building capacity of community members, through creation of ownership, participation, collaboration, and transparency. It differs from the CHF approach because it focuses on women empowerment, gender issues, and builds a community center as a way gather communities and create a vision of the future (The Hunger Project 2009). This reinforces the strength of the innovative approach's process of creating a community vision as a way to establish a sense of purpose among community members.

Dr. Kelly Cain, Director of The St. Croix Institute of Sustainable Community Development and practitioner of The Natural Step's approach to community development, reaffirmed the innovative approach's strategic guideline of creating sustainable resource mobilization methods aimed at food, water, and energy self-sufficiency. He emphasized the importance of building a community vision of self-sufficiency in order to address the

increasing socio-ecological pressures occurring as a result of the global sustainability challenge.

3.3 Community Development Approach of CHF International

An example of a community development model created specifically for developing countries is CHF International's Participatory Action for Community Enhancement (PACE) approach. CHF International is an international NGO that is striving to meet the holistic community development approach outlined by the UN and Agenda 21. CHF International is a grassroots NGO dedicated to helping communities of developing countries improve their economic, social, and environmental conditions and act as a catalyst for long-lasting positive change. Their methods focus on community capacity development as a way to create real-lasting change. PACE helps communities to realize their own development potential while empowering them to manage and/or prevent possible conflict situations, through establishment of a community driven democratic process. The ultimate result of the CHF approach is visible improvements in the living standards of a community. These living standard improvements can come in many forms, such as tangible improvements in local infrastructure and services, strengthened local leadership and democracy, established transparent decision-making processes, a greater sense of community ownership, increased self reliance of a community, broadened local economic opportunity, and implementation of practical mechanisms for communication and cooperation (CHF 2004a).

CHF's approach builds on a strategy that creates a participatory and systematic process to engage community members in identifying the collective needs of the community and establishes transparent democratic decision-making methods. This supports empowerment of individuals, organizations, and the entire community to prioritize projects and mobilize available resources to meet their own needs. The strategy seeks agility within resource mobilization methods, which helps to build project ownership and support within the community. In addition to satisfying individual community needs, the CHF approach also helps group communities together into clusters. This can have many beneficial results such as helping to increase resource mobilization possibilities and creating communication channels to discuss complex and conflicting views between

communities. Clustering also helps communities realize their role in the larger social context of the region.

3.3.1 PACE Model Summary

There are 8 key features that are central to effective implementation of the CHF approach in developing communities (CHF 2004a, 2004b). These 8 key features are a very important introduction to understand how the PACE model functions, see figure 3.2. These interrelated parts help to provide a structure to mobilize community development through building capacity.

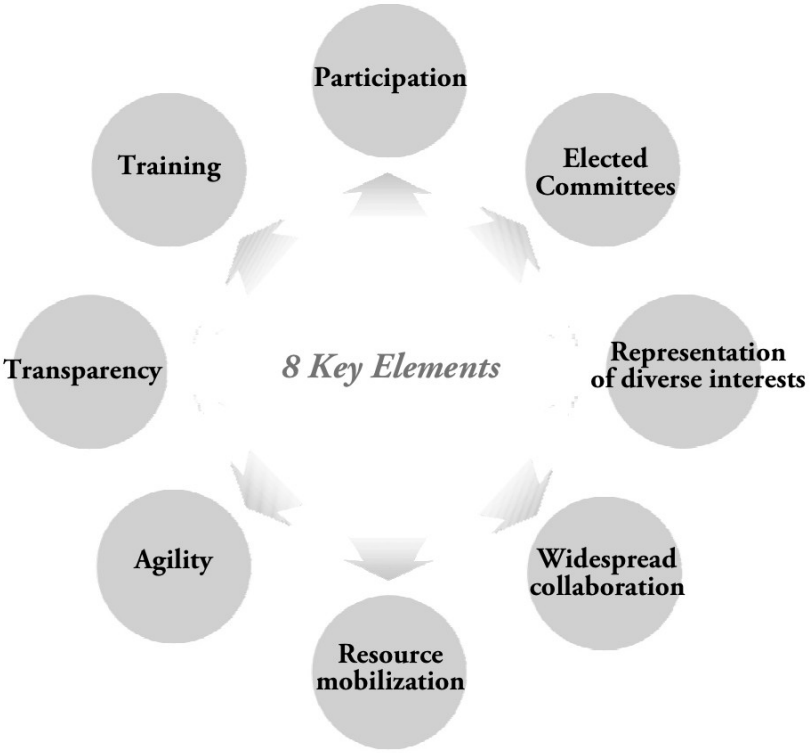

Figure 3.2. Eight Key Elements of PACE Model

Participation is central to the PACE model. "Participation is the engagement of multiple stakeholders of a given context in the shared exercise of committing time and resources to make decisions and take action toward a desired (development) objective." (CHF 2004a) These stakeholders take an active role in determining their community's priorities, allocation of resources to meet those priorities, and access goods and

services beyond immediate circumstances. Participation can take many forms such as community meetings, election of community officials, or an understanding gained through the media. When effectively implemented, participation can further engage community members by raising their personal expectations and building their confidence to take a more active role in their community's development. However when poorly implemented it can have the opposite effect, increasing apathy and cynicism within the community. Effective participation can also lead communities to a greater sense of ownership. By asserting control over how their quality of life changes, they become further invested in the process and outcome; creating a positive feedback loop in regards to the personal empowerment of community members. Requiring the community to contribute typically 15-30% of the financial, material, or human capital to the project also establishes this concept of ownership. (CHF 2004a)

Elected committees are another essential tool to the PACE model. Establishment of a Community Development Council (CDC) is necessary for the success of CHF's community development model. The CDC typically consists of "8 to 12 formal and informal community leaders who reflect the diversity of their community and genuinely work together to identify, implement, and maintain projects" (CHF 2004a). These CDCs identify, prioritize, and select projects that are both in high demand and have a large impact on the community. The councils also take an active role in building local constituencies and partnerships, leveraging local funds and resources, and provide management of the projects. The CDC serves as the communication channel among the different community stakeholders and plays an active role in connecting the different stakeholders of the community, e.g. citizens, local and national governments, international organizations, local NGOs, women and youth groups, service groups, business associations, cooperatives, and schools. It is essential that the CDC truly reflect the diversity of the community, so that the differing interests are equally represented. The CDC is also responsible for coming up with a Long-Term Community Action Plan (CHF 2004a). The action plan is meant to conceptualize the community's long-term development goals and to determine the steps needed to achieve those goals. The CDC then prioritizes the goals based on criteria decided upon by the community.

Another key element in the PACE model is the **representation of diverse interests**. It is essential that all the interests of the community members are equally represented; this helps to ensure that participation is effective and

citizens become more engaged and invested in the community development process. As stated before, this is completed through participation techniques and a functional CDC.

Widespread collaboration is a useful way to engage stakeholders from all facets of the community. This happens internally within the community through the organization of a CDC that is a true representation of the community, regarding social, religious, monetary, cultural, and political differences. Externally, collaboration occurs among national governments, regional governments, local governments, international organizations, and other communities. When communities collaborate on a project it is called *clustering* (CHF 2004a). Clustering is effective when a need exceeds the boundaries of one community, e.g. water treatment or waste management, or when communities geographically close to one another. The communities' mutual interests are met and the project facilitators have greater access to materials and knowledge needed to complete the project.

Resource mobilization and agility are linked ideas within the PACE method. **Resource mobilization** refers to the assessment and management of financial, material, and human capital. **Agility** refers to the process of being able to use these resources efficiently. Much of the mobilization occurs within the first 90 days of PACE implementation, through *The Rapid Start-up* and *Fast Track Community Projects*. The purpose of The Rapid Start-up is to establish the program management systems, e.g. recruiting, hiring, and training staff, establishing offices, reporting systems, and procurement of equipment and materials. This is also a display of CHF's organizational capacity and agility to achieve process facilitation quickly and without administrative barriers (CHF 2004a). The Fast Track Community Projects process also helps to mobilize resources by stimulating the community to achieve tangible results within 90 days of beginning the process. Some advantages, outlined by CHF International, of this are establishment and testing of community systems, provide quick results for visible demonstration of the process, emphasizes the experimental learning process, and enhance the credibility of the CDC and the PACE method (CHF 2004b).

Transparency is another key element to the PACE model. In order to build credibility of the CDC and the PACE method, members of the community need to easily determine the basis of decisions that affect the whole community. Having a transparent system builds trust among the community

stakeholders and is an effective way to address the issues of corruption that plague many communities in developing countries. One example of transparency within the CDC itself is the fact that all members must be aware of, agree upon, and sign bids and status reports of the implemented projects. Having good communication with the media structures in the community also help the PACE method to be as transparent as possible to the community.

Training of staff and council members is the last major element of the PACE model. It is important that community members working with CHF understand the PACE methodology and possess skills necessary to achieve the given responsibilities. Some examples of the initial training programs include "How to participate in PACE", "Training of Trainers Methodology", "Community Action Planning", Communication Skills", "Environmental Awareness", and "Negotiation and Problem Solving" (CHF 2004a). Training is repeated as new members join the CDC or clusters grow and more communities join the process.

3.3.2 Summary of CHF Approach through the Generic 5 Level Framework

Below is a summary of the CHF approach in the context of the generic 5 level framework. This was completed as a way to establish a structure similar to the innovative approach; allowing for easier comparison in the following section 3.4.

System Level:

The CHF approach defines the system in which they function as individuals, within a community that is part of a larger society, able to meet their needs. The approach considers social mechanisms such as participation, widespread collaboration, and representation of diverse interests as necessary components of a functional system. These components contribute to self-organization, interdependence, and diversity within the community and larger society.

Success Level:

The definition of success, i.e. definition of sustainability, within the CHF approach is to empower individuals in order to build the community capacity to create visible improvements in their living standards.

Strategic Level:

The strategic level which is represented by five of eight of PACE key-elements, including participation, representation of diverse interests, widespread collaboration, agility, and transparency, can be seen as building transparency and a sense of community ownership throughout the development process. This will allow for individual empowerment and capacity enhancement which helps establish social mechanisms including participation, widespread collaboration, and representation of diverse interests. Due to the rather broad definition of success and not creating future vision of the community, the approach uses forecasting as a strategy to plan development actions of the community. Forecasting looks at the present situation and planning actions according to the current needs without first considering a vision of the desired future. It tends to introduce a more limited range of options, hence stifling creativity.

Action Level:

Specific actions of the CHF approach are difficult to assess because it is implemented in many cultures and situations, each pose unique problems and require innovative solutions. However, the approach outlines ten basic actions that summarize the general implementation process, figure 3.3.

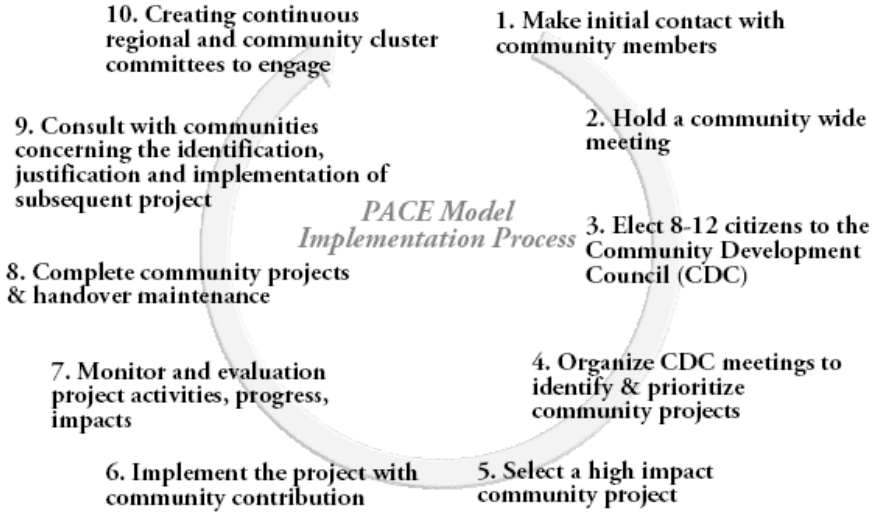

Figure 3.3. PACE Model Implementation Process

Tools Level:

The CHF approach possesses tools that assess completed community projects and evaluate the effectiveness of the CDC actions. These tools can come in the form of Environmental Impact Assessments and internal assessments of specific CDCs.

3.4 Comparison of CHF Approach with a holistic innovative approach

Based on sections 3.2 and 3.3 the associated strengths and limitations were identified in comparison to the innovative community development approach. This was done in an effort to identify any limitations of the CHF approach, in regards to socio-ecological sustainability, and provide a basis for recommendations relevant to practitioners and people directly affected by the community development approach. This assessment was completed by the research team and accompanied by ongoing dialogues with CHF International.

System Level:

When comparing the CHF approach to the understanding of the system level within the innovative approach, the strength of creating community awareness and allowing for social mechanisms, self-organization, interdependence, and diversity, through participation, equal representation, and collaboration is weakened by the limited understanding of the holistic system. CHF approach ignores the impacts exerted by society on the global biosphere and hence underestimates the level of complexity with the endemic trends. This limited understanding constrains the system requirements from being fully met when providing a solution. The system requirements are not only meant to represent human beings but rather all the organic system within the biosphere. Consequently, the aim of CHF approach in building community capacity to meet their needs remains disjointed and incomplete due to the lack of holistic understanding.

Success Level:

Strengths of the CHF approach, regarding success, include creating a broad vision of community development, where a community can manage and allocate their resources to achieve identified needs.

Identified weaknesses include the fact that the broad vision does not consider a socio-ecological definition of sustainability. By not including a sound definition of success, there is no assurance that present needs are being met without compromising future generations' ability to meet their own needs.

Strategic Level:

Strategic strengths include developing community members' capacity to identify and meet their own needs, through diverse participation and representation. The CHF approach also establishes a transparent democratic atmosphere that provides a positive attempt toward changing community members' mindsets.

Weaknesses in the CHF approach include planning methods based on forecasting, i.e. looking ahead from the present situation and only realizing the downstream effects of the problems. It responds to the current community needs at the time of the CHF implementation process. This short-term view of the planning process leads to a forecasting strategy. This is due to the lack of a long-term vision of the future, the approach does not include backcasting, i.e. envisioning a future and planning present actions to reach that desired future while considering the upstream causes of development barriers. In addition the CHF approach does not provide an explanation of how to maintain the established democratic processes and governance structure. There is also a lack of formal prioritization criteria to ensure the projects are moving the community toward a sustainable future.

Action Level:

Strengths associated with the actions include creating an open-participatory process that allows community members to freely elect representatives and discuss community identified needs in a democratic atmosphere. Through this approach the community selects a highly visible project that requires community resources. This action builds support for the democratic process and creates a sense of community ownership for the project. More projects are subsequently completed and progress is monitored and evaluated. The CHF approach also clusters communities together in an effort to share resources and exchange benefits among communities. Lastly, the approach community representatives in relevant community development programs such as "Community Action Planning", "Communications Skills",

"Environmental Awareness", "Negotiation and Problem Solving", and "Sustainability and Management".

Despite the strengths of CHF's actions to build community capacity, weaknesses indentified include not educating community members about their role within the socio-ecological system. This can help build individual consciousness leading to the realization of the root cause of community problems. Other identified weaknesses in relation to education, is the lack of equal-opportunity access to education among community members and CDC representatives. There is also a lack of documentation and archival actions that could be utilized by the community in an effort to create their own standards and tools to better assess and evaluate the development process.

Tools Level:

Strengths regarding monitoring the processes of the CHF approach include assessing completed community projects and evaluating the effectiveness of the CDC actions.

However, weaknesses include a lack of ecosystem services indicators that help describe to community members the acceptable consumption limits of resources. There are also no tools that assess the cultural aspects of the community before implementation of the development process. This type of tool would provide a more holistic understanding of the system level that helps to identify the best implementation approach. Also within the CHF approach, there is a lack of a tool that assesses the ultimate success of the community. Lastly, the CHF approach has no tool for helping communities create and develop their own tools and indicators.

3.4.1 Reflections: Comparison of CHF approach with a holistic innovative approach

The assessment of strengths and weaknesses revealed that the CHF approach is lacking a holistic understanding to the socio-ecological system. This issue has been explicitly expressed by Mr. John Chromy, vice president of CHF International. He recognizes that the CHF approach needs to expand its understanding in regards to the full perspective of the socio-ecological system when implementing community development strategies. He provided an example through and an explanation of pastoral practices in semi-arid landscapes. This situation he described involved using a sparsely

vegetated hillside for grazing goats. Through his description he identified a need for an understanding of how to balance using the resource to provide nutrition to community members, versus the carrying capacity of the natural resource. This example has reinforced the understanding that providing a holistic perspective to community development approaches is central to creating self-sufficient communities.

3.5 Recommendations to the CHF Approach

Resulting from the above-mentioned information and analytical processes, this study has created several generic recommendations to the CHF approach to community development. It is recommended that the CHF approach,

- Adopts a holistic understanding of the socio-ecological system
- Helps the community to build vision of success based on Sustainability Principles and rooted in the cultural heritage
- Integrates backcasting from an envisioned future into the existing strategic approach, that incorporates project prioritization criteria and considers the cultural idiosyncrasies
- Enhances the existing leadership, governance, and resource mobilization structures to ensure actions of the community align with the strategic vision
- Creates and/or integrate monitoring and evaluation tools

These recommendations are intended to strengthen the CHF approach to encompass a more holistic socio-ecological definition of sustainability and will be discussed further in the discussion, along with the role of the development practitioner in the process. However, these recommendations are not specific to the CHF approach to community development in the developing world. They can be seen as overarching strategic guidelines toward sustainable development perspective that can aid efforts to shift communities, in the developing world, toward a more prosperous and self-sufficient future.

3.6 General Recommendation

This recommendation came out of the literature review and assessment of the overall barriers to sustainable community development in the developing world. It is meant to address the organizations and stakeholders within the international development assistance (IDA), when creating policy for developing world.

- Allow for long-term intrinsic progression of sustainable community development

4 Discussion

The discussion is an elaboration on the results and recommendations of this study.

The overall aim of this research was to assess how a strategic sustainable development perspective can further efforts in the developing world to shift communities toward a more sustainable future. This study referred to the ICSP as a successful model that uses a strategic sustainable development perspective to aid community development. However, the ICSP assumes that functional democratic governance structures and a level of societal consciousness and mobility exists to plan and implement community development initiatives. Due to the more compounded situations that exist in developing countries, due to the combination of widespread poverty, corruption, dictatorship, and lack of capacities, the ICSP approach does not have the necessary prerequisites to function properly. Therefore an innovative community development approach, with the intention to establish the necessary structural prerequisites, had to be developed. This approach is meant to catalyse the transformational change and perpetuate the transition of the community to a sustainable future based on a holistic understanding of the socio-ecological system.

The innovative community development approach (section 3.2) is meant to operate within dysfunctional systems, to provide the necessary prerequisites for the community to become a functional system at the community level. When the three mechanisms are in place, they effectively work to address the overarching barriers to development, e.g. corruption, desperation, lack of trust, determinism, and apathy. Once the mechanisms are in place, they will help the community to recognize the needed infrastructure to lead them toward self-sufficiency and stimulate ongoing investment and efforts for development. They also create a community atmosphere of confidence, accountability, and satisfaction driven by transparency and participation.

The aim of the innovative approach is to address the existing barriers to community development, such as lack of democratic structures, existent in many developing countries and utilize a structured framework of strategic sustainable development to visualize the overall picture of the community and help community members establish a planning and decision-making structure that allows for self-organization, diversity, and interdependence within a self-sufficient community. By establishing a functional,

transparent decision-making process, community members will be able to take ownership in the development of their community. This will help to build personal capacity through an increased sense of self-awareness, motivation, and trust in the development process. This change in the individual community member mindset can bring about a transformational change within the community. As they realize how to take control and shape the future of their community, ingrained frustrations such as desperation, apathy, and a craving for justice will be changed into feelings of participation, transparency, and self-respect. Furthermore, this will help move the community toward their shared vision of a sustainable future.

Through creation of the innovative approach and comparison to an existing community development model, i.e. CHF International's approach, several generic recommendations arose to aid current efforts to encompass a more holistic and strategic approach to sustainable community development.

4.1 Holistic understanding of the socio-ecological system

The CHF approach looks at the community as a piece of the larger society and works to implement a decision-making system that encourages the three main requirements to a functional social system. These include self-organization, by electing CDC's, diversity, by ensuring broad participation and adequate representation of the community, and interdependence, through wide-spread collaboration with all community stakeholders. However, this study has concluded that the CHF approach lacks the structured understanding of how a community, as part of a larger society, impacts the biosphere in which it exists. There is also a lack of consideration among social, economic, ecological, and cultural aspects, which can result in an overall societal disconnection, signified by erosion of trust and empathy amid community members. The new innovative approach strengthens the community's consciousness of how their actions affect the socio-ecological system. This consciousness is also meant to be integrated into the planning and decision-making processes, to ensure the community complies with the constraints of the system. This understanding is critical in order to communicate the importance of a sustainable community and its role within the socio-ecological system, which can help build individual consciousness that leads to a realization of the root cause of community problems. This will communicate the countless relationships and networks that exist within the boundaries of the socio-ecological

system and how a seemingly small impact in one area can have larger unpredicted, sometimes delayed, ramifications throughout the system. This systems understanding will illuminate existing opportunities for the infrastructural development processes and operations to be established more attune with the balance of natural systems and not follow the example set by developed countries, which have contributed significantly to the global sustainability challenge (section 1.1).

This study recommends this understanding to be communicated during the initial stages of the community development process, through education programs that provide a structured understanding to the socio-ecological system. It is important for the entire community to understand this concept to ensure their needs are met without compromising other's abilities to meet their needs now and in the future. Community members having this understanding, through creation of a shared mental model, will also accelerate the development process by eliminating barriers related to their development process. This will help community leaders by reducing the amount of time and effort required to communicate the implications of proposed development projects.

4.2 Building an idiosyncratic community vision of success within the constraints of the Sustainability Principles

The CHF approach recognizes success through the implementation of resource allocation methods to achieve solutions aimed at meeting the community's current needs. It also works to create a broad vision of continued development. On the other hand, because the CHF approach does not consider the socio-ecological complexity that exists, they cannot provide a holistic definition of success that moves a community toward sustainability. This could potentially create planning and decision-making processes that do not lead the community toward a sustainable future. Also, due to the fact that there is no long-term socio-ecological vision of sustainability, there is no insurance that present needs are being met without compromising the future generations' ability to meet their needs. The innovative approach is working from a holistic understanding of the socio-ecological system and has a definition of a sustainable community through adoption of the Sustainability Principles (section 1.3.1). If this understanding of the system and definition of sustainability is provided to

the community, then the community is able to create a practical vision of a self-sufficient future on the path toward sustainability.

This study recommends that the CHF approach internally adopts an understanding of the Sustainability Principles and work to educate the community of the principles, so this understanding can be integrated into the community's future vision of success. In order for the community to take ownership and receive empowerment from the vision, it must be built on the societal idiosyncrasies, i.e. core cultural values, religious beliefs, and social and political structures.

A vision based on the constraints provided by the Sustainability Principles and rooted in the cultural identities of a community will motivate community members by building trust and confidence in the development process. This confidence will trigger community expectations and stimulate creative tension and innovative solutions for the community. This shared vision of success energizes the propelling drivers of creativity through a dynamic creative tension. Therefore it is the principle-based definition of sustainability that stimulates creativity because it helps to look at the larger scale of a problem and all of the overarching variables. This brings realization to all the possibilities that exist and helps to build consensus around solutions by providing clear limits that define success. This creative enhancement and basis for consensus lead to the establishment and guidance of a community vision, as stated in section 1.3.1.

4.3 Creating a strategy that backcasts from the envisioned future and strengthens existing leadership and governance structures

The CHF approach seeks to build the capacity of individuals through education and training in order to create leadership that is capable of mobilizing available resources and plan projects to meet community needs. Within this capacity building strategy, the CHF approach creates a transparent democratic atmosphere to establish a structure to engage community members in the decision-making process. The planning and decision-making strategy within the CHF approach is presuming that meeting the most urgent needs of the community will inevitably lead to sustaining the community. However without a future vision that provides a

definition of success, the actions taken are not guaranteed to move the community in the right direction. This method of forecasting places an emphasis on immediate results of present and short-term actions, instead of considering how current actions relate to the future vision. It is recommended that backcasting be integrated into the CHF approach as a strategy that incorporates a vision of sustainability into the planning process. This helps to ensure that actions taken by the community are aligned with the sustainable vision of the future. Prioritization criteria, coupled with the ABCD tool (section 1.3.1), are suggested to be used to ensure actions are aligned with the strategy aimed at achieving a community-identified vision of a sustainable future. Three basic prioritization criteria are established within the innovative approach, but it is important for the community to establish their own set of criteria based on their unique situational circumstances. This will help to build a sense of ownership in the development process by allowing the community monitor the progress of their community in a way unique to their circumstances.

It is also a recommendation that cultural considerations are central to the creation of development strategies. This cultural assessment could be completed in a number of ways, for example by speaking with community members, national and international experts, anthropologists familiar with the culture, and other community development practitioners. It is the development organization's responsibility to establish an approach in which the development strategies are built from within the core cultural values, religious beliefs, and existing social and political structures of the community.

Diverse participation among community members and diverse cooperation among external stakeholders helps communities to understand the larger context of their situation and increase global knowledge and resources for the community. This is central to the innovative approach as well as the CHF approach. It is important to meet the system requirements to social sustainability, i.e. self-organization, diversity, and interdependence.

The proposed social governance mechanisms were created as an effort to fulfill the basic prerequisites for a functional democratic system that realizes the needs of the community to sustainably mobilize resources, monitor and evaluate the community's progression, and educate the community about the development process and communicate with external stakeholders. Through establishment of a functional democratic governance

structure and a consciousness of their personal role in the socio-ecological system, communities will be able to remove barriers to their development process and begin to take control of the future of their community. It is also important during implementation of the proposed governance mechanisms, that existing leadership and governance structures are considered and utilized when possible. Most communities will have some type of governance in place and that should be strengthened when possible. This will also help to build further ownership and trust in the process, because community members are not required to begin with a governance structure that has no basis in their current planning and decision-making processes. The proposed governance mechanisms are meant to be taken as guidelines for an effective governance structure. It is the responsibility of the development organization and community to decide the best method of implementing the functional democratic decision-making system.

The proposed governance mechanisms are designed to respond to the need for equitable governance and justice. Therefore it gives the people a stake for a promising change and hopeful future. This will eventually drive community members out of desperation, apathy and fatalism. The suggested mechanisms provide solid ground for continuous growth of transparency and participation. Together with the ongoing education and self-sufficient resource mobilization, they will reinforce individual's empathy and generate more trust where ownership is delivered in a spontaneous and non-empirical way. This ownership expresses the community's genuine engagement, giving continuous thrust to the governance process while creating internal and external momentum to support the ongoing sustainable development. Transparency and participation as strategies have no significance without a robust governance structure, which is the incubatory vehicle to regenerate these through purposeful practices. The holistic perspective is designed to build community capacity to meet their needs. However community capacity has to be mobilized towards meaningful short, medium and long-term objectives to ensure continuation. Therefore the creation of a vision for sustainability links the short-term measures with the long-term objective providing further cohesion, trust, and ownership. The genuine intelligence of people, regardless of their diversity and education, can easily receive the benefits of a holistic perspective, verify truth, and identify what works to serve their best interests.

4.4 Ensuring actions align with the strategic vision

The CHF approach builds capacity and ownership within the community by implementing democratic processes to take action and meet community indentified needs. However, because there is a lack of an effective strategy to move toward a sustainable future, there is no assurance that actions are contributing to success within the system constraints. As part of the innovative approach, the community is educated of the system constraints and creates a strategic vision. This education is initially completed to ensure that the community identified projects are both meeting needs and contributing to the strategy to move the community toward their sustainable vision.

As stated in the results, the CHF approach works to educate CDC members in relevant community development topics. However the innovative approach places significance on expanding the educational topics to include a wider array of knowledge and making it accessible to the entire community. Topics include, but not limited to, leadership training, relevant agricultural and pastoral practices, environmental conservation, small-scale financial management, women entrepreneurship training, and trade skills. Providing cultural examples rooted in the understanding of community. Increasing the amount of education provided to community members will build their personal awareness, consciousness, and motivate them to participate and take ownership in the development process. Increasing their consciousness will also bring a sense of responsibility and increase the opportunities for behavioural change that can act as a catalyst for a transformational shift.

The quality of the leadership training is critical for creation of effective leaders. Therefore, it is necessary that special attention is given to the curriculum taught to community leaders. The end result is an evolution of leaders who act as educators in their communities, communicating the importance of the socio-ecological system and maintaining the balance of the community within the constraints as outlined by the vision of success. Through effective leadership technique that realize and encompass the power of relationship patterns, the sense of urgency to create self-sufficient resource mobilization methods can be communicated to the community.

The CHF approach also establishes resource mobilization methods. However there is no assurance that the resources are used within the regenerative limits of the ecosystem. It is necessary that communities understand the acceptable limits of resource use. This knowledge is established through assessment of resource abundance and understanding acceptable rates of use that do not deplete the resource over time. The ongoing process of creating self-sufficient resource mobilization methods, in regards to food, water, and energy, is necessary for communities to develop sustainably. This has special significance due to the fact that increasing environmental pressures that result from climate change will alter the physical dynamics of available resources. As a consequence, if communities can obtain resources locally without overexploitation, then this will minimize the external influences of social, environmental, and economical pressures to acceptable rates.

Also by establishing self-sufficient resource mobilization methods, communities in developing nations can avoid the traditional resource use trends set by developed nations which have contributed significantly to the global sustainability challenge.

4.5 Ongoing monitoring and evaluation tools

The CHF approach has monitoring and evaluation tools to assess the progress of the CDC and project implementation. However, this study recommends additional tools to help assess the unique aspects of the community.

This study suggests taking into consideration tools to assess and evaluate the current and ongoing situation of the community against the conditions at each of the five levels of the framework. At the system level the conditions include self-organization, diversity, and interdependence among individuals, the community, and the larger society. Tools are then needed to evaluate the community's current compliance with these three mechanisms. This research recommends that a preliminary assessment of the community, with specific cultural focus, is completed as a tool to gauge the current compliance with the system requirements. At the success level, the socio-ecological conditions are defined as the Sustainability Principles. Here is it necessary to gauge the vision of the community against the constraints defined by the principles. In the strategy level, the ABCD method, including backcasting, as well as transparent, collaborative, and

accountable planning and decision-making process can be seen as the conditions for compliance. The condition within the action level is compliance with the three-prioritization questions, within the D-step of the ABCD method. They act as guidelines to ensure the action is aligned with the strategic vision of success within the constraints of the system. For example, the guidelines can be very useful when establishing the sustainable resource mobilization structure and methods for best practices.

Another category of tools that would have useful implications within the approach is ecosystem service indicators. These are tools that help assess the limits of resources and the regenerative properties of the natural system. By determining the boundaries the natural system, the community can better understand how to use the available resources and what extent of exploitation the ecosystem can tolerate. These can come in the form of water table assessments, vegetation analyses, wind and solar evaluations, livestock impact appraisals, best practices for agriculture and pastoral techniques, crop rotations, diverse plantings, or agro-forestry.

The study recommends communities develop unique standards and evaluation tools, through the archival and documentation of the development process. These tools can help evaluate the specific situations that exist within different communities and help to establish criteria and best practices to be used during the ongoing development. These can be especially useful during the transitional phases of project implementation, leadership selection, and the education of the community.

4.6 Allow for long-term intrinsic progression of sustainable community development

This research resulted in the realization that external forces place negative affects on the development process undertaken by the practitioner. The international development assistance community puts emphasis on creating sustainable change. However, this goal is contradicted by strict timelines that focus on short-term results. This contradiction hinders the natural progression of a community on a sustainable development path and does not allow the practitioner to implement a holistic approach that considers a long-term development process. This study recommends that the international development assistance community builds on the realization that community development can not be subjected to strict timelines and give adequate time to complete intrinsic sustainable development. This will

allow communities to develop at their own pace, take ownership, establish pride, and build trust in their own development process.

5 Conclusion

The objective of capacity development is to enhance peoples' ability to evaluate and address crucial questions of implementation options for development. This ability enhancement is based on an understanding of the socio-ecological potential and limits and of the needs perceived by individuals in the community (UNCED 1992). This can be achieved by communities in cooperation with international non-governmental organizations (NGOs), which can observe and assess the current situation and begin empirical projects aimed at providing training, knowledge, and technical assistance. More importantly, this process reinforces individual and group competence and capacity to promote a better life quality. Through decentralized transparent community leadership and governance models, the local communities learn how to develop and maintain their own societies effectively through learned democratic practices of planning and decision-making aimed at sustainable development, prosperity, and self-sufficiency.

It was the purpose of this study to assess how a strategic sustainable development perspective could benefit community development approaches in the developing world. The study began by looking at the global sustainability challenge and the significance that it places on developing countries. This challenge is compounded by the fact that often, developing nations are plagued by wide-spread poverty, corruption, apathy, and a lack of democratic structures. This study is built on the understanding that currently there is a debate among the international development assistance community regarding the volume, effectiveness, viability, and shortages of current development approaches.

The overall outcome of this research established a generic conceptual structure, through which a chronological progression of community driven capacity building can utilize the socio-ecological complexity and turn it into a powerful-strategic thrust for transformational change that drives the community toward a sustainable, self-reliant, self-sufficient, and prosperous future.

Limitations identified in this study included a limited exposure to field experts working in developing nations. Time constraints also strained the depth of the study. For example, the study was not able to address the national governance role in the development process, the election process

for community leaders, the relevant educational curricula, and the specific monitoring and evaluation tools that can help assess the development progress.

Despite these mentioned limitations, the research has provided benefits to the ongoing efforts of the international development assistance community and communities in the developing world. This study provides generic recommendations that are applicable in many diverse situations. They are aimed at leading communities toward a self-sufficient sustainable future through empowerment of individuals to strengthen community capacity and build trust to meet their self-identified needs. This study recognizes the potential of the FSSD to provide a holistic approach and structured understanding to the complexities that exist in the developing world in regards to the persistent problems. This is accomplished through establishing an awareness of the socio-ecological system thereby creating a consciousness of personal actions, helping the community create a vision of success based ecosystem constraints and rooted in the societal idiosyncrasies, introduces a strategic approach that aligns community actions with their envisioned future, and outlines methods for communities to monitor and evaluate the progression of their community development process. It is a result of this study that a robust, transparent, democratic governance structure is necessary to bring essential change that establishes hope and trust among individuals. This shift in mindset, in conjunction with a holistic approach, will provide the conditions for a community to develop toward a more sustainable future.

5.1 Suggested future research

Below are ideas that resulted from this study and could be further researched:

What would an implementation strategy for sustainability look like to deal with the complexities and corruption of a national government in the developing world?

Because communities are reliant on national governments, there is a need to address the national governance role in the development process. This is especially relevant in the context of developing nations where national governance structures are often inflicted with corruption and lack of democratic processes. It may be possible that the ICSP is implemented in

these countries at the regional municipal level, providing a top-down approach to link with this study's bottom-up approach.

How can the FSSD help to identify educational structures and curricula, based on the cultural diversity?

Education is a large part of any community striving for development. It is important that the structure of educational systems match the culture and expectations of the community in which they are implemented. It is also necessary that programs are designed to meet the current level of the community's education and are relevant to their living situation.

How can criteria be created for community members to realize whom among their community is reliable and will become an effective leader?

Effective methods or structures of community leadership selection are also necessary to ensure communities can achieve their aspirations. Competent, honest, and skilled people are most effective in leadership positions.

What would groups of ecosystem/geographic specific tools look like?

Developing countries exist within all of the various landscapes on earth's surface. This necessitates creation of groupings of tools that are specific to deal with the differing geographic features. These tools could include environmental resource assessments, agricultural and pastoral practices, fishing standards, soil erosion controls, water quality measures and standards, desertification and deforestation controls, and geographic disease listings and control measures.

What type of entity and features would be best suited for fulfilling an overarching facilitation role?

There is also a recognized need for neutral third party to create overarching monitoring systems or tools to maintain a quality implementation process. This will reinforce the development processes and ensure that the progress is truly moving in a sustainable direction. Also, due to the fragmented nature of many environmental agendas and governance, there is a recognized need for an international governance structure that can deal with international finance, trade, long-term investments, and the environment in an integrated and holistic way (Stakeholder Forum 2008).

What roles, advantages, and disadvantages does the transfer of technology have in helping developing nations in the short, medium, and long-term?

It would also be interesting to address the role of technology transfer to developing nations. This could lead to further enhanced solutions identifying how to create self-sufficient resource mobilization methods, e.g. to use renewable energy sources, to improve energy efficiency, to recover or prevent methane emissions, to improve forest and soil management, and to adapt to climate change.

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