ALIGNING VISION AND ACTION OF A LANDCARE ETHOS THROUGH SYSTEMIC INTERVENTION: THE CASE OF THE FARMER SUPPORT GROUP

by

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Submitted in partial fulfilment of the degree of

Master of Agriculture

in

Rural Resource Management

Center for Rural Development Systems

University of KwaZulu Natal

Pietermaritzburg

2004

AKNOWLEDGEMENTS

I would like to thank the following people and groups for their contributions to my research:

To Monique Salomon for guiding me through this process, at every step, twist, and turn. Thank you for your direction and support. I have gained so much.

To CERDES for granting me a scholarship bursary and starting me on my path.

To FSG Staff for accepting me into their 'community.'

To Nosipo Fuzani, Khumbu Zuma, and Zandile Mngomezulu for showing me the community facilitator 'ropes' through example and reflection. Thank you for sharing.

To Vusimuzi Sithole for helping me with logistics beyond the call of duty.

To Ncengimpilo Khanyile for translating; for being my voice when I could not be heard.

To Gail Du Toit for answering my every question at the office.

To all community groups and individuals for openly welcoming me into their communities.

A special thanks to Thembinkosi Nxele and the Mpumalanga Buffalo Club for their deep understanding of environmental education and the inspiration it brings.

To Mr. Mtshali for hosting my parents when they visited me 'at work.'

To the Mbongolwane evaluation committee for appreciating my minuscule Zulu vocabulary.

To Aynom Teweldebrhan for his assistance with GenStat and daily encouragement.

To my family for their continual support, this time from afar.

To Alex Moore for continual friendship and support.

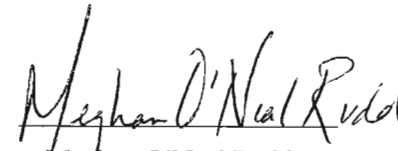
PREFACE

The dissertation is written in American English. The research is presented in narrative form, according to systemic intervention methodology. The citation method is the Harvard system. Quotes without page numbers in text are from websites.

DISCLAIMER

The research was carried out through the University of KwaZulu-Natal, Pietermaritzburg, South Africa, during the 2003 academic year. The research was supervised by Monique Salomon (Director of the Farmer Support Group, extension branch of the Centre for Rural Development Systems) and co-supervised by Reverend Sydney Luckett (Centre for Rural Development Systems).

The research reported in this dissertation is of my own investigation. Where the work of others has been used, it has been acknowledged in the text.



Meghan O'Neal Rudd

ABSTRACT

The present context of community based natural resource management is characterized by multiple stakeholder involvement, a situation that presents challenges in aligning vision for common action. A 'systemic intervention' involved the staff and stakeholders of the Farmer Support Group, a non-profit rural development organization based in KwaZulu-Natal, South Africa. The 'creative design of methods' guided inquiry in aligning vision of a Landcare ethos amongst the organization and their stakeholders, and in directing action toward the vision. Critical Systems Thinking is outlined as the framework in which the intervention methodology is encompassed. The importance of applying a broad range of environmental education methods to Landcare is established through drawing from present debates and contexts in environmental education and community based natural resource management. The 'organization as community' approach to organizational learning and development is highlighted as a means of creating synergy of purpose across staff and stakeholder boundaries. The intervention's methodology consisted of three phases: drawing out perspectives, forming a common vision in a mission statement, and developing action plans based on the mission statement. Outcomes included: identification of three schools of thought that drove perspectives on the role of environmental education in natural resource management strategies, formation of the FSG Landcare Ethos Mission Statement, which was inclusive of all stakeholder perspectives, and integration of the mission statement into FSG projects through action plans. The intervention found that aligning staff members and stakeholders in common vision and action towards developing a Landcare ethos could be accomplished through a blend of environmental education approaches that facilitate sustainable decision making by building capacity in individuals and communities in a participatory and locally relevant manner that is attentive to predominant perspectives and adaptive to change.

Keywords: Landcare, Landcare Ethos, community based natural resource management, environmental education, learning organizations, organization as community, common vision, critical systems thinking, creative design of methods.

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LIST OF ABBREVIATIONS

CBNRM	Community Based Natural Resource Management
CERDES	Centre for Rural Development Systems
Com.	Community
CST	Critical Systems Thinking
DoA	Department of Agriculture
DoAEF	Department of Agriculture, Environment and Forests
FSG	Farmer Support Group
HIV	Human Immunodeficiency Virus
IIED	International Institute for Environment and Development
KZN	KwaZulu Natal
LC	Landcare
LCF	Landcare Facilitator
MWLR	Manaaki Whenua Landcare Research
NAAEE	North American Association for Environmental Education
NCSE	National Council for Science and the Environment
NDA	National Department of Agriculture
NGOs	Non-Governmental Organizations
PIM	Participatory Impact Monitoring
PLASS	Programme for Land and Agrarian Studies
RRM	Rural Resource Management
SADC	Southern African Development Community
SDFs	Social Development Facilitators
SDinfo	Sustainable Development Information Systems
SILC	Secretariat for Landcare
UN	United Nations
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
YIELD	Youth in Environment, Landcare and Development

LIST OF TERMS

Unless otherwise noted, definitions were formed by author based on use in the text's context.

adaptive management approach
A model and practice that combines ecological and participatory action research approaches. A structured process of 'learning by doing' where information is central and natural systems and institutional social dimensions are synthesized in a multidisciplinary manner (Allen 2001).

Appreciative Inquiry
A methodology that honors positive aspects of past situations to guide future visions and plans.

boundary critique
The idea that no assumption held by the inquirer/intervener should be beyond question. Bringing forth awareness to what issues are and are not going to be considered in the intervention and who are considered key stakeholders.

capacity building
Firstly about building skill and capability in individuals. Also regarded as a wider process involving many stakeholders with a shared vision, issue or problem, brought together in a way that facilitates real communication to co-ordinate collective effort (Mack 2001:27).

coercion contexts
Situations in which one or more participants are not free to speak openly; also called closed debate.

community based natural resource management
Involvement of local communities as managers of the land, with the role of governments at all levels to be that of information and experience transferors.

complementary
Methods or methodologies that work well together.

creative design of methods
Midgley's (2000) strategy for mixing methods to facilitate systemic interventions. The approach is situated in critical systems thinking and prioritizes boundary critique.

critical awareness
Critical awareness refers to boundary judgments when defining both methods and theory of interventions.

critical systems thinking
The third wave of systems thinking (Midgley, 2000), characterized by critical awareness, emancipation and pluralism (Jackson, 2000).

discordant pluralism
An idea argued by Gregory, suggests that what makes paradigms different should be emphasized rather than seen as 'complementary.' A term Jackson interchanges with his meta-methodology, Total Systems Intervention.

emancipation
A 'dedication to sustainable improvement of local situations' (Midgley, 2000).

emancipatory
Methodological approach that emphasizes boundary critique.

empirical-analytical
One of three different paradigms within the field of environmental education; in alignment with Habermas' three human interests (Wals and van der Leij 1997). Referred to as 'behavioristic.'

environmental education
A vehicle for enabling an informed public that is able and motivated to create positive change for the environment, and ultimately, themselves. Containing the potential to draw out and develop a Landcare ethos in community based natural resource management practices.

epistemology
Our knowledge about the nature of the world.

functionalist systems thinking
The first wave of systems thinking, dominated by the traditional scientific method and associated theories, and primarily focused on mathematical modeling techniques to represented reality (Jackson 1991). Also known as positivism or analytical.

Habermas's theory of knowledge-constitutive interests
Summarized as: a *technical* interest in predicting and controlling our natural and social environments, a *practical* interest in attaining mutual understanding, and an *emancipatory* interest in freeing ourselves from unjust power relations (McCarthy 1978). Considered a universal truth.

imposed community based natural resource management
Natural resource management approach characterized by low community participation and lack of common vision.

interpretive-hermeneutical
One of three different paradigms within the field of environmental education; in alignment with Habermas' three human interests (Wals and van der Leij 1997). Referred to as 'non-behavioristic.'

interpretive systems thinking
The second wave of systems thinking, arising from discontent with functionalism (Midgley 2000). Brought on by the introduction of subjective reality to systems thinking. Also called soft systems thinking.

intervener
One who catalyses or facilitates an intervention.

intervention
The action research portion of the dissertation research process. In this body of research, work with the Farmer Support Group.

isolationism
The use of one methodology by itself (considered by Jackson (2000) one of three types of mixing methods that is not 'genuine' pluralism).

Landcare
An adaptive management strategy of community based natural resource management that is characterized by a grassroots movement linked with a national program (McFarlane *et al.* 1996).

Landcare ethos
The values and attitudes that underpin Landcare.

meta-methodology
Methodology that is used with meta-paradigm.

meta-paradigm / theory
Overarching paradigm/theory for all systems paradigms/theories; provides the theoretical basis for methodological pluralism and demonstrates paradigm complementarism.

method
The tools and/or techniques used in a methodology.

methodological imperialism
Favoring one methodology when attempting pluralism (considered by Jackson (2000) one of three types of mixing methods that is not 'genuine' pluralism).

methodological pluralism
Originally understood by Jackson (1991) as: methodologies from various paradigms have strengths and weaknesses that enable them to be suited to different problem contexts. Now methodological pluralism is understood as the use of multiple methods (tools, techniques, models) from multiple methodologies (containing different theoretical underpinnings) in a singular intervention. Considered a new paradigm by Midgley (2000).

methodology
The steps/process that guides inquiry; may or may not be rooted in theory.

narrative
A form of writing up interventions that describes how the intervention actually happened from the point of view of the intervener.

ontology
The nature of the world.

organic community based natural resource management
Natural resource management approach characterized by collaboration, common vision, and sharing of experience. Also characterized by true partnerships between government, non-governmental organizations, the community and the private sector, which encourage empowerment of community members.

organizations as communities
Likening organizations to communities involves redefining organizations using the approaches of community development (Senge 1994). Includes the idea of building a common vision, or purpose.

paradigm
Term introduced in 1962 by Kuhn (Midgley 2000). Also know as worldview: the stocks of images, put in by our personal histories, of which we make sense of the world (Checkland, 1989).

paradigmatic lens
Way in which one views the world. Similar to worldview.

paradigm incommensurability
Paradigms are based on fundamentally different theoretical assumptions. Therefore, an intervener can not jump from one to another and fully comprehend both. Only one paradigm can be fully understood by one individual.

participatory action research
Inquiry method that uses the critical reflection aspect of the action research cycle.

Participatory Rural Appraisal
A methodology that encourages local participation in development.

pluralism as a new paradigm
Midgley's version of methodological pluralism is considered "pluralism as a new paradigm." One of three explanations considered not true theoretical pluralism by Jackson (2000).

pluralism as postmodernism
The atheoretical mixing of methods. One of three explanations considered not true theoretical pluralism by Jackson (2000)

postmodern
Methodological approach that denies universal truths.

practitioner
One who practices methods and/or methodologies.

pragmatism
The a-theoretical use of mixed methods (considered by Jackson (2000) one of three types of mixing methods that is not 'genuine' pluralism).

research
All aspects of the research process of the dissertation, including the intervention.

social capital
Refers to the institutions, relationships, and norms that shape the quality and quantity of societies social interactions (Mack 2001:24).

social cohesion
The critical product of social capital working in the same direction.

social-critical
One of three different paradigms within the field of environmental education; in alignment with Habermas' three human interests (Wals and van der Leij 1997). Referred to as 'non-behavioristic.'

strategy of inquiry
An approach or methodology to investigate a question(s).

sustainable development
Defined in the 1987 Brundlandt report, Our Common Future, as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (UNEP 2002).

systemic intervention
An approach to inquiry. Involves the creative design of methods (Midgley 2000) as its strategy for selecting and mixing methods in practice, which understands of the limits of crossing paradigms, yet encouraging of the practice. Midgley (2000) states that the approach embodies its own paradigmatic assumptions, and is part of a wider methodology that acknowledges paradigm incommensurability while welcoming pluralism.

systems thinking
A body of knowledge based on the notion that in systems, 'emergent' properties peculiar to themselves arise that can not be derived from their parts (Flood and Jackson 1991).

theoretically informed
Practice guided by a theoretical basis; the theoretical use of methods.

universal truths
Theories that are considered unaltered by time or circumstance.

unreflective pluralism
The use of different methodologies together that ultimately contradict each other. One of three explanations considered not true theoretical pluralism by Jackson (2000).

world view
The stocks of images, put in by our personal histories, of which we make sense of the world (Checkland, 1989). Similar to paradigm.

1. PROBLEM SITUATION

1.1 INTRODUCTION

My name is Meghan O'Neal Rudd and I am a native Californian. I am the 'agent of change' in this body of research. One might ask why I came all the way to South Africa for my Master's studies. To explain, let me first cover some personal background. For my undergraduate degree I majored in Biology and minored in Environmental science. During my studies I spent a semester in eastern Africa, which spurred my interest in the challenges presented in rural African contexts. More specifically, I was interested in the dynamic between people and the land, which is often placed in the agricultural arena. After finishing my studies I worked as a social worker, teacher, and environmental educator. Restless at home, when I had the chance to study rural agriculture in South Africa I seized the opportunity. My interest in the Farmer Support Group was that their development practices seemed to be in line with my own philosophies.

The purpose of the research is to create a context-specific, participatory action oriented, critical systems thinking methodology that facilitates multiple stakeholder perspectives to establish consistency in purpose within the individuals of an organization through promoting environmental education as an integral part of community based natural resource management and Landcare.

The intervention also aims to facilitate the creation of a common vision of the role of environmental education within organizational and community structures in order to better develop a Landcare ethos and take collective action towards realizing the vision among the FSG staff and stakeholders.

The structure of this dissertation slightly differs from the norm. It is a blend of traditional dissertation format and Midgley's (2000) 'systemic intervention' reports. I chose this format because it illustrates the process of the intervention, instead of presenting the information as if the entire research design was perfectly polished from the start. To clarify the dissertation format an explanation of chapter design follows.

This chapter introduces the author and the objectives of the research, outlines the structure of the chapters, describes the broad and local contexts of the problem situation as well as presents the strategy of inquiry into the research and main influences that shaped the intervention's methodology.

In chapter two Critical Systems Thinking is presented as the framework in which the intervention's methodology will be encompassed. Background on critical systems thinking and current debate in the field leads to the reasoning for the creative design of methods as the strategy of inquiry of the intervention, corresponding with Midgely's 'new' paradigm.

In chapter three the importance of applying a wide range of environmental education methods to Landcare is established to contribute to the methodological framework. This is done through drawing from present debates and contexts within environmental education, the concept of Landcare ethos, community based natural resource management, adaptive management, and Landcare and capacity building.

In chapter four current development concepts are explored to further inform the intervention's methodology. The 'organizations as communities' approach to organizational learning and development is highlighted as a means of creating synergy of purpose throughout stakeholders.

Chapter five describes the theoretical framework and methodology of the research, and is the alternative to a traditional 'Methodology' chapter. The reasons why I, as the intervener, thought the purposes of the intervention were important are followed by the research and the intervention purposes. The beginnings of the intervention process are described to set the stage for the chosen methodology and the system in which the intervention takes place is illustrated. The theoretical framework of the research is described along with the corresponding assumptions and principles. The research questions and sub-questions along with the intervention questions and sub-questions are stated. Early boundary critique concerning the design of methods for defining issues leads into an overview of the actual intervention methods and a flow chart of the intervention process.

Chapter six is a narrative of the process and results along with the outcomes and trends of the actual intervention phases. Narrative is the form in which systemic interventions are reported.

Chapter seven is a discussion of the research using the intervention process and the literature previously presented to reflect on the research questions. Conclusions are made through reflection on the research questions and recommendations for future

research in the greater research context, for the Farmer Support Group, and for future interveners are offered.

1.2 HOW PURPOSES WERE ARRIVED AT

The context in which development is taking place is rapidly evolving. Presently, development work is characterized by multiple stakeholder involvement in projects that aim to meet the dual goals of sustainable livelihoods for people and sustainable management of natural resources. In striving for these goals, organizations' visions and purposes should be in alignment with all involved stakeholders, a task that presents many challenges but can be aided by organizations viewing themselves as communities (Senge, 1994). A lack of articulated attitudes and values that support Landcare practices, characteristics associated with participation and ownership, weaken community based natural resource management strategies and should be strengthened. A critical systems thinking strategy of inquiry that recognizes the multiple 'lenses' people view the world through while perceiving commonalities and supporting empowerment may be an appropriate intervention approach to the situation.

A systemic intervention involving the non-profit organization Farmer Support Group (FSG) and their stakeholders will provide the medium for exploring the challenge of aligning a positive vision of the future among FSG staff and stakeholders. This process will draw on the learning organization approach of organizations as communities, the potential of environmental education to promote a Landcare ethos as a part of the community based natural resource management strategies and the creative design of methods critical systems thinking approach.

The intervention is situated within a historically coercive context, apartheid South Africa. Though a decade has passed since the 1994 democratic elections, the mark of past injustices is evident throughout much of the country. The Farmer Support Group and their client community stakeholders have a common goal of sustainable livelihoods, but the 'playing field' is not level due to the historical context.

The intervention is physically located within the office and field sites of the Farmer Support Group. FSG is located at the University of Natal, Pietermaritzburg campus in Scottsville, KwaZulu-Natal, South Africa. Field sites are dispersed throughout the province of KwaZulu-Natal. Currently, project sites include Okhombe, Msinga, Mbongolwane, Mpumalanga, and Amaswazi. FSG is an innovative development

organization dedicated to sustainable and productive resource management, institutional development and entrepreneurship through participatory and innovative methodologies. It is a part of the University of Natal's Centre for Rural Development Systems (CERDES), a union of research, teaching, and extension (FSG bearing particularly the responsibility for the latter function). FSG has a staff of circa 20, working in five programs: Landcare, Sustainable Farming Systems and Food Security, Social Development in Forestry, Learning in Action, and SADC Center of Excellence.

FSG's Landcare program is part of South Africa's National Landcare Programme. On a national level, Awareness and Education is one of five components, to be discussed in depth later, of the Landcare Programme. FSG's Landcare program reflects this emphasis, with environmental education highlighted as one of four areas of intervention, the others being sustainable land use, income generation, and structures for collective action. Two out of five Landcare projects at FSG presently directly address environmental education.

FSG is an organization that seeks to guide interventions and build competencies in sustainable resource use, entrepreneurship, good governance, and Landcare ethos (Salomon and Zuma 2003). The Okhombe Landcare Project, started in mid 1999, was the first Landcare project of KwaZulu-Natal. The aim of the project was "for the communities to assume full responsibility for sensitive and appropriate management of their natural resources, particularly the land, and through this to improve their own quality of life" (Sisitka 2002:3). FSG served as the lead agency involved in the project, with other main service providers: CSIR – Environmentek, University of Natal – Range and Forage Resources, Bergwatch, KZN Department of Agriculture (Directorate of Soil Conservation and Engineering, North-West Region, and Bergville District), and KZN Wildlife. Within the Okhombe community key partners included the Okhombe Development Committee, Okhombe Inthathakusa Monitoring Group, Landcare Facilitators, Okhombe Tourism Task Team, Okhombe Livestock (Grazing) Committee, Okhombe Farmers Association, Inkosi and the Tribal Council, and Izinduna of the 6 sub-wards.

In an independent evaluation (Sisitka 2002:10) of the Okhombe Landcare Project the objective *community has a shared vision of the Landcare/land management* was assessed. It was found that relatively few participants in the evaluation appeared to have a broad conceptual understanding of Landcare and that service providers made

little reference to the idea of a 'shared understanding' of Landcare concepts. Although a general increase in the understanding of environmentally related issues within the communities was noted by service providers, *creating interest in Landcare activities in the community, promoting awareness of environment/Landcare,* and *making people aware of conservation and erosion* were identified as continuing challenges (Sisitka 2002:11). The evaluation stated:

> There is little doubt that the project has increased the awareness and understanding of community members with regards to the importance of caring for the land. How wide-spread, and how profound this understanding is, is less clear, with the evidence indicating that it is probably only the most committed and involved community members who have developed substantial understanding of the issues. There remains considerable scope for increasing the levels of awareness and understanding of the whole Landcare concept. (Sisitka 2002:11)

And went on to suggest:

> *It is imperative that the broader Landcare 'ethos' is continually reinforced in relation to all activities, and that these activities are strongly located in the broader picture of environmental management across the entire area.* (Sisitka 2002:11, italics in original)

The development of a Landcare ethos focuses on enhancing values that underpin the Landcare approach (Salomon and Zuma 2003). Because Landcare is a part of FSG's mission as an organization, the development of a 'Landcare ethos' should apply to all Landcare projects. Currently, only two out of five Landcare projects have environmental education as a component. One project is Environmental Education in primary schools of Landcare sites and the other project is Youth in Environment, Landcare, and Development (YIELD), which distinguishes environmental education as primary of three objectives. Environmental education, and the general concept of a Landcare ethos is not an integral part of FSG's Landcare program. The question remains in how far Landcare values are a part of FSGs' interventions. There is a need to link Landcare values and attitudes, which compose the Landcare ethos, to a vision for Landcare held by FSG staff members that is also representative of stakeholder views.

In order to facilitate the research process, three domains of inquiry will be explored: appropriate methodologies for real life interventions, current trends in community based natural resource management practices and environmental education, and the role of vision in learning organizations. The next three chapters will generate debate in the three areas as they pertain to the research and to the design of the research methodology.

2. CRITICAL SYSTEMS THINKING APPROACHES

The way in which an agent intervenes in a situation, or one's methodology, is crucial to consider. What follows is a brief review of the field of systems thinking followed by an argument for one strain of critical systems thinking as the paradigm and corresponding strategy of inquiry of the research intervention. For the purposes of the research the following issues will be reviewed: the level of importance of boundary critique in interventions, the degree in which one can negotiate multiple world views, and ideas on addressing the constraints to pluralism. An appropriate approach to guide inquiry in real-world interventions, such as the current research intervention, is identified.

2.1 HOW THE RESEARCH PROJECT FITS IN

In order to explore a path of inquiry one should have a guide, or methodology that leads the way. For the intervention I chose a strategy of inquiry to shape my methodology that has the ability to draw out the information I am seeking, while at the same time be flexible enough to respond to the changes that real life presents. The chosen approach recognizes that the intervener is a part of the intervention, and encourages intervener reflection and learning throughout the process.

2.2 A BRIEF HISTORY OF SYSTEMS THINKING

Critical systems thinking (CST) is considered the third wave of systems thinking (Midgley, 2000), a body of knowledge based on the notion that in systems, 'emergent' properties peculiar to themselves arise that can not be derived from their parts (Flood and Jackson 1991). The first wave, later termed 'functionalist,' was dominated by the traditional scientific method and associated theories, what is known as positivism (Jackson 1991), and was primarily focused on mathematical modeling techniques that represented reality (Midgley 2000). The second wave, later given the name 'interpretive systems,' arose from discontent with functionalism (Midgley 2000). The concept of subjective reality was introduced to systems thinking by Churchman (1979), Ackoff (1983), and Checkland (1989), among others (Midgley, 2000). Systems models were viewed as an aid to understand reality, which constituted a shift in paradigm for systems thinking. Midgley (2000) explains that Kuhn introduced the concept of 'paradigm' in 1962 to explain why scientific knowledge wasn't building upon itself continuously, as first thought. Scientists would be caught in ongoing theoretical debates; new ideas met tough resistance from owners of older theories. To explain the

uncomplimentary theoretical standpoints, "Kuhn suggested that different groups of scientists make different paradigmatic assumptions, and that one view eventually *replaces* the other (rather than simply building upon it)," (Midgley 2000:250, italics in original). In this way interpretive systems replaced functionalism as a paradigm for some systems practitioners, while others continued to have a functionalist paradigmatical stance. Habermas's theory of knowledge-constitutive interests: a *technical* interest in predicting and controlling our natural and social environments, a *practical* interest in attaining mutual understanding, and an *emancipatory* interest in freeing ourselves from unjust power relations (McCarthy 1978), was used by systems thinkers to theoretically validate the existence of non-functionalist paradigms (Jackson 1991).

The third wave arose from practitioner's critiques of the limitations of functionalist and interpretive handling of power relations. The movement was called 'critical systems thinking' and began in the late 1970s and early 1980s and took shape with two contributions (Midgley 2000). The first was Ulrich's (1983; 1996) Critical Systems Heuristics emancipatory systems methodology. Critical Systems Heuristics' main focus was on the need to be critical of the value and boundary judgments made by planners (Midgley 2000). Boundary judgments, or critiques, determine who and what is and isn't involved in the intervention. The second contribution was Jackson and Keys's System of Systems Methodology based on Habermas's theory of knowledge-constitutive interests (Jackson 1991). The System of Systems Methodology's main contribution to systems thinking was that system practitioners should accept methodological pluralism (Midgley 2000), understood as critical reflection, or choice, over which methodology of which paradigm (functionalist, interpretive or critical) is best suited for the problem context (Midgley 1997). This was done through demonstrating that different methods have strengths and weaknesses that correlate to different problem contexts.

Three main critiques lead to a revisioning of CST (Midgley 2000). The first problem with the 'original' CST was that boundary critique was isolated to a minority of situations whereas it should be a practice of all interventions. Secondly, the two main contributions to CST were both based in theories that were universal truths, unaltered by time or circumstance. Lastly, situations in which one or more participants are not free to speak openly, called 'coercion' contexts or closed debate, were not addressed by a CST methodology. These and other critiques lead to a further 'pluralization' of CST, meaning methods from multiple methodologies representing different paradigms used

together in a singular intervention. CST has broadened boundary critique to its present status as a part of all interventions and rejected universal truths in response to critiques. As for CST's inability to address coercion contexts, the issue is still open. For a detailed review of the revisions CST has undergone through 1995 see Flood and Romm (1996) and post 1995 see Jackson (2000) and Midgley (2000).

By 2000 most critical systems authors agreed with many aspects of CST. Jackson (2000) outlines the 'three commitments' of CST for most critical systems thinkers: critical awareness, emancipation and pluralism. Critical awareness refers to boundary judgments when defining both methods and theory of interventions. Emancipation might be better stated as a 'dedication to sustainable improvement of local situations.' Pluralism is the use of multiple methods (tools, techniques, models) from multiple methodologies (containing different theoretical underpinnings) in an intervention. While critical systems thinkers generally identify critical awareness, improvement of local situations and pluralism as central to CST, their specific meanings and implications, particularly that of pluralism, are still under debate. Our discussion focuses on the theoretically informed strain of pluralism argued primarily by Jackson (2000) and Midgley (2000).

2.3 EMPHASIS ON TWO AUTHORS AND SELECTED DEBATES

In this chapter I will present a brief review of the main areas of debate between Jackson (2000) and Midgley (2000) concerning theoretically informed pluralism: the role of boundary critique in interventions, the ability of an intervener to comprehend paradigms that are different than their own, and how to address the problems of pluralism. These are by no means the only debates present in critical systems thinking; they are the ones most relevant to the selection of research philosophy, process and application.

Jackson has made several contributions to the discipline of systems thinking, particularly to developing critical systems thinking. During the first stage of CST, Jackson held the view that the System of Systems Methodologies rested above all other paradigms because of its theoretical base in Habermas's theory of knowledge-constitutive interests (Jackson 1991), taken as a universal truth. The theory was explained as a meta-paradigm that overarched all systems paradigms and provided the theoretical basis for methodological pluralism (Jackson 1991). His suggested meta-methodology for this meta-paradigm was Total Systems Intervention. Total Systems Intervention, while facilitating methodological pluralism (originally understood as

methodologies from various paradigms have strengths and weaknesses that enable them to be suited to different problem contexts), did not encourage using methods from methodologies of different paradigms in a singular intervention. Through critiques of CST, Jackson revised his view by dismissing the System of Systems Methodologies as a meta-paradigm due to its theoretical base in a universal truth, Habermas's theory of knowledge-constitutive interests. Habermas himself withdrew the theory as a universal truth. Total Systems Intervention was re-introduced as the meta-methodology for CST, revised to accommodate pluralism of both methodologies and of methods in singular interventions.

Midgley's systemic intervention concepts were developed through his varied and extensive work in community development. Midgley (2000) proposes a strategy for mixing methods called the 'creative design of methods' to facilitate systemic interventions. The approach is situated in critical systems thinking and prioritizes boundary critique. Midgley considers the creative design of methods to be one of several strategies that welcomes methodological pluralism and supports the theoretical use of methods, thus is appropriate for 'mixing methods.' Midgley views methodological pluralism as a new paradigm, asserting that one can not transcend their own paradigm, but can only view other paradigms through their own paradigmatic 'lens.'

Jackson and Midgley are very similar in much of their thoughts on critical systems thinking, but in one area they vary greatly. While Jackson supplies a meta-methodology aimed to ensure pluralism and to guide critique between paradigms, Midgley places pluralism in a new paradigm that accepts that paradigms are based on fundamentally different theoretical assumptions, or are 'incommensurable,' while welcoming pluralism. A close examination of the proposed directions for CST will provide background and generate debate concerning the choice of approach to the research methodology

2.4 COERCION AND BOUNDARY CRITIQUE

The basics of Midgley's creative design of methods as relevant to the first debate and the intervention ensue. Systemic intervention involves the creative design of methods (Midgley 2000) as its strategy for selecting and mixing methods in practice. The approach:

> involves understanding the situation in which an agent wishes to intervene in terms of a series of systemically interrelated questions, expressing the agent's purposes for intervention. Each purpose might need to be addressed using a different method, or part of a method. The purposes are not necessarily determined as a complete set in advance, but may evolve as events unfold and understandings of the situation develop.
> (Midgley 2000:226)

Aspects of the creative design of methods include:

a) Methods are mixed and even developed for the situation: "Most situations are complex enough to warrant the use of a variety of methods and there is often a need to develop new methods from scratch (Midgley 2000:225)."

b) Concept of time important: "The purposes are not necessarily determined as a complete set in advance, but may evolve as events unfold and understandings of the situation develop. In this sense, it is important to acknowledge that interventions take place over *time*, and that different purposes may emerge at different 'moments of inquiry, requiring the use of different methods" (Midgley 2000:226, italics in original).

c) Methods used together are greater than totaling their parts: "a whole *system* (interrelated set) of purposes can be pursued through a synergy of different methods...the resulting synergy of methods is a new, more comprehensive whole (Midgley 2000:226, parenthesis and italics in original)."

d) Importance of the role of intuition. The intervener will make on the spot choices that may not even be conscious. It is important to reflect on the choices and state them in the write-up: "Upon reflection, I would now prefer to see the use of intuition made more visible so that we can begin to destroy the illusion so often created of flawlessly preplanned interventions" (Midgley 2000:228).

The role of the intervener is described as "pivotal" by Midgley (2000). He distinguishes three types of questions that the intervener should ask herself or himself throughout the systemic intervention:

1. *Boundary questions*, leading to design of methods for defining issues
2. *Issue-related questions*, leading to the design of methods for addressing the issues already defined

3. *Knowledge-related questions*, enabling explorations of relations between agent(s) and intellectual resources

(Midgley 2000:229-230, italics in original)

Boundary questions are especially relevant at the beginning of the intervention but should be continued throughout the intervention process. They bring awareness to what issues are and are not going to be considered in the intervention and who are considered key stakeholders. Issue-related questions are concerned with choosing appropriate methods for the specific issues of the intervention. Knowledge-related questions address discrepancies between the intervener's knowledge and what needs to be known for the intervention. These questions allow the intervener to engage other intellectual sources other than herself or himself.

When writing up interventions narrative form is used. This means that the intervention is described how it actually happened from the point of view of the intervener. In narratives, the purpose being expressed in the question is usually articulated rather than the question itself (Midgley 2000). When describing purposes of the intervention, three aspects should be covered:

1. How particular purposes are arrived at in local situations
2. Why they are important to the agent(s) concerned
3. How they are pursed through the creative design of methods

(Midgley 2000:237)

It is apparent that Midgley places a high value on boundary critique in interventions. Jackson argues that the creative design of methods highlights emancipatory methodologies over other methodologies so is therefore not true pluralism, in which no one methodology is represented consistently above others. He calls this favoring 'methodological imperialism,' and counts it as one of three types of mixing methods that is not 'genuine' pluralism (the other two being 'isolationism,' the use of one methodology by itself, and 'pragmatism,' the a-theoretical use of mixed methods) (Jackson 2000). The creative design of methods is an advanced form of imperialism because it favors the emancipatory approach (that emphasizes boundary critique) as a part of all interventions. Jackson states that while the priority placed on emancipatory approaches ensures the creative design of methods version of pluralism's "radical edge," it is not truly pluralism: "I have every sympathy with those who wish to maintain

the emancipatory option by privileging radical [emancipatory] paradigms, but this is not the role of pluralism or, in my view, of critical systems thinking" (Jackson 2000:386, brackets added). Jackson views critical systems thinking and its use of pluralism as a way of protecting the emancipatory approach without committing every intervention to the approach. Jackson believes that ideally, all four (functionalist, interpretive, emancipatory and postmodern) theoretical rationales would be present in every intervention, and every step would include methods from each rationale. While identifying 'dominant' and 'dependant' rationales in methods is encouraged by Jackson, he doesn't favor the emancipatory rationale in all intervention contexts (Jackson 2000).

This means that when going into an intervention situation Jackson doesn't think the intervener has to *highlight* boundary issues of who and what is and isn't going to be a part of the intervention, in every intervention. Let's use the intervention with the Farmer Support Group as an example, using the creation of a common vision of the role of environmental education in the organization as the main goal. Boundary critique questions such as who is 'in' and 'outside' of the organization is involved in the intervention should be confronted, according to Jackson (2000), but as the interpretive question of *how to form a common vision* is the 'dominant' rationale in the intervention, boundary questions may be relegated to a 'dependant' rational and not be a main focus of the intervention.

Midgley, on the other hand, asserts that the creative design of methods is true pluralism, and that addressing emancipatory issues are an integral part of every CST intervention. He refers to Ulrich's marriage of 'critical' with 'systems,' "Truly rational inquiry is said to be critical, in that no assumption held by the inquirer should be beyond question. It is also systemic, however, in that boundaries always have to be established within which critique can be conducted" (Midgley 1997a:41). Midgley questions, "Who decides if there is coercion?" (Midgley 2000:207), implying that every intervention has the possibility of being coercive, depending on where the boundaries are drawn. Midgley emphasizes boundary critique in his critical design of methods because he asserts that "Dealing with coercion is therefore not so much a matter of which method to use, but *what are the appropriate boundaries for analysis and engagement:* when coercion is experienced, this suggests the need to widen the boundaries...a truly *critical* systems thinking must prioritize boundary critique" (Midgley 2000:210, italics in original). Rather than choose what seem to be the best methods for an intervention, explore the boundaries present and potentially present in the situation. Midgley (1996:20) would like to see boundary critique as a significant part of all interventions,

"What I am proposing, then, is to define the commitment to critical awareness in terms of the ethical critique of boundaries, and to continue to conduct research to enhance both the theory and practice of boundary critique." Only if boundary critique is a meaningful part of all interventions, in maintaining CST's commitment to critical awareness, will the possibility of coercion be assuredly addressed and sustainable local improvement realized.

Because of systemic intervention's dedication to boundary critique as a fundamental part of all interventions, the creative design of methods is a more appropriate critical systems thinking approach to real life interventions. Boundary critique was a significant aspect of the research methodology on several levels. Most obviously, the research took place within a historically coercive context. Additionally, boundary fluctuations from individual to societal boundaries were an aspect of the intervention process.

2.5 PARADIGM INCOMMENSURABILITY

Midgley believes that paradigms are fundamentally distinct. Therefore an intervener can not jump from one to another and fully comprehend both. Only one paradigm can be fully understood by one individual. This concept is called paradigm incommensurability. Midgley also believes that interveners can learn from other paradigms. Midgley (1997b:280, italic in original) states, "Paradigms are commensurable in the sense that we can draw upon ideas from a variety of sources, but they are also *in*commensurable in the sense that we can never appreciate those ideas exactly as their original advocates do." For Midgley, the goal is to broaden the limits of one's own paradigm, not to assume that understanding of other paradigms is attained.

Jackson designs a methodology that necessitates viewing all paradigms equally, yet believes that interveners practicing pluralism need to deal with the fact that paradigms can't be completely transcended, "To repeat, pluralists must learn to live with and manage a degree of paradigm incommensurability," (2000:386). He rejected his earlier claim (Jackson 1991) that Habermas's theory of knowledge-constitutive interests formed a meta-theory proving a meta-paradigm above all paradigms that demonstrated paradigm complementarism. Total Systems Intervention revised (Jackson 2000) is retained as a meta-theory that guides critique between paradigms. Jackson explains that in the wake of the lost meta-theory, pluralists have bound onto new explanations for methodological pluralism. Midgley's view is considered "pluralism as a new

paradigm," and is one of three explanations considered not true theoretical pluralism. The other two are "unreflective pluralism" and "pluralism as postmodernism" (Jackson 2000:384-386). Unreflective pluralism is the use of different methodologies together that ultimately contradict each other and pluralism as postmodernism is the a-theoretical mixing of methods. Jackson considers Midgley's argument for "pluralism as a new paradigm" as more sophisticated than the other versions of the new paradigm movement. He recognizes its strength: that the argument solves the problem of combining methodologies that are based on fundamentally distinct philosophical and social assumptions. He argues against Midgley's new paradigm stating, "It follows that, in order to protect paradigm diversity, pluralism cannot sell itself to any one paradigm. One paradigm pluralism is simply not pluralism" (Jackson 2000:386). Jackson (2000:387) prefers "discordant pluralism" a term he interchanges with his meta-methodology, Total Systems Intervention. Discordant pluralism, an idea argued by Gregory, suggests that what makes paradigms different should be emphasized rather than seen as 'complementary.' The meta-methodology Total Systems Intervention is viewed as protecting and guiding divergent paradigms: "The meta-methodology needs to accept that paradigms are based upon incompatible philosophical assumptions and that they cannot, therefore, be integrated without something being lost" (Jackson 2000:387). While Jackson acknowledges that individuals can interpret systems methodologies in different ways, it is not acknowledged that individuals possess their own paradigms when entering a pluralistic intervention, and filter all other paradigms through their own.

Jackson would have any and all interveners use his meta-methodology, Total Systems Intervention, as a guide to pluralist practice in all interventions. If an intervener chooses methods from each paradigm using the meta-methodology (that is structured to guarantee methodological pluralism) as a guide, without regard to her own paradigmatical stance, the intervener may assume that all paradigms will be covered and carry out the intervention unaware that the methods from paradigms not her own are being shaded by her own paradigmatical lens. What the intervener thought was pluralism of methods true to each paradigm (and reported in such a way) was actually tinted by her own paradigmatical assumptions. She was unaware of her own paradigm's limits and limitations and therefore didn't give herself the opportunity to broaden her own paradigm through the use of, and subsequent learning and reflection on, methods from paradigms not her own.

Midgley describes systemic intervention as understanding of the limits of crossing paradigms, yet encouraging of the practice. He states that the approach embodies its own paradigmatic assumptions, and is part of a wider methodology that acknowledges paradigm incommensurability while welcoming pluralism: "*methods* are drawn from other methodologies and interpreted through the intervener's own methodology" (Midgley 2000:218, italics in original). Midgley holds that paradigms are incommensurable, thus any meta-paradigmatic position is not possible. Midgley argues that most authors recognize that there can be no meta-paradigmatic stance:

> For Midgley (1989a, b, 1990b, 1992c), this means accepting that critical systems thinkers are trying to establish the foundations for a new paradigm. It is therefore inappropriate to claim that we can contextualize other paradigms. Rather, we "import" ideas and methods from other paradigms, reinterpreting them in our own terms.
> (Midgley 1997b:280)

The creative design of methods is viewed as an approach that welcomes methodological pluralism and thus enables other methodologies to be seen through the intervener's 'lens.' Pluralism is at both the level of methodologies and of methods; methods from other methodologies can be drawn upon and reinterpreted through one's own methodology (Midgley 2000). Even methods developed outside of systems thinking can be used in a systems intervention. "Of course pluralists can still learn from other paradigms (Gregory 1992), but this learning is always geared to the enhancement of one's own paradigmatic position—there is no pretence that other people's methodological ideas are used in exactly the manner that their creators intended," (Midgley 2000:248). One cannot transcend their own paradigm and understand another as their own; they can only enhance their own paradigm through learning about and from other paradigms.

The creative design of methods is a more appropriate critical systems thinking approach to real life interventions because it acknowledges that one can only enhance their own paradigm through others, not proffer to understand all paradigms. I can relate to this concept as an interventionist. Though I welcome ideas that are theoretically opposed to my own, it would be arrogant for me to assume full understanding of them.

2.6 ADDRESSING CONSTRAINTS TO PLURALISM

Several constraints to pluralistic practice have been identified by various authors. Midgley (2000) questions how we can we justify using methods from paradigms that

make fundamentally different assumptions about the nature of the world (ontology) and our knowledge of it (epistemology). Three of the challenges are the philosophical problem, the cultural problem, and the psychological problem (Midgley 2000).

The philosophical problem states that paradigms can not be combined that have assumptions and philosophies that are alien to, and incommensurable with each other. Meta-paradigm gone, Jackson tells pluralists that they must accept some degree of paradigm incommensurability, recognizing that paradigms can't be integrated without something being lost (Jackson 2000). He then offers the meta-methodology Total Systems Intervention that provides assurance and guidance of pluralist practice without addressing how interveners should cope with paradigm incommensurability. This implies that the meta-methodology will compensate for intervener's personal paradigmatical tendencies. Alternatively, Midgley presents a new paradigm that accepts paradigm incommensurability while embracing pluralism; one's own paradigm can be enhanced through learning about other paradigms (Midgley 2000).

Another constraint is the cultural problem (Brockelsy and Cummings 1995), that work and academic environments don't encourage pluralism. This problem is addressed by Midgley through the writing of his 'systemic intervention' book (2000) for people working and studying intervention practices. Jackson (2000) refers to the problem, but doesn't comment on it.

The last constraint is the psychological problem, that one can only truly comprehend their own paradigm. Jackson acknowledges that interventionists will have to deal with paradigm incommensurability, but doesn't detail how. On the other hand, Midgley proposes establishing a "broad ontological framework" in which practitioners can widen their assumptions about the nature of the world. Alien paradigms are critically appreciated through the filter of one's paradigm's lens. A balance between methodological coherence and openness to new ideas is sought. Midgley calls for a 'model of learning'; engaging in a "continuous process of learning and reflection, building skills over time" (Midgley 2000:216) in order to develop pluralist interventionists.

Through providing a broad ontological framework for developing pluralist interventionists, the creative design of methods is a more appropriate critical systems thinking approach to real life interventions. For the research, this concept applies mostly to myself as the intervener as a way of perceiving methods from different

paradigms. In welcoming and reflecting on methods from paradigms other than my own I can widen my own paradigm's perspective while increasing my familiarity with a variety of methods.

2.7 CONCLUSION OF CRITICAL SYSTEMS THINKING APPROACHES

The creative design of methods doesn't assume that the practitioner will treat all methodologies equally. Pluralism in CST is better assured by an approach that encourages one to recognize that they are looking through their own paradigm's lens and to try and develop their perspective through learning about other paradigms than a methodology that attempts to guarantee pluralism through its meta-methodological design.

For instance, a UN diplomat at an international conference can not assume that she knows the plight of the nations' representatives she is addressing. A manual that outlines how to cover all plights and when to emphasize a particular plight will not bring her to a greater understanding of her colleagues' situations. She can only try to understand their plight by building on her own experience through learning more about the representatives, their situations, and reflecting on them.

Because the creative design of methods prioritizes boundary critique, recognizes that one can enhance their paradigm through learning about other paradigms, and provides a framework for paradigm growth, the intervener self-categorized herself within Midgley's 'new' paradigm and chose the creative design of methods as the more appropriate critical systems thinking approach for the intervention. This was done with recognition that the intervener has a personal tendency toward the interpretive-critical lens.

3. ENVIRONMENTAL EDUCATION IN COMMUNITY BASED NATURAL RESOURCE MANAGEMENT

The way in which development is approached has a significant impact on outcomes of interventions. The discussion begins by setting the context of the intervention, giving a brief history of environmental education through to current trends, and linking environmental education to Landcare. What follows is a review of current ideas and practices in community based natural resource management leading to the adaptive management approach, Landcare. Environmental education as a capacity building force in promoting a Landcare ethos in the South African Landcare context is established.

3.1 HOW THE RESEARCH PROJECT FITS IN

The intervention occurred with the Farmer Support Group, a non-profit organization that works in the field of community based natural resource management. The majority of its efforts are devoted to the South African Landcare Programme along with similar community based natural resource management (CBNRM) programs. The role of environmental education within the organization, as well as with partners and client communities, is predominately underdeveloped. The following discussions from the literature seek to guide method selection for the intervention process.

3.2 LANDCARE ETHOS

The failure of the Okhombe Landcare Project, of which the Farmer Support Group is a partner, to meet the objective: *community has a shared vision of the Landcare/land management* (Sisitka 2002:10) led the independent evaluator to strongly advise that a broad Landcare 'ethos' be continually reinforced in relation to all Landcare activities. It was further advised that the Landcare activities be located in the broader picture of environmental management (Sisitka 2002). Awareness and education about Landcare, including fostering the values and attitudes that support Landcare practice is a major component of Landcare projects that is often difficult to realize. Environmental education has the potential to be one way of drawing out and developing a Landcare ethos in community based natural resource management practice.

3.3 ENVIRONMENTAL EDUCATION

Environmental education has been slowly evolving to fully embrace the goals that its original definer, Dr. William Stapp, set out in 1969:

> Environmental education is aimed at producing a citizenry that is knowledgeable concerning the biophysical environment and its associated problems, aware of how to help solve these problems, and motivated to work toward their solution.
> (NAAEE n.d.)

The historical context of environmental education's rise and transformation to 'education for sustainability' will ensue, followed by current debates in the field, leading to an appeal for complementarism in environmental education methods to mobilize collective action.

According to Adam *et al.* (2000), with the production of material wealth through industrial means there is an accompanying production of risks. One response to these risks, or 'the environmental crisis', along with legal, economic, and management strategies, was environmental education (Janse-van Rensburg and Shongwe 1994; Taylor and Praxton 1994; Lotz 1999; Mrazek 2003). In 1975 the participants at a United Nations Educational, Scientific, and Cultural Organization (UNESCO) international environmental workshop created a global framework for environmental education called the Belgrade Charter (NCSE 2003) which began to define the goals and objective of the field (NAAEE n.d.). 1977 witnessed the landmark international environmental education conference in Tbilisi Georgia, attended by 66 Member States (UNESCO/UNEP 1978). The document produced the Tbilisi Intergovernmental Conference Declaration, demonstrated the consensus by Member States of the importance of environmental education for the preservation of the environment and the sound development of communities (UNESCO/UNEP 1978). The importance of education in addressing sustainable development is promoted in Agenda 21, Chapter 36: Promoting Sustainable Agriculture and Rural Development, Programme Area A: Reorienting Education Towards Sustainable Development:

> Education, including formal education, public awareness and training should be recognized as a process by which human beings and societies can reach their fullest potential. Education is critical for promoting sustainable development and improving the capacity of the people to address environmental and development issues.
> (SDinfo 2002)

Although the intention of environmental education for sustainable development has been made clear, the way to reach the goal is still under debate. In 1991 a symposium, Alternative Paradigms in Environmental Education, was held by the North American Association for Environmental Education. Wals and van der Leij (1997) explain that the goals and objectives of environmental education were debated and that the different ideas about the role of science and education in society reflected different paradigms, or worldviews. Three different paradigms within the field of environmental education were identified and discussed in the symposium and are in alignment with Habermas' three human interests: the empirical-analytical, the interpretive-hermeneutical, and the social-critical (Wals and van der Leij 1997). The empirical-analytical paradigm is often referred to as 'behavioristic' and the interpretive-hermeneutical and the social-critical paradigms are referred to as 'non-behavioristic' (Wals and van der Leij 1997). Support was overwhelming for non-behavioristic approaches:

> We view environmental education as a participatory *process* that can lead to educational change. Educational change can contribute to the improvement of relationships between people, and between people and their environment. This view of environmental education stands in contrast with the more behaviorist view which basically holds that environmental education is an instrument that can modify behaviour in a pre- and expert-determined direction.
> (Wals and van der Leij 1997:2, italics in original)

Chawla (2003:1) disagrees in a retrospective update on her review of Alternative Paradigms in Environmental Education, "To the extent that some contributions advocated one approach to the exclusion of others, they appear unrealistic."

Chawla's 1994 review of the monograph produced by the symposium notes as a weakness the research focus on formal education settings that teach environmental knowledge and awareness, occasionally touching on values (Chawla 1994). But Stapp's definition of environmental education additionally called for motivation to work toward solutions to environmental problems. Studies have shown that the motivation and inspiration to work on environmental problems is not taught in schools, but through various means:

> A body of research on the antecedents of "responsible environmental behavior" suggests that it is related to many unprogrammed hours spent in childhood in wild or semi-wild places, role models who are often not teachers, influential books and other mass media, and opportunities to practice activism – often out in the community rather than in the classroom.
> (Chawla 1994:3)

Support for environmental/ sustainability education in contexts other than the classroom is also advocated by Australia's Local Agenda 21 that states that awareness raising and education should be in "more than just 'schools'," (Agyeman 1999). Because of the broad nature of environmental education in terms of content areas, purposes and audiences, and the wide situations in which people develop motivation to take action towards sustainability, a complementary rather than mutually exclusive approach to environmental research methods has been suggested (Chawla 1994; 2003; Mrazek 2003).

> Rather than continuing to air courteously the widest possible variety of research positions and approaches, a more productive project for environmental education leaders and for future publications would acknowledge the different purposes that different approaches and methods serve (a task to which the present monograph contributes). After this beginning, it would show how different approaches can complement each other within integrated, cooperative research efforts. To this end, an issue-oriented rather than methods-oriented structure would be effective.
> (Chawla 1994:6)

Due to the complex and diverse applications of environmental education, cooperative research efforts with an issue-oriented blend of appropriate methods is advocated by Chawla (1994; 2003) to catalyze action.

3.4 LINK BETWEEN ENVIRONMENTAL EDUCATION AND LANDCARE

Whether as a component of the South African Landcare Programme, or in other sustainable agriculture and natural resource management strategies, "Environmental education is an important instrument to raise awareness about social, ecological and economic issues in an area, and to mobilize collective action to address land degradation" (Salomon and Zuma 2003:1877).

As demonstrated in the previous section, environmental education is not limited to learning about the environment. Environmental education is a vehicle for enabling an informed public that is able and motivated to create positive change for the environment, and ultimately, themselves. Because environmental education has this capacity, it is an appropriate means of promoting a Landcare ethos, the values and attitudes that underpin Landcare, in Landcare programs. Since values and attitudes are not independent entities, but are linked to all that we do, know, and feel, at any particular time and space, the broad objectives of environmental education are able to address the development of a Landcare ethos from a variety of angles. The presence of

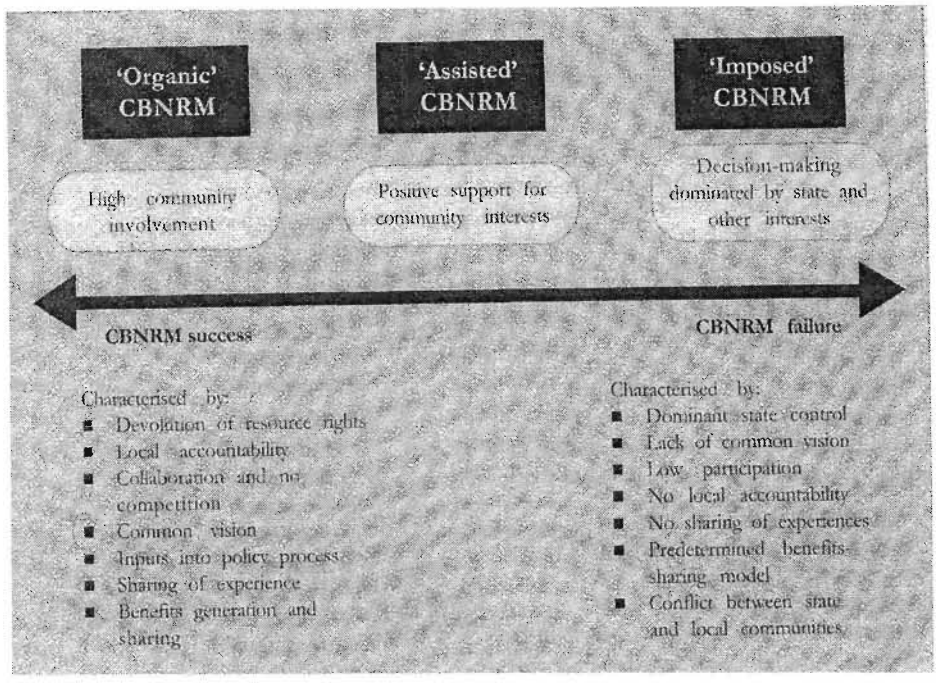
a Landcare ethos is necessary for successful Landcare programs (Sisitka 2000), an adaptive management strategy of community based natural resource management that is characterized by a grassroots movement linked with a national program (McFarlane *et al.* 1996). In the following sections current trends in community based natural resource management are explained with environmental education emerging as a means of capacitating people for sustainable vision and action.

3.5 COMMUNITY BASED NATURAL RESOURCE MANAGMENT

The fields of development and conservation, once considered distinct, began to merge together with increasing speed in the last quarter-century. The product of the merge was termed 'sustainable development.' In 1980, the World Conservation Union developed the World Conservation Strategy, which introduced the concept of sustainable development (UNEP 2002). In 1983 the UN appointed the World Commission of Environment and Development, which in 1987 published the Brundlandt report, Our Common Future. The document popularized the concept of sustainable development, defining it as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (UNEP 2002). The official document of the1992 United Nations Environment and Development Conference, held in Rio de Janeiro, was Agenda 21, a re-visioning of both conservation and development (Janse van Rensburg and Shongwe 1994). Chapter Ten of Agenda 21 outlines an integrated approach to land management that focuses on all environmental, social and economic factors. Additionally, involvement of local communities as managers of the land is stated, with the role of governments at all levels to be that of information and experience transferors, recognizing the value of *community based* natural resource management approaches (Bridgewater 1999). Other chapters of Agenda 21 focused on sustainable agriculture and rural development, "The key to the achievement of a wide range of activities was seen to be the cooperation, support and participation of rural people, national governments, the private sector and international cooperation," (Bridgewater 1999). This noted the importance of partnerships in the arena of sustainable development.

Several kinds of community based natural resource management practices exist in Southern Africa. They range from 'Imposed' CBNRM in which the decision making is primarily held by the state and other interests to 'Organic' CBNRM in which the community dominates decision making (see Figure 3.1):

Figure 3.1 CBNRM Models in Southern Africa



(CBNRM models in Southern Africa, Katerere 2002:23)

'Imposed' CBNRM is characterized by such things as low participation and lack of common vision, while 'Organic' CBNRM is characterized by collaboration, common vision, and sharing of experience. "'Organic' forms of CBNRM are those where communities have ownership with respect to ideas, implementation, and generation of benefits" (Katerere 2002:22). The closer to 'Organic' CBNRM a practice is, the more likely it will be sustainable. Generally, these practices are also characterized by true partnerships between government, non-governmental organizations, the community and the private sector, which encourage empowerment of community members.

The more effective CBNRM approaches encompass 'collaborative learning' and 'empowerment' in an effort to better address the complex, multi-stakeholder nature of land use. Collaborative learning approaches are used to influence people's behavior (Allen *et al.* 2002) and to coordinate differing perspectives (MWLR 2002) of multiple stakeholders to manage complex environmental problems.

> Increasingly, we are seeing the use of action research and learning approaches to achieve this, and so more closely link science with management and policy to bring about the 'learning and knowledge' needed to help the different groups involved develop a *shared understanding and a more co-ordinated response to achieve sustainable development.*
>
> (Allen 2001, italics added)

Appropriate methodologies for creating a dialogue that promotes shared understanding and coordinated action draw from the soft systems approach. Soft systems thinking highlights awareness of relationships in the development process. The researcher is not removed from the project, but actively reflects on their activities. There is an interactive dialogue between all stakeholders; differences are explored, not ignored (Scoones and Thompson 1993).

3.6 ADAPTIVE MANAGEMENT

Allen (2001) suggests adaptive management as a model and practice that combines ecological and participatory research approaches through the following features, adapted from Jiggins:

i) management-based experimentation and innovation

ii) natural resource system management on scales larger than individual enterprises and communities

iii) methods for bringing about capacity for action among multiple agencies and actors (with typically divergent, not to say antagonistic points of view and interests)

iv) facilitation of the social processes and organizational capacity to accomplish these

(Allen 2001)

Adaptive management is a structured process of 'learning by doing' where information is central and natural systems and institutional social dimensions are synthesized in a multidisciplinary manner (Allen 2001). Hagmann *et al.* (2002) discuss an adaptive management approach called integrated natural resource management that is "grounded in a learning paradigm and a combination of theories: the constructivist perspective to development, systemic intervention, and learning process approaches."

Allen (2001) and Hagmann *et al.* (2002) both describe adaptive management as participatory action research. What distinguishes participatory action research from any inquiry method is the critically reflective aspect of the action research cycle (Allen 2001). The importance of all stakeholders to engage in critical reflection during the adaptive management process, in order to bring about change, is highlighted by both Allen (2001) and Hagmenn *et al.* (2002).

Allen (2002) draws from Argyris in saying that in the sense that action research seeks alternatives to the status quo that will both illuminate what exists and inform fundamental change, it is a form of critical theory and seeks to stimulate critical reflection among human agents so that they may more freely choose whether and how to transform their world.

The importance of debating worldviews of all stakeholders involved in the adaptive management process in order to come to a shared understanding and joint action is also distinguished by Allen (2001),

> The underlying assumption of these approaches is that effective social change depends on the commitment and understanding of those involved in the change process. In other words, if people work together on a common problem 'clarifying and negotiating' ideas and concerns, they will be more likely to change their minds if their 'joint research' indicates such change is necessary.

The long-term success of adaptive management approaches has been limited by social and institutional barriers. Allen (2001) lists them as: the continued reliance on a linear transfer of technology model of research and development; fragmented information and knowledge systems; a tendency to discount non-scientific forms of knowledge; institutional cultures within research and policy making that work against genuinely participatory approaches; and a failure to provide appropriate processes to promote the development of shared understanding among diverse stakeholders. One such adaptive management strategy that has witnessed some success despite limitations by social and institutional barriers has its origins in Australia.

3.7 LANDCARE AND CAPACITY BUILDING

Landcare is a natural resource management strategy emerging from Australia and quickly taking hold elsewhere. It is considered an adaptive management approach.

A brief background leading to new directions in Australia's Landcare program will be covered from the perspective of Victoria Mack of Land Connect Australia, an agricultural and natural resource management training organization, in her article that appeared in *Agricultural Science* in 2001. Landcare was created in the mid-to-late 1980s as a participatory democratic grassroots community and rural livelihood response to land degradation problems. Landcare provided a positive practical outlet to concerned citizens, embodying an 'owned by everyone and yet owned by no-one' outlook. In 1989 Prime Minister Bob Hawke started the National Landcare Program, with the Decade of Landcare one billion trees program, as well as other programs with its $340 million budget. This marked the beginning of a government community partnership. Today there are over 4000 rural and urban Landcare groups in Australia, accounting for around 30% of farm families.

A report by the University of New England's Institute of Rural Futures, based on national surveys of farmers from 1991 and 2001 addressed the impact of the Landcare movement on the environmental attitudes of farmers coinciding with the Decade of Landcare, in comparison with farmers who were not involved in the movement. It was found that, on the whole, Landcare had not increased farmer's environmental outlook, as claimed, and that membership in Landcare did not equate to environmental awareness, compared to non-members.

Partly due to the report, along with several other factors including increasing environmental degradation and realization of the time and costs of sustainability, the direction of Landcare witnessed a change in direction. Capacity building was featured in new project funding. Collaboration between business and government and the community was also featured, as well as partnerships, "It is in developing partnerships and raising the standard and quality of the dialogue between government, community and industry that capacity development has a role in achieving new levels of social capability" (Mack 2001:25).

In 1998 the Commonwealth Government commissioned a training course for facilitators on all levels called Qualifications in Natural Resource Management (Community Programs) Skills Toolkit. The training course had a capacity building approach, moving beyond specific skill development.

The Commonwealth funded Building Regional Capacity natural resource management pilot training initiative (1999-2001) project used the NHT Skills Toolkit as the base of its short course program. The program was independently evaluated as a success. Capacity building strategies are "an opportunity to add value to our collective efforts, to confront difference and resolve conflict, to bring new players onto the field and help everyone learn, grow and get closer to achieving shared goals," (Mack 2001:25). Mack asserts that it will play a key role in the new direction of Australian Landcare. In this way capacity building is seeking the same ends as environmental education.

Australia has been a leader in developing international Landcare programs. Australia hosts delegations from nations interested in developing Landcare programs (SILC 1999). The first international Landcare Conference was held in Melbourne in February, 2000 (NRE 2001). Even before the first conference South Africa became a player on the world Landcare scene.

3.8 SOUTH AFRICAN LANDCARE PROGRAMME

South Africa has been a major Australian Landcare partner. In 1998 a discussion document, Implementation Framework for the Landcare Programme, was drawn up by the National Department of Agriculture. Part Two addresses the policy context and rational for the Landcare Programme:

> South Africa's Constitution provides within the Bill of Rights that:
>
> Everyone has the right to:
>
> a. an environment that is not harmful to his/her health or wellbeing; and
> b. have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that:
>
> i. prevent pollution and ecological degradation;
> ii. promote conservation; and
> iii. secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development.
>
> (Molope 1999)

The document goes on to state:

> The Landcare Programme supports the general objectives of chapter 10 of the United Nations' Sustainable Development Agenda, entitled Integrated Approach to the Planning and Management of Land Resources, with the aim:

> To facilitate allocation of land to the uses that provide the greatest sustainable benefits and to promote the transition to a sustainable and integrated management of land resources. In doing so, environmental, social and economic issues should be taken into consideration. Protected areas, private property rights, the rights of indigenous peoples and their communities and other local communities and the economic role of women in agriculture and rural development, among other issues, should also be taken into account.
> (Molope 1999)

The Landcare Mission, stated in the 2001 strategic planning workshop held in December of 2000 in Wonder Waters, Pretoria, and attended by about 65 Landcare stakeholders, is as follows:

> To facilitate an enabling environment for the development and support of an integrated community driven Landcare movement thereby enhancing quality of life of the present and future generations
> -- Landcare Stakeholders, 2000
> (NDA 2001)

Two of the eight immediate objectives of the Landcare Programme are to:

- Develop the capacity and skills of land users through education, knowledge sharing, information, participatory interaction for better access and management of resources

- Empower all people through knowledge and understanding to take the responsibility for the care of the environment
  (Molope 1999)

Capacity building is a more dynamic vehicle for transforming environmental views, attitudes, and actions than traditional environmental education strategies that highlight awareness. In seeking to enable people to make collaborative and future-minded decisions, capacity building and current environmental education practices are striving toward the same goals. Both intend to enable people and communities to make sustainable decisions for their own livelihood and for the land.

Five major programs have been initiated as part of the Landcare Programme, one of which is the Awareness and education programme: "This will be communication and information strategy geared primarily for the farmers and secondarily for the broader land-user communities and also young people" (Molope 1999). The intended links to civil society include school-based voluntary groups, environment groups, agricultural unions/co-operatives and business.

Activities aim to:

- Change attitudes, knowledge and behaviour so that all South Africans can contribute towards achieving sustainable management of land resources;
- Raise community awareness and understanding of the need for sustainable land use and of the consequences of alternative land management approaches;
- Achieve long term changes so that attitudes and behaviour of individuals and the community favour sustainable land use;
- Encourage provincial based Landcare education programmes that co-operate to share resources nationally; and
- Integrate Landcare principles into Curriculum 2005 at all levels.
(NDA 2000).

South Africa's Landcare Programme sets up a government-supported, grassroots-driven movement that aims to support appropriate land use for future land users. The Awareness and education programme of Landcare seeks to inform land users about sustainable practices and to encourage people to take care of the land. One way this can be done is by utilizing the full potential of environmental education as a capacity builder. When all three approaches to environmental education are enacted in a complementary way that addresses local issues in a participatory manner, environmental education becomes a capacity builder for empowering individuals and groups and directing vision and action towards sustainability.

3.9 CONCLUSION OF ENVIRONMENTAL EDUCATION AND LANDCARE

The Australian experience in Landcare shows that environmental education in promoting a Landcare ethos is crucial. A locally relevant and participatory mix of environmental education methods can build capacity that helps facilitate common vision and action towards sustainable decision making in individuals and communities.

4. ORGANIZATIONS AS COMMUNITIES, SYNERGYZING VISION

The present field of development work is characterized by multi-stakeholders involvement, from national to local governmental departments, international to local non-governmental organizations, private sector to communal interests, and individuals to community organizations. Within this context, the development of sustainable livelihoods and community based natural resource management is supposed to take place. To assist this goal, a common purpose, or vision, should be cultivated throughout all stakeholders to guide common action.

4.1 HOW THE RESEARCH PROJECT FITS IN

The Farmer Support Group is an organization working in development with many stakeholders. The intervention is centered on the views, values, and purposes of FSG staff members and how those 'guiding ideas' can be aligned with stakeholder 'guiding ideas' on the same issues to form a common vision that steers sustainable improvement of local situations.

4.2 CONSTRUCTING MEANING, BUILDING A BETTER FUTURE TOGETHER

The radical constructivist idea that "Under the right conditions persons are capable of constructing shared meanings and understandings about experienced or imagined realities" (Frantz 1995:296) has taken hold as a crucial concept in development work. Reason (1999) base their Co-operative Inquiry methods for intervention on "revisioning our understanding of our world, as well as transforming practice within it." Meanings, or understandings about the world can be constructed together with other individuals, and those meanings can mould how we live in the world.

Appreciative Inquiry is a methodology that, like Co-operative Inquiry, stands apart from most approaches. While many methodologies address real problems in participatory ways that incorporate local knowledge, they tend to look for and identify areas of weakness. Assessments that search for the 'problems' of a community encourage dialogue about the 'problems.' This results in community members viewing their community as a place full of problems that need outside intervention to overcome, thus create a disempowering effect. What differentiates Appreciative Inquiry from most problem-solving processes is that it focuses on the positive aspects of the situation

instead of the 'problems.' At community level this means a shift from local problems to local achievements,

> By identifying and reinforcing positive and constructive actions, relationships and visions within a community, it [Appreciative Inquiry] encourages local ownership in activities that contribute to sustainable development and secure livelihoods at the village level.
> (Elliott 1999, brackets added)

and from participation to inspiration,

> Feeling is as important as understanding, because the methodology teaches us that the energy for change comes from both the heart and the head.
> (Elliot 1999)

Appreciative Inquiry takes the energy from the 'positive present' and uses it to build a vision of a positive, desired future that is grounded in reality. This is done through four phases. In the 'discovery phase' participants explore their past to reveal successes in the area of interest. In the 'dream phase' participants form a vision of an ideal future based on past accomplishments. The 'design phase' outlines visions into a plan that guides realization of the dream. The 'delivery phase' is when participants use the plan to work toward their dreams. The tools of Participatory Rural Appraisal, another methodology that encourages participation, work well in conjunction with Appreciative Inquiry (Ashford and Patkar 2001).

Bowling (2002) places a very high value on community knowledge, suggesting that what community members know shape their actions and thus the community's future. This places community development extension work in a community-shaping role via its knowledge-creation processes, like education (Bowling 2002). Bowling asserts that through the knowledge-creation processes of extension community members can become more successful (personally and professionally) and thus re-shape their community. Mack (2001) concurs, referring to a quote from the World Bank:

> Social capital refers to the institutions, relationships, and norms that shape the quality and quantity of societies social interactions. Increasing evidence shows that social cohesion is critical for societies to prosper economically and for development to be sustainable. Social capital is not just the sum of the institutions which underpin a society—it is the glue that holds them together.
> --World Bank Social Capital for Development, 2001
> (Mack 2001:24)

Social capital is the result of extension's knowledge-creating processes, and social cohesion is the critical product of social capital working in the same direction. Mack (2001) identifies capacity building, encompassing a wide range of 'hard' and 'soft'

skills development, as one of the keys to establishing synergy of purpose in multi-stakeholder contexts,

> Capacity development is firstly about building skill and capability in individuals. However; capacity development could also be regarded as a wider process involving many stakeholders with a shared vision, issue or problem, brought together in a way that facilitates real communication to co-ordinate collective effort.
> (Mack 2001:27)

She alleges that capacity building may be the new direction of the Australian Landcare movement. Cooperrider and Srivastva (1990) label community knowledge, or social capital, 'theory:' "Never before in history have ideas, information, and beliefs--or theory--been so central in the formulation of reality itself" (Cooperrider and Srivastva 1990). 'Good theory' is described as being the most powerful means of helping social systems innovatively change their patterns over time, " (Cooperrider and Srivastva 1990). Thus, extension's knowledge-creating processes must be based in 'good theory' to lead communities in a positive direction. Without a guiding vision based in 'good theory,' stakeholders may work in different and possibly opposing directions, unintentionally undermining the success of the partnership in meeting its' goals.

Lewis *et al.* (2003) agrees that organizational culture is constantly being produced, more often than not leading to fragmentation instead of integration. They argue that the fragmentation is due to the range of cultures within organizations working in development and is an important reason why some projects fail, especially those with complex objectives like "empowerment."

4.3 ORGANIZATIONS AS COMMUNITIES

With a different perspective, Senge (1994) argues that imbuing organizations with characteristics of community will address some of the challenges met in today's complex, inter-linked working environment, specifically the 'cultural' problem. (Bowling 2002) views communities as open-ended systems, "something deeper and more intangible, a common identity, purpose, and culture that bind people together." Senge (1994) states that likening organizations to communities involves redefining organizations using the approaches of community development. The democratic principle of informed participation, often associated with 'self-management' and 'empowerment,' is valued. Emphasis is on the individual in the organization viewing themselves as part of a larger whole, instead of an insignificant aspect of a profit and

power driven 'machine.' The goal is for the organization to see themselves as an active part of an interconnected web of stakeholders, collectively interested in a positive, mutually shared future (Senge 1994).

One aspect of accomplishing this goal is the 'organization as community' idea of building a common vision, or purpose (Senge 1994). It is not easy for multiple stakeholders to agree in purpose. Aligning vision throughout every individual of every related stakeholder group seems like an impossible task. Individual preferences within organizations and communities, as well as distinct goals of organizations abound. Balancing vision throughout all entities in a partnership is a daunting task. One way to assist groups in forming a common vision is to use the guiding ideas of an organization to discover the vision, values and purpose of an organization (Senge 1994). The methodology Idealized Systems Design recommends discussions between participants in which shared experiences and values emerge, giving shape to a sense of common purpose and an identity as a learning community (Franz 1995). Bowling (2002) asserts that extension processes that focus on community members at their best and on the self-organizing aspects of their communities lengthen and quicken the rate of desired behavioral change, thus improving effectiveness. A creative tension is created when visions of an improved future are contrasted to present practices (Senge 1994).

The same concepts apply on a global level: "there's no doubt that Gandi, Martin Luther King Jr., and Cesar Chavez *(and Nelson Mandela!)* were all gifted leaders in designing creative approaches for engaging large numbers of people to work together toward a shared vision of a better future" (Senge 1994:510, parentheses added). Community development's aim is in building collaborations across large groups "by creating a web of multiple constituencies and stakeholders—engaging, involving, and mobilizing members until there is a critical mass of perhaps hundreds or thousands of people who can move together on a common path. They may move autonomously in many different locations, but they move with a clear shared vision and overall strategy in common" (Senge 1994:515-516). Frantz (1995:296, brackets added) explains the power of a positive, common vision:

> [Participants] discover deeply meaningful values and ideals, *which they hold in common*. Only a *collectively imagined* ideal has the power to draw persons *into* purposeful cooperation with each other and *through* the inevitable obstacles which practical reality places between intention and actualization.

Over time, visions, purposes, and obstacles will change. It is the challenge of an organization to reflect on its vision to see if it is still in line with their purposes, as well

as their stakeholder's vision and purpose. Visions represent the values and views of participants at the time of conception. To remain vital they must respond to changes in the organization, its stakeholders, and the greater context in which it applies.

4.4 CONCLUSION OF ORGANIZATIONS AS COMMUNITIES, SYNERGYZING VISION

In today's complex and dynamic field of development work, Appreciative Inquiry and the organizations as communities approach aides construction of synergy of purpose, the vision, values, and direction of an organization's staff and stakeholders.

5. INITIAL PURPOSES, BEGINNINGS, AND PLANS

5.1 PURPOSES OF RESEARCH AND INTERVENTION

Viewing situations holistically makes sense to me, as does the idea that everyone views the 'whole' a little differently. I chose to locate the intervention in critical systems thinking because of its dedication to methodological pluralism. Because of its inherent flexibility (both in choice of methods and value of time) I found critical systems thinking to be the most appropriate approach to real life situations. Why I choose the creative design of methods is because of its recognition that pluralism, for an individual intervener, is an ideal. Individuals can only strive for methodological pluralism through learning about paradigms that are not their own. It would be false to assume that an individual can equally access all paradigms. The creative design of methods addresses this issue by putting emphasis on the process of learning about other paradigms to broaden one's own 'lens.'

As a former environmental educator I understand the diversity of applications in the field. Including values and attitudes in natural resource management strategies seems only natural to me. For communities to 'own' *community based* natural resource management strategies, as is the intention of the Landcare movement, people must have an internal drive to make positive change. Using environmental education as the vehicle for drawing out people's values and attitudes about the land while building capacity in individuals and communities seems to me one way to encourage the internal drive that fuels action on a community scale.

Aligning stakeholders in a similar direction is a challenging, but worthwhile task. Without it, sustainable development, as well as any other goal in our highly interconnected world, wouldn't occur. I believe it is important for people to know they are a part of something larger than themselves, and I believe it is important for people to know their views and values are being recognized and adopted by their 'community.' The philosophy of learning organizations strives to create a common purpose while honoring individuality.

The research process will contribute to the theoretical bases of critical systems thinking, community based natural resource management, and learning organizations through its purposes:

The purpose of the research is to create a context-specific, participatory action oriented, critical systems thinking methodology that facilitates multiple stakeholder perspectives to establish consistency in purpose within the individuals of an organization through promoting environmental education as an integral part of community based natural resource management and Landcare.

- To create a context-specific, participatory action oriented methodology that facilitates multiple stakeholder perspectives and addresses the creation and facilitation of a common vision that sustains development interventions, located in critical systems thinking.

- To explore the role of environmental education in sustaining interventions in community based natural resource management and Landcare.

- To establish consistency in purpose within the individuals of an organization that extends throughout all stakeholders.

The intervention also aims to facilitate the creation of a common vision of the role of environmental education within organizational and community structures in order to better develop a Landcare ethos and take collective action towards realizing the vision among the FSG staff and stakeholders.

- To get representational FSG staff and stakeholder views on the present and potential role of environmental education in Landcare.

- To form a collective vision of the role of environmental education.

- To implement the organization's collective vision of environmental education into project objectives, processes, and monitoring

The research and intervention purposes were identified through preliminary interactions with FSG. A synopsis of the beginnings of the intervention process ensues to provide background to the purposes, questions, and theoretical framework of the actual intervention.

5.2 BEGINNING OF INTERVENTION PROCESS

The intervention has an evolving nature, in accordance with most real-life interventions. It began with myself approaching the Farmer Support Group's (FSG) Director about internship and masters research opportunities with the organization in February 2003. A mutual interest for intervention was located in the area of FSG staffs' views on the role of environmental education in promoting a 'Landcare ethos,' or, a strong conviction of the importance of properly managing the land.

Several months later the Director became the supervisor for my master's research. We embraced the additional formal relationship fully aware of the potential complications of her status as main stakeholder in the intervention and supervisor of the master's research. The working relationship is best characterized by the term 'research partnership'.

My role as a catalyst in the action and reflection process with FSG staff started with a five-day intervention project completed as a coursework requirement. It consisted of a series of semi-structured interviews and a project representative workshop, the aim of which was to create a common vision of the role of environmental education in promotion of the Landcare ethos (see Appendix A).

The process was guided by the principles and assumptions of Appreciative Inquiry, a methodology that honors positive aspects of past situations to guide future visions and plans. The methods were drawn from the Participatory Rural Appraisal methodology, which encourages participation. Semi-structured interviews were conducted with one representative from each of FSG's projects to gather perspectives on the present and potential role of environmental education in the organization. The interviews corresponded to the 'discovery phase' of Appreciative Inquiry in which participants explore their past to reveal successes in the topic area. The perspectives revealed in the interviews were discussed in a group workshop consisting of the representatives which resulted in the formation of FSG's original "Environmental Education for a Landcare Ethos Mission Statement." The group workshop corresponded to Appreciative Inquiry's 'dream phase' in which participants form a vision of an ideal future based on past accomplishments.

Five themes were recognized in the responses to interview questions:

1) The role of environmental education within FSG

2) The relation of environmental education to sustainable livelihoods/ natural resource management

3) The meaning of 'Landcare' and how it relates to environmental education

4) The role of environmental education in FSG projects

5) The target group for environmental education activities.

Nearly two thirds of the ideas brought up in the interviews were mentioned in the workshop, but not discussed in-depth. One possible reason for lack of discussion was the very limited time of the workshop.

The goal of the workshop was to create a mission statement of the role of environmental education within FSG. The participants formed the following statement:

ENVIRONMENTAL EDUCATION FOR A LANDCARE ETHOS
MISSION STATEMENT

> Environmental Education plays an important role in achieving sustainable livelihoods within FSG's projects through promoting indigenous knowledge, capacity building and ownership to schools and client communities.

The importance of a common vision within the organization was evident by the heated debates that arose during the workshop. Many successes were related during interviews, implying that positive results can occur from divergent visions. Using peak experiences from the past helped envision what should occur in the future, as featured in the mission statement. Appreciative Inquiry principles and assumptions form an ideological framework for Participatory Rural Appraisals' methods of organizing data (for instance, brainstorming and mind mapping). Ideas that came out of the interviews and workshop featured both participatory and 'teaching' approaches to environmental education.

Environmental education was identified as a potential means of instilling a Landcare ethos by FSG staff. It was felt that more discussion was needed on the role of environmental education within FSG as an organization and in projects. Other findings included: The relationship between environmental education and sustainable livelihoods/natural resource management needs to be discussed and clarified amongst FSG staff. Discussion of the meaning, reasoning, and implications of invoking a 'Landcare ethos' within clients, in relation to staff's specific projects could be beneficial

in elucidating the connection between environmental education and FSG's sustainable resource management goals. The idea located in the mission statement of combining indigenous knowledge of community members with formal knowledge from staff should be developed along with other ways of involving adults in environmental education activities, and should be incorporated into FSG projects' objectives and activities.

The preliminary intervention highly informed the development of the actual intervention. The theoretical framework, as well as the research and intervention questions and design of the actual intervention took shape from reflection on the five-day intervention process. A short description on the relevance of 'systems' to the research will occur to provide a foundation to the theoretical framework.

5.3 THE REASONING FOR SYSTEMS

The research is situated in systems thinking because attention to boundaries is an integral part of the intervention. Strategizing for common vision can be challenging, due to the various boundaries that must be negotiated (see Figure 5.1):

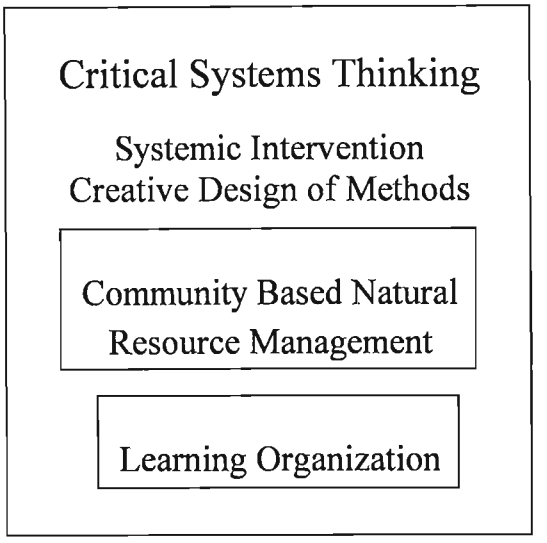
Figure 5.1 The System in Which the Organization Operates

Figure 5.1 symbolizes the multi-level nature of creating a common vision within a community based natural resource management development context. Alignment must be sought from the individual to the organization the person is in, through the development context in which the organization is located, and inclusive of the communities and policies that are inherent in the system, for similarly directed action in the management of natural resources.

5.4 THEORETICAL FRAMEWORK

The intervention was done within critical systems thinking and encapsulates principles, theories and ideologies of community based natural resource management and learning organizations (see Figure 5.2):

Figure 5.2 Boundaries of Research



As the agent of change, or 'intervener' I chose to place the current research project within critical systems thinking because the intervention is located in a historically coercive context. As critical systems thinking is committed to critique of the status quo (critical awareness of boundary judgments) and sustainable improvement of local situations (emancipation), it is the most appropriate location in systems thinking for the research. The critical systems thinking approach chosen to guide the intervention's methodology was the 'creative design of methods' based on 'systemic intervention' philosophies. This approach was chosen because of its version of methodological pluralism, its value of time, and its emphasis on enhancing one's own paradigm through learning and reflection on other paradigms.

The specific methodology of this research project contains methods, tools, techniques, principles, and assumptions from systems thinking, community based natural resource management and learning organization approaches. The combination was designed to address the concerns of the research intervention: aligning a common vision amongst

the Farmer Support Group and their stakeholders of how environmental education can draw out a Landcare ethos in community based natural resource management projects.

5.5 PRINCIPLES AND ASSUMPTIONS OF METHODOLOGY

The systemic intervention methodology has nine principles and assumptions. They were chosen by the intervener from various methodologies based on how they would theoretically guide the intervention. The methodologies whose philosophical underpinnings were drawn from include Learning Organizations, Social Systems Sciences, Soft Systems Methodology, Idealized System Design, Co-operative Inquiry, Appreciative Inquiry, Participatory Rural Appraisal, and Rapid Appraisal of Agricultural Knowledge Systems (Senge 1994; Jackson 1991; Checkland 1989; Frantz 1995; Reason 1999; Barret and Cooperrider 2001; Cooperrider and Whitney 1988; Elliot 1999; Hammond 1996; Pretty *et al.* 1995; Participants 1993; Salomon and Engel 1997; Engel and Salomon 1997).

The *Holistic Principle* is based on the assumption that wholes exhibit emergent properties that make them greater than the sum of their parts; systems concepts are relevant and beneficial in exploring our complex reality.

The *Principle of Mental Models* is founded in the assumption that real-life situations can be evaluated in multiple ways depending on the underlying assumptions, or worldviews of the evaluator. Multiple realities exist; the world is understood subjectively.

The *Participative Principle* assumes that a greater understanding of reality is fostered through understanding as many perspectives of reality as possible. It follows that everyone affected by the results of a planning process should be included in the process; debate is the key to broadening one's perspective.

The *Principle of Shared Vision* is grounded in the assumption that in social interaction, social reality is continually constructed and re-constructed. Shared values, meanings and understandings can be collectively constructed.

The *Ideal Principle* is embedded in the assumption that the future is constructed by people's present perceptions. Current behavior is guided by images of the future; an anticipated positive future encourages actions toward that reality.

The *Principle of Reality-Based, Desired Future* assumes that the optimum parts of the past can be used to form a common, idealized vision for the future. People have more confidence and comfort to journey to the future (the unknown) when they carry forward parts of the past (the known). If the best parts are carried forward, an idealized reality is sought that is grounded in the attainable.

The *Ownership for Empowerment Principle* is based on the assumption that community groups must be empowered to take responsibility for their own development; ownership of the process resides with the participants. Facilitators are not experts but co-participants in the process. Transformation of the present situation is desired to improve local conditions.

The *Learning and Reflection Principle* rests on the assumption that everyone, including the facilitator, is part of a learning process. Learning processes work in cycles and necessitate reflection for growth and change.

The *Principle of Flexibility and Change* is embedded in the assumption that views, values, and perceptions change over time. What may be best now may not be best later. Plans must adapt to change; flexibility is key.

The *Holistic*, *Mental Model*, *Participative,* and *Ownership for Empowerment* principles of the research have come from several methodologies with similar theoretical origins. Senge's (1994:25) Learning Organization asserts "wholes are primordial to parts," and Soft Systems Methodology states "systems ideas can be mobilized to help explain the tangled reality we perceive." (Checkland 1989:278). Other 'systems' methodologies agree, and speak to the subjective nature of reality. Idealized Systems Design (Franz 1995: 296) refers to mental models, "Persons construct complex version of reality, carried inside as a system of assumptions which they use to interpret events, make meaning from their experience and select responses to it." One of Appreciative Inquiry's assumptions also highlights this, "Reality is created in the moment and there are multiple realities," (Hammond 1998). Participatory Rural Appraisal acknowledges the value of viewing the world systemically and of honouring multiple perspectives (Pretty *et al.* 1995:56). Social Systems Sciences believes that involving everyone in the

process is important for a diversity of perspectives to create a deeper picture of the whole and to foster ownership "everyone affected by the planning should have a part in the process" (Jackson 1993:147). Through being active in the process, participants gain a sense of ownership for intended outcomes, which brings a sense of empowerment. This is a key idea of Co-operative Inquiry (Reason 1999), in which the people most affected by the research are "active agents" of the research process, instead of passive subjects.

The principles of *Shared Vision*, *Ideal*, and *Reality-Based Desired Future* have their roots in various methodologies that value multiple perspectives. Rapid Appraisal of Agricultural Knowledge Systems identifies the idea of a "common concern" (Engel and Salomon 1997:160), or shared vision, which is also highlighted by Learning Organizations (Senge 1994:6) "building a sense of commitment in a group, by developing shared images of the future we seek to create, and the principles and guiding practices by which we hope to get there." That the vision represents an ideal is held by Ackoff's Social Systems Sciences, "An idealized design is a design for the organization that the relevant stakeholders would replace the existing system with today if they were free to do so" (Jackson 1991:148). Franz's Idealized System Design (1995:296) agrees that an ideal, or "imagined," reality helps groups of people realize a common goal. Appreciative Inquiry takes the idea even farther by emphasizing that the vision of the future be based on past successes, "If we carry parts of the past forward, they should be what are best about the past" (Hammond 1998).

The *Learning and Reflection* and *Flexibility and Change* principles are found in methodologies from several disciplines. Co-operative Inquiry recognizes that learning comes from "cycling between action and reflection" (Reason 1999). Learning Organizations also focuses on the learning cycle, "This deep learning cycle constitutes the essence of a learning organization—the development not just of new capacities, but of fundamental shifts of mind, individually and collectively," (Senge 1994:18). Participatory Rural Appraisal also identifies learning as a group process (Pretty *et al.* 1995:56). Ackoff in his Social Systems Sciences states that "the values of an organization's stakeholders change over time, so the plan needs to be constantly revised. Unexpected events may also occur within the system, or from the greater systems the organization is a part which necessitates plan revision" (Jackson 1993:147). Appreciative Inquiry views its methods as a cycle so that it can accommodate "changes to the vision and action plan as priorities evolve" (Ashford and Patkar 2001:35).

The principles and their assumptions are the theoretical guide to enacting the methods of the intervention and helped shape the questions of the research and the intervention.

5.6 RESEARCH QUESTION AND SUB-QUESTIONS

Research Question:

How can a context-specific, participatory action oriented, critical systems thinking methodology that facilitates multiple stakeholder perspectives establish consistency in purpose within the individuals of an organization through promoting environmental education as an integral part of community based natural resource management and Landcare?

Sub-Questions:

What is the role of environmental education in sustaining interventions in community based natural resource management and Landcare?

How can consistency in purpose be established within the individuals of an organization that is reflective of all stakeholders?

How can a context-specific, participatory action oriented methodology that facilitates multiple stakeholder perspectives and is located in critical systems thinking address the creation and strategizing of a common vision that sustains development interventions?

5.7 INTERVENTION QUESTION AND SUB-QUESTIONS

Intervention Question:

How can FSG staff and stakeholders form a common vision of the role of environmental education within organizational and community structures in order to better develop a Landcare ethos and take collective action towards realizing the vision?

Sub-Questions:

How can representational FSG staff and stakeholders views on the present and potential role of environmental education in Landcare be drawn out?

How can a common vision of the role of environmental education in projects be formed?

How can the organization's common vision of environmental education be implemented into project objectives, activities, and monitoring?

5.8 EARLY BOUNDARY CRITIQUE

The systemic intervention decidedly focused on FSG as an organization. Improvement was aimed at exploring and bringing together staff members' views on the role of environmental education in relation to promoting a Landcare ethos. Stakeholder views were included to get a sense of community members' thoughts on the issues in order to better inform FSG staff, so in turn they could be better partners and providers to the organizations and communities they work with. It was decided that an interview with each FSG partner and community interviews from across FSG work sites and across community 'groups' (i.e., children, youth, farmers, etc.) would provide a spectrum of stakeholder perspectives on the issues. All FSG members were included in the intervention process.

5.9 OVERVIEW OF ACTUAL INTERVENTION

The actual intervention consisted of three phases. The first phase focused on stakeholder views on the role of environmental education, the second on developing a common vision and the third on integrating environmental education in project plans (see Figure 5.3).

Methods, tools and techniques used in the systemic intervention were drawn from the following methodologies: Appreciative Inquiry, Participatory Rural Appraisal, and Rapid Appraisal of Agricultural Knowledge Systems (Ashford and Patkar 2001; Bushe 1999; Woodhill and Robbins 1999; Pretty and Voudouhe 1997; Participants 1993; Pretty *et al.* 1995; Dunn 1988; Salomon and Engel 1997).

Phase One: Stakeholder Views on the Role of Environmental Education

The first phase was directed towards FSG's stakeholders' views on the present and potential role of environmental education in Landcare. Views from client communities, partners and the Landcare consultant were explored through a sequence of focus groups and semi-structured interviews, both participatory techniques of Participatory Rural

Appraisal. The views were collected to create a perspective base for FSG to work with that is in touch with other stakeholders, in order to align themselves toward a common vision.

Stakeholder Interview Groups:

i. Client community
   - Schools
   - Youth
   - Farmers

ii. Partners
   - Landcare Staff
   - Service Provider

iii. Landcare Consultant

Phase Two: Developing a Common Vision

The workshop aimed at bringing together FSG staff and stakeholders' views of the present and potential role of environmental education in Landcare to form an ideal role of environmental education in promotion of a Landcare ethos within the organization. During the workshop, FSG staff reviewed the areas of debate that emerged during the initial FSG interviews and workshop, along with the original Environmental Education for a Landcare Ethos Mission Statement and the themes that came from stakeholder interviews. This was to bring their own debates and client's views to their attention, and to try to incorporate all perspectives into a Landcare mission statement for FSG. The all-staff workshop embodied the philosophy of the 'dream stage' of Appreciative Inquiry which aims at building a positive shared vision of the future that is based in past accomplishments.

All-FSG staff Workshop:

i. Review FSG staff's perspectives/ideas

ii. Report back stakeholder perspectives/ideas

iii. Project teams scenarios: construction of "provocative propositions"

iv. Presentation of provocative propositions

v. Finalization of Mission Statement

Phase Three: Integrating Environmental Education into Project Plans

The Project team workshops took the vision, in the form of a mission statement, and applied it to project objectives, activities, and monitoring. Each project team (Mbongolwane Landcare, Okhombe Landcare, Amaswazi Landcare, YIELD, Msinga Sustainable Farming Systems and Food Security, and Mondi Social Development in Forestry) met in a workshop to devise how, specifically, the vision for environmental education in Landcare can be applied in their project. Ideas were documented in an 'action plan' that was incorporated into project plans. The project team workshops correspond closely with the 'design phase' of Appreciative Inquiry, which aims to bring people into conversation about how to put their common vision of a positive, yet attainable future into action.

Individual Project group workshops:

i. Identify how the Landcare mission statement works into Project Plan
ii. Create Action Plan
iii. Self-evaluate plan

5.10 INTERVENTION FLOW CHART

The flow chart (see Figure 5.3) outlines the questions or purposes of the intervention, the primary methods or tools used to find answers about the questions and the intended outcomes of the tools.

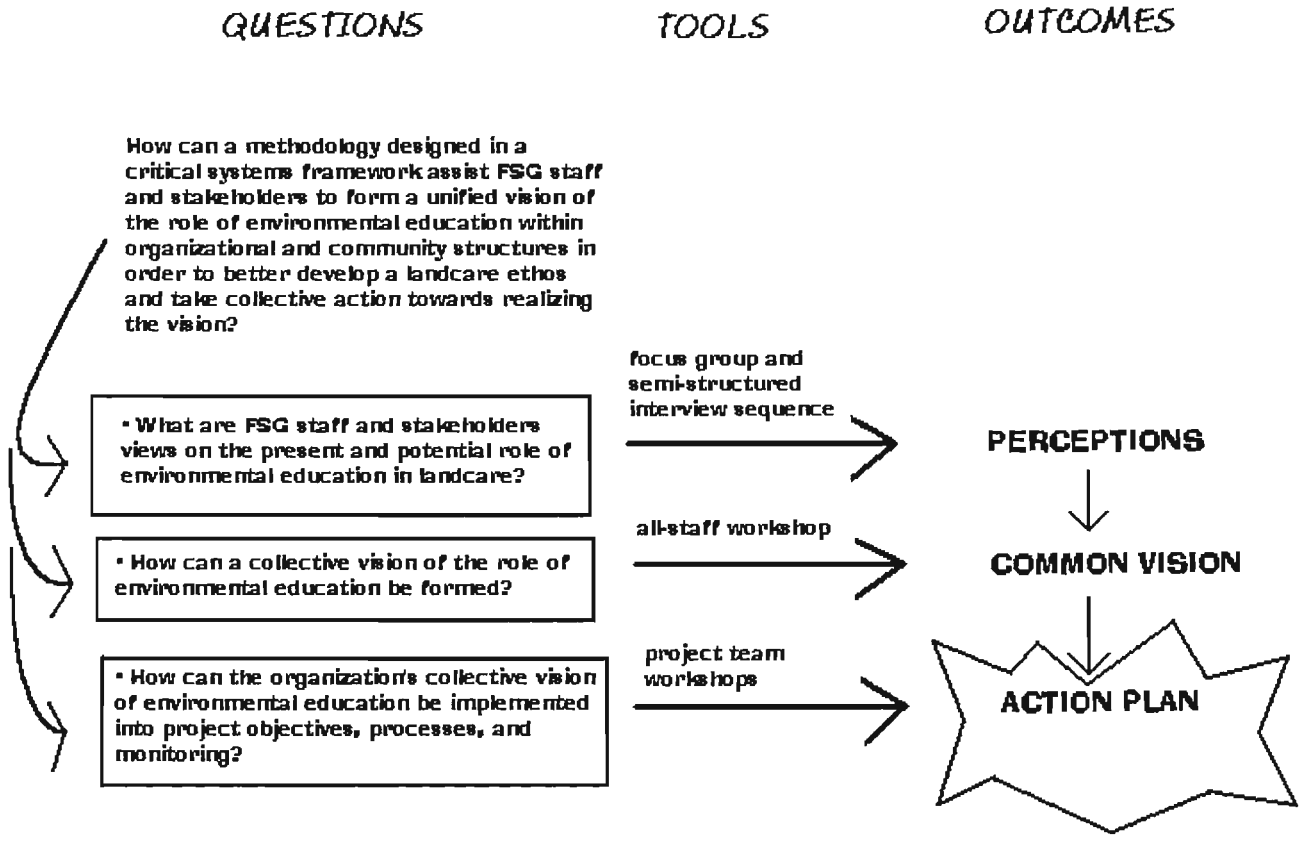


Figure 5.3 Intervention Flow Chart

6. NARRATIVE OF ACTUAL INTERVENTION PHASES

6.1 BEGINNINGS OF INTERVENTION

6.1.1 PROCESS AND RESULTS

I was drawn to being involved with FSG because I had heard of their work and had known that it was the kind of work I was interested in learning more about. In the initial discussion between the Director of FSG and myself, some of the issues of the intervention were outlined. In deciding if we had any intersecting interests that would enable me to work with FSG as part of my Master's dissertation, we found that the issue of staff perceptions of environmental education and its role in the organization as a part of development work was of mutual interest.

A couple months later I worked with FSG to complete a 'five-day' intervention project, as a part of my coursework requirements. This is when I designed the methodology that lead the initial FSG staff member interviews (summary in Chapter Five). Bringing together various staff members' views on the role of environmental education surfaced as the primary issue of the intervention. Because of the time constraint of the coursework intervention, my supervisor and I decided that one representative, the project leader, from each of FSG's projects would be interviewed. Questions in the semi-structured interviews centered around FSG staff perceptions of the present and potential extent of environmental education in the organization. Stories from the past illustrating successful environmental education applications that increase participant's Landcare ethos were captured, an Appreciative Inquiry technique that links past successes to future visions. Conducting the staff interviews gave me the chance to start getting to know FSG staff members and their work and likewise, gave them a chance to get to know me.

The workshop that followed the interviews brought up some interesting 'areas of debate' between project leaders, but also illustrated how they could reach common ground.

6.1.2 6.1.2 OUTCOMES AND TRENDS

The areas of debate arose during the 'brainstorming' activity of the workshop, when FSG staff shared their own perceptions of the present and potential of FSG in the organization with each other:

Areas of Debate:

- The role of environmental education within the organization
- The role of environmental education within projects
- The relation of environmental education to Landcare and meaning of Landcare ethos
- Whether environmental education is related to natural resource management and sustainable livelihoods
- Who the current target group(s) of environmental education are

Although there wasn't the time or the impetus to work out all the debates that arose, the group was able to come to agreement in forming FSG's Environmental Education for a Landcare Ethos Mission Statement:

> Environmental Education plays an important role in achieving sustainable livelihoods within FSG's projects through promoting indigenous knowledge, capacity building and ownership to schools and client communities.
> –FSG project leaders

Themes that arose from the Environmental Education for a Landcare Ethos Mission Statement include:

- Environmental education plays an important role in achieving sustainable livelihoods within FSGs' projects
- Environmental education's role at FSG is to promote indigenous knowledge, capacity building, and ownership
- Environmental education is aimed at schools and client communities

6.2 PHASE ONE: STAKEHOLDER VIEWS ON THE ROLE OF ENVIRONMENTAL EDUCATION

6.2.1 PROCESS AND RESULTS

The actual intervention began with the design of methods for collecting stakeholder perspectives on the role of environmental education in community based natural resource management strategies. This purpose was important for many reasons. Firstly, the idea of environmental education in community based natural resource management approaches needed to be examined. If the study was limited to just Landcare it would exclude FSGs' projects that were not 'Landcare' projects. If the boundary was placed on development work in general, it would be too wide for the intervention's focus on FSG as a sustainable development organization that primarily works with rural communities.

Secondly, FSGs' stakeholders' perspectives were considered important to include because FSG's development work is characterized by multi-stakeholder involvement. For any movement to be made, all stakeholders must have a common vision and strategy for action. In accordance with the systemic intervention ideal of obtaining the broadest range of perspectives as practically possible, it was decided that a cross-section of community clients from various sites and across community 'groups,' as well as a representative from each closely-linked service provider partner, and a consultant of FSG's Landcare projects would form the stakeholder interviews. The community client groups included in the research were chosen because they were representational the diversity of sites, age ranges, and community interests that FSG works with. The service providers were chosen based on their high level of involvement in FSG projects. The Landcare consultant was chosen because of the evaluator perspective he provided.

To explore stakeholder views on the role of environmental education in supporting Landcare practices I decided to use the Participatory Rural Appraisal technique of semi-structured interviews. The semi-structured interview method enabled me to re-phrase questions to better suit the interviewee, or question further to engage in unexpected but related avenues (see Appendix B).

There were some areas that I needed assistance with while carrying out the interviews. FSG staff members helped co-ordinate logistics in meeting with community groups, something I wouldn't have been able to do without their connections with the

community. In one of the group interviews, the group members were not bilingual so I needed help translating. One FSG staff member who worked with and who was from the interviewed community lead the group interview in Zulu. This raised issues for me on the extent of my control over this group's interview. It was frustrating to not have the ability to communicate 'freely.' One unexpected positive outcome of that particular interview process was that the FSG staff member, through being a part of the intervention, led her first workshop/meeting. Upon realizing this, I was pleased that the intervention was directly capacitating FSG staff members through the process.

During interviews I made a point to make sure that the atmosphere was safe and 'free,' so that the participants felt comfortable and relaxed around me. I learned more about FSG projects from talking to stakeholders and hearing their perspectives on issues. Insights were gained on the extent and overlapping of stakeholder views from each.

6.2.2 OUTCOMES AND TRENDS

Various themes were identified from the interviews. If an idea was stated more than one time by more than one stakeholder (except two themes that were considered significant to stakeholders, though only mentioned once) it was considered a theme.

Community clients expressed the importance of capacity building and experiential learning, acknowledging interdependence with the natural world and throughout generations. Celebrations and sharing new and traditional knowledge in order to gain pride through producing own sustainable livelihood and realizing a profit were significant.

Service providers partners *and* community clients expressed the importance of capacity building and of highlighting the financial benefits of sustainable management of natural resource use so future generations can benefit. They also distinguished learning as a cyclical process.

There were no themes that service provider partners stated that were not also mentioned by community clients.

6.3 PHASE TWO: DEVELOPING A COMMON VISION

The all-staff workshop was sequenced in the research process after FSG staff and stakeholder perspectives were collected via semi-structured interviews. The perspectives were analyzed for themes, which were presented in the workshop (see Appendix C).

6.3.1 PROCESS AND RESULTS

The all-staff workshop followed naturally after collecting stakeholder perspectives. Bringing together the views of stakeholders is a crucial step in aligning a common vision. Organizations have the potential to direct their own vision with that of their stakeholders through being exposed to, discussing and embracing the various perspectives of those they are working with and for.

The topic of the workshop was the role of environmental education as a means of supporting a Landcare ethos. Through exposure and discussion of the various ideas of what environmental education is and could be, what environmental education is related to, and how it can endorse Landcare practices, the members of the organization become more aware of the breadth of its employment.

The methods used in the workshop were primarily from Participatory Rural Appraisal, often using the Appreciative Inquiry technique of emphasizing the positive of past situations to build a realistic vision of the future. The methods were chosen for their participatory, interactive nature. More discussion on the choice of specific methods follows.

The intention of the workshop was to bring together FSG staff and stakeholder views on the relation of environmental education to Landcare in order to form a Landcare mission statement that embodied FSG's commitment to promoting a Landcare ethos.

A team-building icebreaker was done to create a safe and fun atmosphere and to encourage team learning, an aspect important to learning organizations. The 'Human Knot' icebreaker was successful in that it was unexpected and physical, setting a light, expectant mood. The one participant who walked in late offered to lead the 'well done' Zulu clap, so all participated in the activity.

I followed with thanking everyone for coming, giving a brief update on what stage we were at in the research process, and outlining the workshops' activities using a poster to visually follow. To review what had already been done in the research process I presented the mission statement that was formed during the FSG project team representatives workshop and outlined the 'areas of debate' that were present within the staff during that workshop.

The "what is 'Landcare ethos' and why is it important?" area of debate was chosen for explicit exploration out of all the 'areas of debate' because the others were going to be resolved inherently through the all-staff workshop and project team meetings. The aim of the discussion was to clarify the new term so that all participants were comfortable working with its relation to other ideas like natural resource management, sustainable development, sustainable livelihoods, ecological agriculture, and of course Landcare and environmental education.

Participants were divided up into cross-project team groups to discuss the meaning and significance of 'Landcare ethos.' After discussing, all groups came together to share ideas. Meanings of Landcare ethos included the natural resource management practices of taking care of the land, feelings about the land, and the values, attitudes, and actions related to Landcare. The meaning of 'Landcare ethos' as the values and attitudes that underpin Landcare emerged as the core meaning of the term for the group. Actions (Landcare practices) were decided to be an extension of the Landcare ethos, while values and attitudes about Landcare informed the ethos.

Following the discussion I presented the themes that were identified from the stakeholder interviews. I then introduced the concept and criteria of provocative propositions. 'Provocative propositions' are an Appreciative inquiry tool to bring out a detailed positive vision of the future of a group or organization. My intention was for the project team's provocative propositions to be an inspiration and guide during the formation of their action plans in project team meetings. Although the project plans weren't used directly during the project team meetings, I believe they assisted in promoting team building, vision within the project team, and ideas on how environmental education relates to their project.

I then read a description of the scenario: "Imagine that it is several years in the future. FSG has just been nominated for a very prestigious award for innovative work in sustainability highlighting your project team's activities. The award recognizes

outstanding organizations that should serve as a model for the entire country." Groups were asked to include both FSG and Stakeholder themes, highlighting aspects that were very relevant to their project.

Participants broke up into four project teams (Mbongolwane, Msinga, Mondi and Okhombe) of two to three people each. Amaswazi Landcare and YIELD didn't have groups because there were not enough project team members from those teams in the workshop. Compounding this issue was the fact that there were a lot of people working in more than one project team. The groups developed a provocative proposition based on an extension of the scenario that was tailored to their project's potential of developing sustainable communities through the enhancement of a Landcare ethos.

The guidelines asked for a written provocative proposition of 60-100 words, but only three of the four groups produced written documentation of their provocative proposition. Although the time allotted for developing the provocative propositions was extended, some groups felt rushed.

Presenting the provocative propositions enabled FSG staff members to see how other project groups worked with the new stakeholder ideas. The atmosphere emitted light competitiveness along with general support for each other's projects. Each group presented their provocative propositions according to their specific scenario. The main ideas of each presentation were as follows:

Mondi
A "road show" medium of communication helped individuals realize what they needed to do to attain sustainable livelihoods, food security, and increased self-worth as evidenced in a personal account of transformation.

Msinga
Through organic farming, business, and leadership skills farmers were able to access loans and produce food while protecting the environment. Farmers gained certification as organic producers, gaining them access to major supermarkets that double their profits.

Mbongolwane
Through establishing local enterprises, networking, partnerships, cross visits, local knowledge, and cultural days the Mbongolwane wetland is used in a profitable and sustainable manner.

Okhombe

Through a TV interview with a community member it was revealed that the area was being used sustainably through Landcare practices, environmental awareness, sustainable natural resource management systems, and social systems.

The finalization process of the mission statement was explained to the group, a poster illustrating the guidelines. The guideline "include the essence of all stakeholder themes" was particularly important in building a common vision of the role of environmental education. Participants were divided up into two groups that cross cut project teams. I facilitated one group and Monique Salomon facilitated the other. Both groups developed a potential 'Landcare Ethos Mission Statement.' The two were hung next to each other and read aloud. Certain aspects of each were identified as desirable and linked together to form a cohesive statement:

FSG LANDCARE ETHOS MISSION STATEMENT

> FSG staff commit themselves, in collaboration with government departments, NGOs, and the private sector, to promoting values and attitudes that underpin Landcare through training, mentoring, and experimentation, celebrations, events, and cross-visits, that enable farmers, schools, unemployed youth, elders, and traditional healers to recognize and take responsibility for environmental problems and to take pride in managing their natural resources for themselves and for future generations whilst promoting traditional and sustainable practices.

The final FSG Landcare Ethos Mission Statement was an impressive accomplishment. There was a gap between FSG staff members who were dedicated to the process, and stayed until the very end hashing out the final mission statement, and those who were not very interested in the process. The low number of participants at the workshop and the number of people who decided to leave early, even though the date was given far in advance, was disappointing. On the other hand, the participants who stayed until the end offering their comments, opinions and suggestions showed that some people were invested in the process.

I was regretful that the workshop did not end at the assigned time. I believe this was partly due to starting late because of tardy participants and partly due to the fact that a lot was planned for the amount of time.

6.3.2 OUTCOMES AND TRENDS

6.3.2.1 FSG Staff and Stakeholder Themes

The following themes represent ideas that were brought up by stakeholders about the direction of environmental education, in relation to Landcare and natural resource management. Themes were collected from FSG project leader interviews, FSG stakeholder interviews, and FSG project presentations ('provocative propositions').

1. Experiential learning in "own backyard" has a greater impact than theorizing
2. Learning as a cyclical process
3. Sustainable management of natural resources for future generations
4. Elders and youth sharing environmental skills and knowledge with each other
5. Important to highlight financial benefits of sustainable resource use
6. Accept responsibility for environmental problems and take action to improve situation
7. Celebrations have a great impact; intergenerational, capacity building, honor traditional practices (food/music/knowledge)
8. Stories relay information, including traditional knowledge
9. Traditional knowledge contains information important to sustainability
10. Traditional ways can draw a profit
11. Capacity building, both technical and soft, is needed for people to realize their options, so as to choose the best option for sustainable livelihood/development (education for opportunity)
12. Respect and self-accomplishment earned from producing own livelihood through sustainable practices
13. Land, people, animals and plants are all dependent on one another
14. The arts (drama, music, poetry, dance) can be an effective vehicle for transferring sustainable livelihood knowledge, training and values
15. Networking and partnerships important to sustainable development
16. Hope brought by organizations and kept through interactions
17. Necessary for community (group) to have ownership of process
18. Community leaders have a strong influence

6.3.2.2 FSG Staff and Stakeholder Schools of Thought

Themes that tend to occur in clusters are 'schools of thought'. They are arguments that 'see' the situation from different angles and therefore propose different solutions. Identifying schools of thought was a very challenging process (see Appendix D). Several approaches were made before the schools of thought emerged from the themes:

'Sustainability for future generations!'

'Show me the money!'

'Enable me to choose my path!'

The three different schools of thought are different ways of approaching how environmental education can assist Landcare, and stem from different perceptions of the situation. Each consists of themes that support or add to the strong theme, or main idea.

The school of thought, 'sustainability for future generations!' argues for the sustainable use of natural resources so that future generation can benefit. Realizing that all things are connected and understanding that one must own processes, responsibility is taken for environmental problems and action made to improve situations. Acknowledging our mutual dependence, sharing of knowledge and skills, including traditional knowledge, between elders and youth is valued, as is the role community leaders and the power of the arts to transfer knowledge and values. This school is most closely linked to the interpretive-hermeneutical environmental education approach.

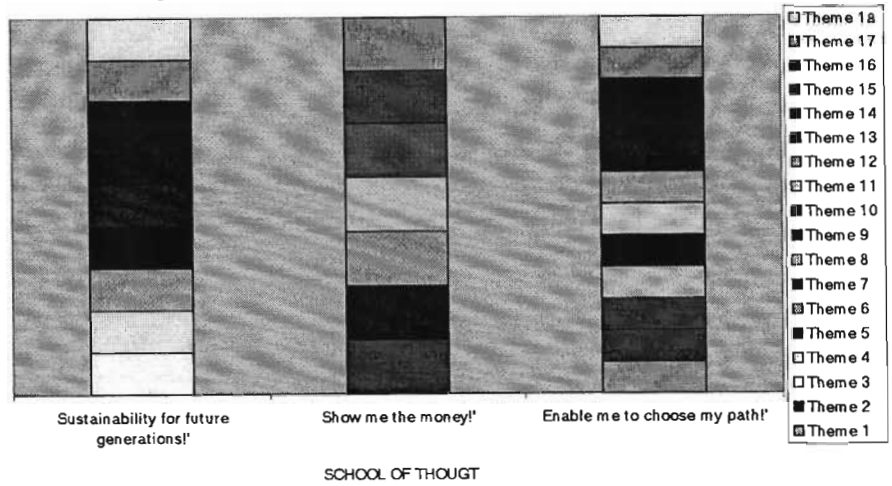
'Show me the money!' argues that the way to changing behavior is through the purse. Sustainable natural resource management will occur when the financial benefits are made clear. Organizations are recognized for the hope they bring; networking and partnerships are key. Learning is viewed as a cyclical; ownership of process is valued, as is accepting responsibility and taking action for environmental problems. Stories are honored for their ability to relay information, including traditional knowledge and practices that are acclaimed for drawing a profit. This school is most closely linked to the empirical-analytical approach to environmental education.

'Enable me to choose my path!' argues for capacity building for better, sustainable livelihoods. They promote soft and hard skills development in order for people to choose the best option for their families for generations to come, and appreciate that

organizations are the bearers of the skills. They know of the self-respect that comes with owning a process and earning your own living sustainably. Traditional knowledge is highly valued for its insights on sustainable living and can be transferred through stories; the power of experiential learning, including celebrations and the arts, as a means of transferring knowledge and skills is acclaimed. Our dependence on one another and the influence of community leaders is acknowledged. The social-critical approach to environmental education is most closely linked to this school of thought.

I made two graphs, using Excel, to visually demonstrate the different themes located in each school of thought (Figure 6.1) and how the various schools of thought are located in each theme (Figure 6.2).

Figure 6.1 Themes Within School of Thought Arguments



Themes Numbers

1. Experiential learning in "own backyard" has a greater impact than theorizing
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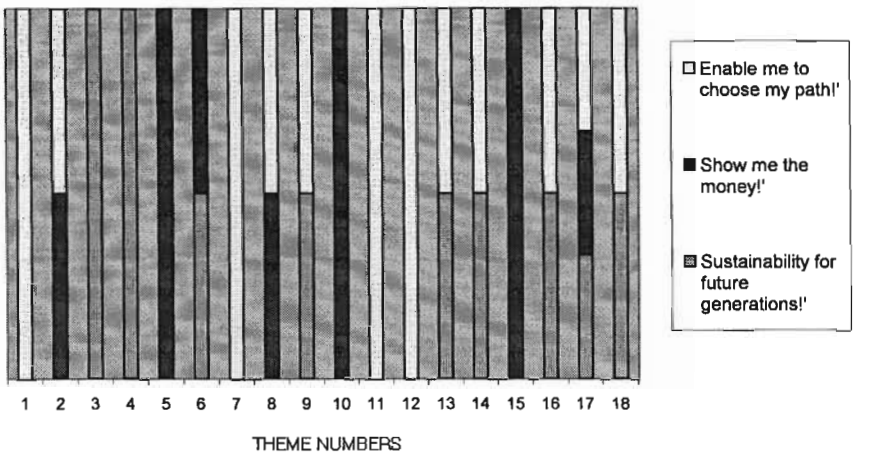
13. Land, people, animals and plants are all dependent on one another
14. The arts (drama, music, poetry, dance) can be an effective vehicle for transferring sustainable livelihood knowledge, training and values
15. Networking and partnerships important to sustainable development
16. Hope brought by organizations and kept through interactions
17. Necessary for community (group) to have ownership of process
18. Community leaders have a strong influence

Description

Figure 6.1 portrays the theme clusters of each school of thought. While some themes occur in more than one argument (theme # 2, 6, 8, 9, 13, 14, 16, 17, and 18), others are featured in only one argument (theme # 1, 3, 4, 5, 7, 10, 11, 12, and 15). 'Show me the money!' has the highest diversity of themes in its argument, followed by 'Sustainability for future generations!' and 'Enable me to choose my path!'

Figure 6.2 School of Thought Arrangement in Themes



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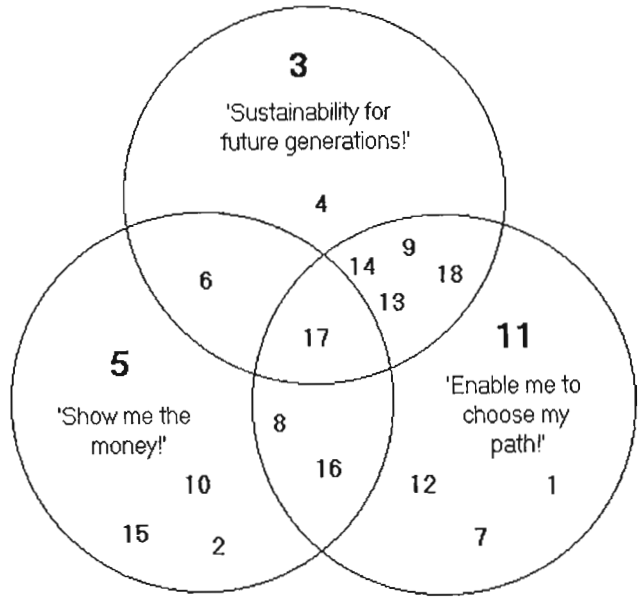
Description

Figure 6.2 depicts how the three schools of thought, or arguments, are arranged within themes. Some themes are owned by just one argument (theme # 1, 3, 4, 5, 7, 10, 11, 12, and 15), while others are shared by two schools of thought (theme # 2, 6, 8, 9, 13, 14, 16, and 18), and theme # 17 is found in all three. 'Enable me to choose my path!' has the most solely owned themes, followed by 'Show me the money!' and 'Sustainability for future generations!'

The arguments have similar aspects evidenced by their shared themes, but each push for environmental education's role in sustainable resource management from different angles: the sustainability slant, the economic slant, and the capacity building slant. The groupings of themes that form the different slants can be visualized below (see Figure 6.3).

Figure 6.3 School of Thought Theme Groupings



Themes Numbers

1. Experiential learning in "own backyard" has a greater impact than theorizing
2. Learning as a cyclical process
3. Sustainable management of natural resources for future generations
4. Elders and youth sharing environmental skills and knowledge with each other
5. Important to highlight financial benefits of sustainable resource use
6. Accept responsibility for environmental problems and take action to improve situation
7. Celebrations have a great impact; intergenerational, capacity building, honor traditional practices (food/music/knowledge)
8. Stories relay information, including traditional knowledge
9. Traditional knowledge contains information important to sustainability
10. Traditional ways can draw a profit
11. Capacity building, both technical and soft, is needed for people to realize their options, so as to choose the best option for sustainable livelihood/development (education for opportunity)
12. Respect and self-accomplishment earned from producing own livelihood through sustainable practices
13. Land, people, animals and plants are all dependent on one another
14. The arts (drama, music, poetry, dance) can be an effective vehicle for transferring sustainable livelihood knowledge, training and values
15. Networking and partnerships important to sustainable development
16. Hope brought by organizations and kept through interactions
17. Necessary for community (group) to have ownership of process
18. Community leaders have a strong influence

Description

In this figure themes are clustered according to the school(s) of thought they are ascribed. The slogan for the school of thought labels the school (a circle) with the 'strong theme' number that formed the core of the school of thought highlighted above the slogan. Spatial relation of theme numbers to each other within lined areas do not represent correlation values. The most overlapping of themes occurs between the capacity building and sustainability schools of thought. Theme # 17 is shared by all schools.

6.3.2.3 Shift in Mission Statement

The school of thought arguments had an effect on the transformation of the original mission statement to the final mission statement. An evaluation of the text provides insight into which arguments influenced the formation of the new statement. The original mission statement was formed in the beginning of the intervention, during the FSG project team representative meeting:

ENVIRONMENTAL EDUCATION FOR A LANDCARE ETHOS
MISSION STATEMENT

> Environmental Education plays an important role in achieving sustainable livelihoods within FSG's projects through promoting indigenous knowledge, capacity building and ownership to schools and client communities.

The finalized version was formed during FSG's all staff workshop:

FSG LANDCARE ETHOS MISSION STATEMENT

> FSG staff commit themselves, in collaboration with government departments, NGOs, and the private sector, to promoting values and attitudes that underpin Landcare through training, mentoring, and experimentation, celebrations, events, and cross-visits, that enable farmers, schools, unemployed youth, elders, and traditional healers to recognize and take responsibility for environmental problems and to take pride in managing their natural resources for themselves and for future generations whilst promoting traditional and sustainable practices.

Several aspects of the original mission statement were altered. In analyzing the changes I linked the mission statement words and phrases to similar words, phrases or ideas in the themes. I allocated a school of thought slant (sustainability, economic or capacity building) to each change in the mission statement based on the similar theme's argument location(s).

Not included in the new version of the mission statement are the terms "environmental education," "capacity building" and "ownership." "Environmental education" is implied by "promoting the values and attitudes that underpin Landcare" which actually refers to Landcare ethos. "Capacity building" was changed to capacity building actions

like, "training, mentoring, and experimentation, (celebrations, events,) cross visits." This represents a strengthening of the capacity building slant because by adding detailed description to the word it is emphasized. "Ownership" changed to "recognize and take responsibility for environmental problems" which is a strengthening of both the sustainability and economic slants. This is because the concept of ownership is a part of both the sustainability and the economic schools of thought. Promoting "indigenous knowledge" to "indigenous and sustainable practices" represents a strengthening of the sustainability slant. The target groups "schools and client communities" changed to "farmers, schools, unemployed youth, elders and traditional healers" which is also a strengthening of the sustainability slant because involving a wider range of target groups is part of the sustainability school of thoughts' themes.

New in the mission statement was ownership of FSG's role as an organization in the process, "FSG staff commit themselves," which supports all slants (linked to theme # 17, ownership of process, which is found in all arguments). The mention of partners "in collaboration with government departments, NGOs, and the private sector" strengthens the economic slant. The morale-boost linked to ownership of process, "pride in managing their natural resources," strengthens the capacity building slant because respect and self-accomplishment in producing own sustainable livelihood is a theme of the capacity building school of thought. The future component "for themselves and future generations" adds to the sustainability slant.

Some ideas did not appear in either the old or the new version of the mission statement and were noticed by the intervener and by FSG staff members after the process. They were not verbalized until after the process because the staff members who noticed the omission were not present at the all staff workshop when the final mission statement was created. One 'missing' idea is 'community groups' as a group FSG works with and for. Also missing are the terms 'monitoring' and 'evaluation,' although one may argue they are implied in the mission statement.

The sustainability slant from the 'Sustainability for future generations!' school of thought had the most influence in the shift from the original mission statement to the final mission statement. While there were three changes and/or additions in support of both the capacity building and economic slants in the final mission statement, there were five changes and/or additions that supported sustainability.

6.4 PHASE THREE: INTEGRATING ENVIRONMENTAL EDUCATION INTO PROJECT PLANS

The project team meetings occurred a week after the all staff workshop to continue the momentum built by the FSG Landcare Ethos Mission Statement (see Appendix E).

6.4.1 PROCESS AND RESULTS

The project team meetings integrate the FSG Landcare Ethos Mission Statement into project objectives and activities. This is a necessary step in realizing the mission statement in the organization. Otherwise, the mission statement would only exist as a vision of what should be, without effort to 'make it real.' The methods of this phase were designed to address the issue of moving the vision of environmental education for Landcare into action as a part of FSG project plans.

It is important for the vision of environmental education enhancing a Landcare ethos, captured in the FSG Landcare Ethos Mission Statement, to have a structure in which to function. The structure in which the vision has the opportunity to life is in FSG project plans. To fulfill the goal of having a common vision with all stakeholders, FSG as an organization would need to act in alignment with their stakeholders. For this to happen, all involved should share core perceptions of the situation and ideas on the direction of improvement. The FSG Landcare Ethos Mission Statement includes the three central slants, or arguments on the issue. For strategic alignment, it is necessary for FSG project plans to have adequate overlap with the mission statement to fulfill the vision through action (see Figure 6.4).

Figure 6.4 Integrating the Mission Statement into FSG Projects

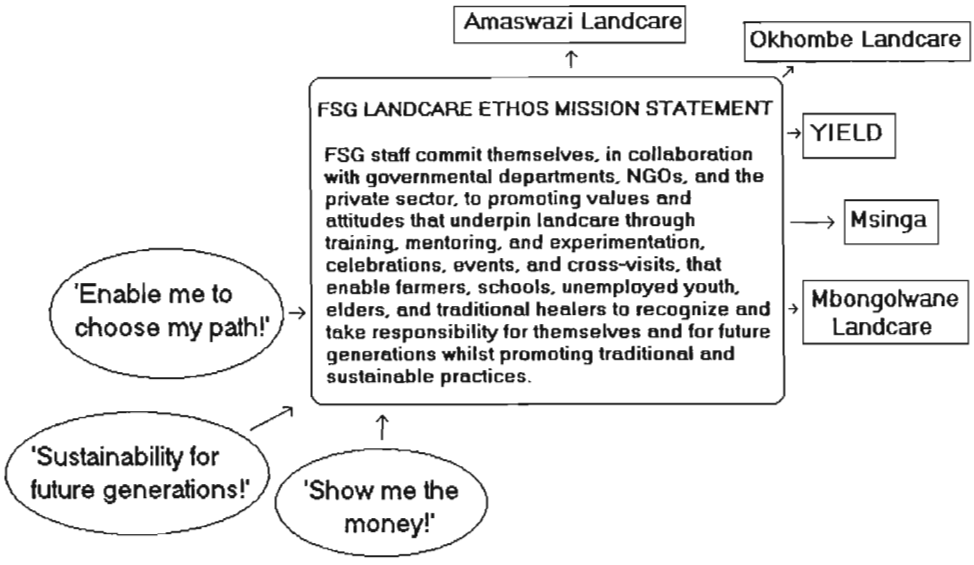


Figure 6.4 illustrates how the three schools of thought merge to create the mission statement; for the vision to be realized there should be a sufficient overlap between the mission statement and project plans. In the intervention, this happens during the project team meetings as project teams identify how the mission statement relates to their project plans and add to existing or make new activities, recorded in an action plan, in order to fulfill the vision through their project's actions.

The methods of phase three were inspired by the Appreciative Inquiry method of bringing vision to reality through action planning. The qualities of valuing the positive of situations, being inherently participatory and promoting ownership of process all underpinned the methods.

The aim of the project team meetings were to realize the FSG Landcare Ethos Mission Statement in FSG projects through adding to already established activities and creating new activities in project plans.

A poster was used to outline the agenda of the project team meetings. The only other posters that were used were the 'provocative propositions' documentation for those groups that made posters. The provocative propositions didn't have the inspiring qualities I had anticipated in this stage of the process.

In all project team meetings accept those in which I met with only one other person we participated in the 'Roses' team building exercise. In the meetings that consisted of only myself and one project staff member I engaged the individual in small talk to set a comfortable atmosphere as an alternative to the 'Roses' activity. This was done to make people comfortable with team members so they feel free to speak their mind, an important part of team building.

The general way in which aspects of project plans were linked to the FSG Landcare Ethos Mission Statement was by going through the project plan, objective by objective and activity by activity (under each objective there are several activities). If an aspect of the mission statement was found to fall under an objective and was easily linked to an activity, that activity was marked (so we could later return to it). Sometimes the aspect of the mission statement fell appropriately under an objective, but didn't correspond to any activity. In these cases we marked the objective, noting that a new activity may be added. As the objectives and activities of the project plans were reviewed, consensus was sought in deciding whether or not the aspect of the mission statement applied.

My personal understanding of projects greatly increased through this process. I was generally surprised at how easily and broadly staff located appropriate areas in project plans to flesh out or to add activities to, in order to promote a Landcare ethos using the FSG Landcare Ethos Mission Statement as a guide.

After the project plan was reviewed, I oriented the team to the action plan, a draft sheet made to document the new additions to project plans. I explained that we would re-review the project plan, re-considering each place we marked as relating to an aspect of the mission statement. Areas marked were agreed appropriate or not, based on the previous conversations we had while reviewing the project plan on how the Landcare ethos related to the objective or activity. Our larger perspective gained from the review process itself also helped to evaluate if marked areas were still appropriate. Ideas deemed appropriate were either incorporated as an extension of an activity or added as a new activity. The additions were recorded in the action plan draft table (see Appendix F).

Actual activities added to plans were minuscule as compared to links initially identified. Possible reasons could be because the links were truly in-appropriate, the project team was trying to avoid duplication, the project team didn't want the extra work that is

implied in adding new activities, or because there was not enough time, resources or funds left in the project to add new activities. Additionally, this stage of the intervention process also was a reality check for individuals. The idea of putting the new activity on paper may have validated the activities' worth, as perceived by the individual, or may have made the person realize that it wasn't crucial.

Only one of the six project teams used the evaluation checklist to evaluate their action plan. The other project teams didn't use it, primarily because evaluation reminders were inherent in the action plan, a worksheet designed to correspond easily with FSG project plans.

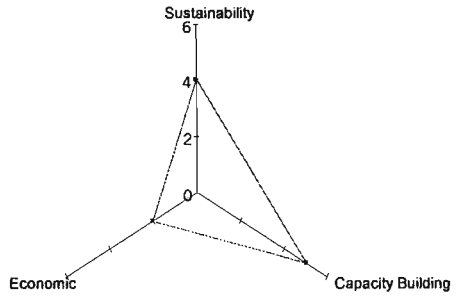
6.4.2 OUTCOMES AND TRENDS

6.4.2.1 Evaluating the FSG Landcare Ethos Mission Statement in Project Team Action Plans

Since it is important to carry the vision through to action, the extent in which the FSG Landcare Ethos Mission Statement was embodied in FSG project team action plans needed to be evaluated. This was necessary for assessing whether the views and perceptions of stakeholders concerning the role of environmental education in enhancing a Landcare ethos re-connect with stakeholders as a part of FSG project activities. If this occurred, the organization and their stakeholders were most likely moving in a similar direction.

To determine the extent in which the schools of thought in the FSG Landcare Ethos Mission Statement were represented in action plans I compared the proposed activities from the action plans with terms, phrases, and ideas in the mission statement. I listed the action plan additions according to objective and activity, highlighting aspects that related to aspects in the mission statement. The same criteria used to ascertain the relation between schools of thought and mission statement words and ideas, used in the evaluation of the shift in the original to final mission statement, was implemented. I went through the process for each project team's action plan (see Figures 6.5 - 6.11).

Figure 6.5 AMASWAZI LANDCARE ACTION PLAN



Amaswazi Landcare's action plan had five activities that supported the capacity building slant, four activities that supported the sustainability slant, and two activities that supported the economic slant. Their action plan was representative of all three schools of thought, but leaned toward capacity building.

Mbongolwane Landcare's action plan added two activities that supported the economic slant. No activities were added that fell under the sustainability or capacity building slants. Mbongolwane's action plan leaned toward the economic school of thought.

Figure 6.6 MBONGOLWANE LANDCARE ACTION PLAN

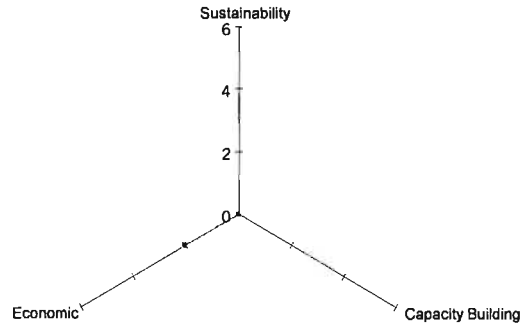
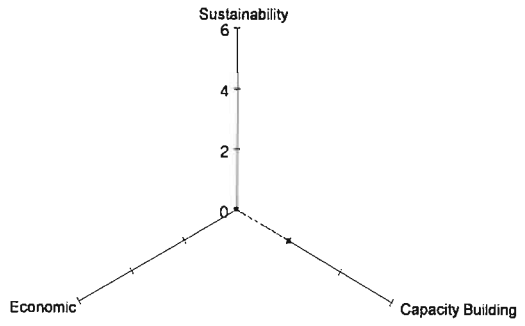


Figure 6.7 MONDI ACTION PLAN



Mondi's action plan had two activities that supported the capacity building slant. The other two schools of thought were not addressed. Mondi's action plan leaned toward the capacity building school of thought.

Msinga's action plan had three activities that supported the capacity building slant, one activity that supported the sustainability slant and no activities that supported the economic slant. Msinga's action plan leaned toward the capacity building school of thought with the sustainability school of thought represented.

Figure 6.8 MSINGA ACTION PLAN

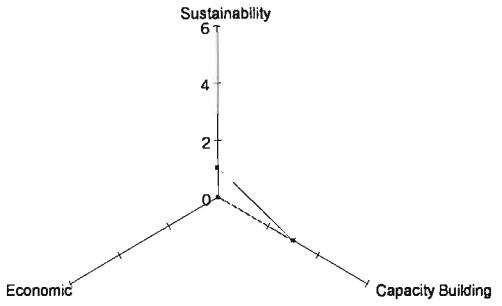
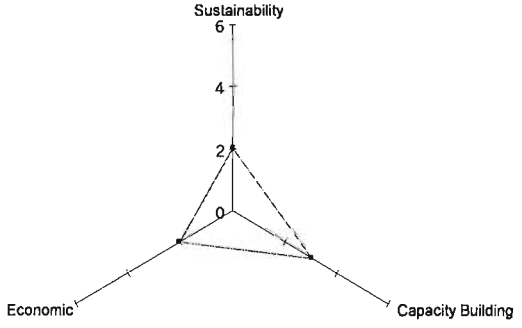


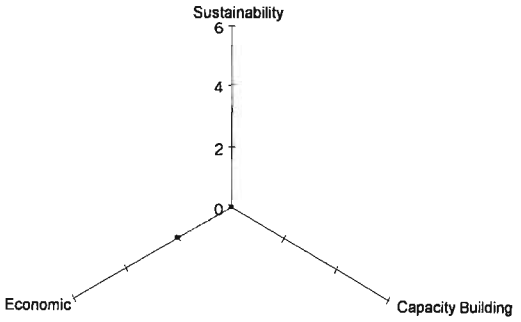
Figure 6.9 OKHOMBE LANDCARE ACTION PLAN



The Okhombe Landcare activity plan had three activities that supported capacity building slant two activities that supported sustainability slant and two activities that supported the economic slant. While all schools of thought were represented in Okhombe's action plan, it slightly leaned toward capacity building.

YIELD's action plan had two activities that supported the financial slant and no activities that supported the capacity building or sustainability slants. YIELD's action plan leaned toward the economic school of thought.

Figure 6.10 YIELD ACTION PLAN

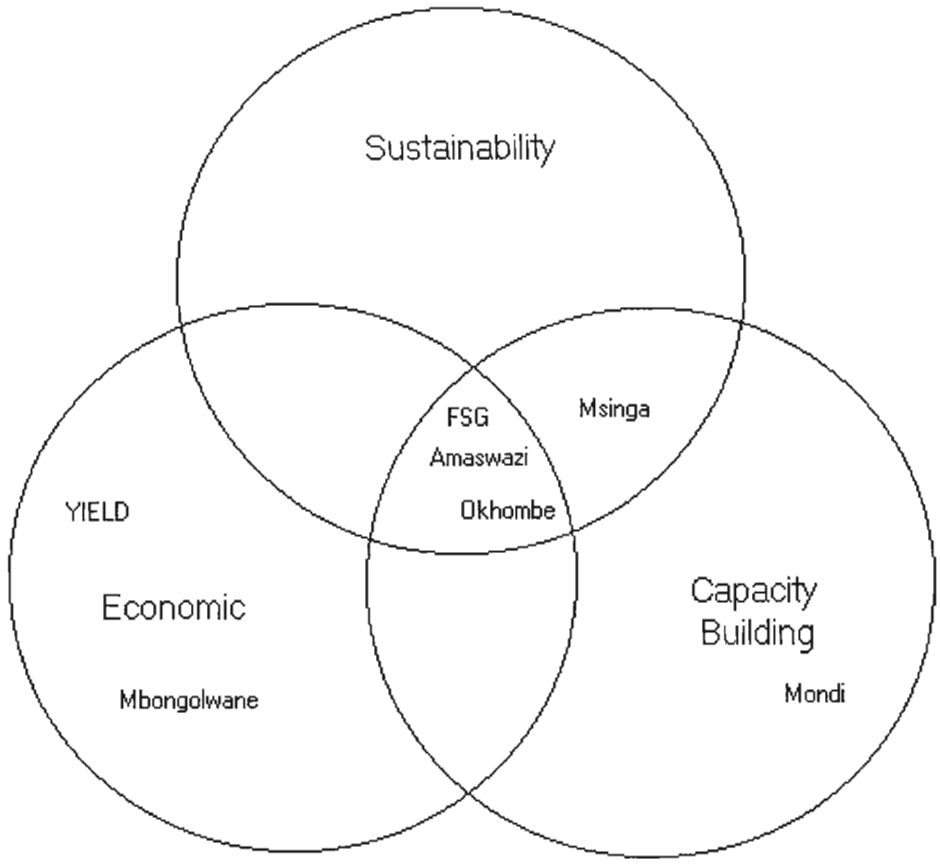


Of the six project team's action plans for integrating the FSG Landcare Ethos Mission Statement into project plans, four were oriented toward the capacity building school of thought and two were oriented toward the economic school of thought. I found it interesting that although the FSG Landcare Ethos Mission Statement shift was primarily guided by the sustainability school of thought, none of the action plans that resulted from the integration of the FSG Landcare Ethos Mission Statement into project plans held a dominant sustainability argument.

6.4.2.2 Comparing Schools of Thought, Mission Statement and Action Plans

Figure 6.11 shows the placement of the FSG Landcare Ethos Mission Statement and FSG project team action plans within the sustainability, capacity building and economic schools of thought. The center area, where the three arguments overlap, is the ideal zone. Action plans located here have optimum alignment with the mission statement. Where all three schools are overlapping, attention to all stakeholder views concerning the application of environmental education as a part of sustainable resource management is likely (see Figure 6.11).

Figure 6.11 Comparisons of Schools of Thought,
Mission Statement and Action Plans



In Figure 6.11 the FSG Landcare Ethos Mission Statement is located in the central region edging towards the sustainability argument. This means that the mission statement included views from all arguments, but leaned most towards the sustainability school of thought. In regard to action plans, Amaswazi Landcare and Okhombe Landcare were also both located in the central region. Because of this they are most closely aligned with the FSG Landcare Mission Statement. Their action plans included elements of all schools of thought, but Okhombe's edged toward the capacity building argument and Amaswazi's edged toward the capacity building and sustainability arguments. Msinga's action plan shared the sustainability and capacity building arguments, edging toward capacity building. Mondi's action plan is located in the capacity building school of thought, while YIELD and Mbongolwane Landcare's action plans are located in the economic school of thought.

Possible reasons why none of the action plans were completely aligned with the mission statement is because the project's orientation, and the staff members working on the project, may be pulled by one or two of the arguments, but not all three equally. Projects are created that highlight sustainable livelihoods over sustainable resource management, or vice versa, influencing the direction of action. Staff members, as individuals, see the world through their own 'lens,' so may be drawn toward a particular school of thought.

7. CONCLUSIONS AND RECCOMENTATIONS

7.1 ENVIRONMENTAL EDUCATION IN FSG

On reflection on Stapp's 1969 definition of environmental education, there has been movement in the direction of environmental education as a motivating force for change in FSG. The potential for an issues-oriented blend of appropriate methods to catalyze action, called for by Chawla (1994; 2003), was evident in the diversity of ideas on the role of environmental education captured in the schools of thought. The economic school of thought has a more behavioristic (empirical-analytical) orientation and the sustainability and the capacity building schools have a more non-behavioristic (interpretive-hermeneutical and social-critical) orientation. However, all arguments for the role of environmental education can and often do contain elements of all methodological orientations. A combination of all three slants used with a complementary mixture of behavioristic and non-behavioristic methods that strive towards enabling individuals and groups to make sustainable decisions would be the ideal goal of environmental education in the organization.

The attention to and shift in the FSG Landcare Ethos Mission Statement were evidence that FSG is striving to work in a wider context, in terms of Landcare and environmental education. Staff members are generally more aware of the broad potential applications of environmental education than when the intervention began. Though the organization has committed itself to a wide range of activities that promote the values and attitudes of Landcare, not all of these actions are regarded a priority by all staff. There is a diversity of views on how best to promote Landcare, and the values and attitudes that underpin the approach. This is clearly seen in the diversity of schools of thought that emerged in the project action plans. This is not a problem as long as they are in line with and don't contradict the mission statement. Blending environmental education approaches is more a matter of bringing out the diversity of methods in each school of thought.

The literature on environmental education makes it clear that environmental education should go beyond awareness to being participatory and locally relevant in order to capacitate people to make sustainable decisions. Environmental education projects need to be tailored to the specific needs, views, and values of the community they work with in a way that engenders ownership and builds capacity of hard and of soft, or conceptual

skills. Transformation will only be realized if people have the capacity to work within the greater context to realize the sustainable options for their own livelihood and be able to work toward those goals. Project action plans with their favored school(s) of thought, grounded in the FSG Landcare Ethos Mission Statement and applied with a blend of environmental education approaches, could have the potential to optimally facilitate a Landcare ethos.

7.2 CONSISTENCY IN PURPOSE

From the FSG and stakeholder interviews it was apparent that the range of ideas on the role of environmental education spread across all approaches and produced a broad platform of ideas to work with in aligning a common vision throughout stakeholders. In comparing the themes held by stakeholder categories with which school of thought each theme belonged to (Figure 6.1 with Figure 6.2) the slants of stakeholder groups emerged. FSG staff favored the sustainability slant slightly more than the capacity building and economic slants. Service provider/partners favored capacity building and economic slants slightly over the sustainability slant. Community clients favored the capacity building slant slightly over the sustainability slant, with the economic slant trailing. The FSG Landcare Ethos Mission Statement emphasized the 'Sustainability for future generations!' argument with 'Show me the money!' and 'Enable me to choose my path!' following close behind.

A diversity of preferred arguments also showed up in the FSG project team action plans. Two action plans were located in the economic school of thought, one action plan was located in the capacity building school, one action plan was located in both the sustainability and capacity building schools of thought, and two action plans were located in the central zone of schools of thought. Where the mission statement and project action plans are close together there is optimum alignment and consistency in purpose. This doesn't mean the diversity found in stakeholder views, the mission statement and in action plans is detrimental to directing common action. In fact, it is beneficial in that the diversity of views keep one another in check. With the common vision as a guide, individuals and groups from different schools will naturally re-align each other by continuing to argue from their own perspective. As long as a sufficient degree of overlap is maintained between individuals and the organization, and between project teams and stakeholders, all actors will move in a common direction. For this to be realized, a vision of a shared (with the organization and its stakeholders), positive future needs to be continually constructed.

In the intervention new realities were created that stemmed from stories of past successes and a vision of a positive future, as referred to in the literature. It is difficult to confirm, but the continual attention to positive aspects of individuals, team members, the organization and stakeholders, may have contributed to the improvements made during the intervention process. FSG now has a mission statement that addresses the values and attitudes of Landcare. Additions were made to project plans that aim to promote a Landcare ethos. These are positive realities that were constructed over the course of the intervention. For the improvements to be sustained, the guiding vision must be present in the organization and fluctuate with changing 'inside' views and 'outside' contexts. Adaptability is crucial in maintaining overlap between individuals, project teams, stakeholders and the mission statement.

Senge's (1994) idea of redefining organizations using community development approaches helped to build the common vision from multiple perspectives and could help sustain the vision through managing the diversity of views. The concepts of participation, empowerment, and being part of a greater whole (fluctuating between project teams, FSG as an organization and all involved stakeholder groups) were central to the intervention and yielded positive results. Some challenges to forming a common vision were presented by people who were hesitant to become involved with the issues of the intervention. For some, it just took time to get involved. For others, internalization of the process was never realized. The concepts associated with viewing organizations as communities can be used to generate ownership of and leadership in the continuing process of directing common vision and action. The challenge for a learning organization is to tactfully manage the diversity of views within the organization and throughout stakeholders. This is a vital element of supporting sustainable development, as well as any broad purpose.

7.3 METHODOLOGY FOR STRATEGIZING COMMON VISION

In the literature it is argued that pluralists (interveners that practice pluralism) are best developed by applying new methods, in a theoretically informed way, and reflecting on them (Midgley 2000). In this spirit I would like to make some reflections on the intervention.

The preliminary interviews with FSG staff members were crucial to the intervention in several ways. I got a chance to get to know staff members and begin to form

relationships, which greatly assisted me later during the stakeholder interview process. I began to understand the workings of FSG projects which enabled me to suit the phrasing of my questions during stakeholder interviews to the project context. Lastly, I was introduced to the ideas surrounding environmental education that were probably being taken into communities.

Including team building activities as a part of every group workshop and meeting set a fun, safe tone which benefited interactions throughout the meetings. Also, using interactive techniques, like the provocative propositions brought the content to life for participants and strengthened their internalization of the process.

Something that I knew would be an issue from the start was the fact that I am a foreigner in all contexts of the intervention (though not foreign to the research contexts). This is a strength because my view of the situation is fresh, but a weakness because everything is very new to me and I am viewed as an outsider. For instance, when going in rural communities I am not able to speak the dominant language and I am not fully aware of cultural norms. I am sure that the fact that I am foreign had an effect on the results of the intervention in ways I may never fully comprehend.

From the range and overlapping of themes identified from the interviews there was an ample amount of perspectives collected from community clients and a sufficient amount of perspectives collected from service providers partners and the Landcare consultant. This is most likely due to the fact that the community client interviews were all group interviews, thus inherently collected more perspectives, while the service providers partners and Landcare consultant interviews were with individuals. Though more perspectives were collected from the group interviews, they may not have been fully representative of each individual in the group. In subsequent interventions, I would interview all stakeholders in the same way.

Finding a time to meet with FSG staff members as well as with project teams proved to be very challenging. Interviews and meetings were re-scheduled several times. This was frustrating, but expected. The context of development work is one in which you have to be extremely flexible because situations are constantly changing. Development work is not done in a fabricated static environment. People's schedules change, often, and 'flexibility' becomes the intervener's motto.

Different people internalize processes in different ways. Some staff members were committed to the process through the one-on-one interview, some though forming the mission statement in collaboration with their co-workers, and still others internalized the process through creation of the action plan.

The importance of time proved to be an important aspect of the intervention, in accordance with the literature (Midgley 2000). Although no new major questions and purposes arose during the intervention process that were not anticipated in advance, some minor questions did come up. For instance: How should small and large group interviews be conducted in order for the most people to be able to share their views? Should provocative propositions be written out, or can they just be verbalized? The evaluation checklist seems redundant, should we still use it? Because critical systems thinking respects the fact that in real life situations evolve, the methodology was able to adapt to unanticipated needs of the situation.

Related to valuing processes as occurring over time and intuitive decision making (Midgley 2000) was a choice I made concerning the methodological design of the intervention. I didn't have a pre-specified method of how I would analyze stakeholder themes. It was decided that creating schools of thought, or clusters of themes, that encased arguments for the different approaches to how environmental education is best used to increase a Landcare ethos would assist in determining the spectrum of approaches. The process of determining schools of thought was strenuous but elicited clusters of ideas and opinions that, I believe, accurately portray the arguments present in the intervention. The use of empirical-analytic methods such as the GenStat correlation matrix values was unplanned, but proved to be a very useful tool in drawing out the schools of thought from amongst the themes. Additionally, graphing the stakeholder categories vs. themes and the schools of thought vs. themes brought forth layers of analysis that would have been very difficult without the clear illustration produced by the graphs. As an interventionist, my own 'lens' has an interpretive-hermeneutical and social-critical tint. I don't naturally turn to behavioristic methods to understand situations. In this case, though, I found it highly advantageous to use such methods to augment my understanding of the situation. Broadening one's own paradigm through using methods from other paradigms is encouraged by Midgley (2000) in order to come be a better pluralistic intervener.

The process of learning and reflection for paradigm broadening proposed by Midgley (2000) to address the philosophical, cultural and psychological problems of pluralism

was encountered through the intervention. As mentioned previously, I, as the intervener, used methods in the intervention that were both in and outside my personal paradigm boundaries. I was aware that I understood more intuitively some methodologies and their methods to a greater degree than others. Usually the methodologies I leaned toward were from the intuitive paradigm, and secondly from the social-critical paradigm. I was more likely to choose a method from those paradigms if I thought it was appropriate. I was also aware that I possibly didn't perceive the method as the originator did, but that didn't take away from the fact that the method was useful in the situation. Additionally, my own paradigm broadened from the application of 'outside' methods. It is clear that continuing to practice the application of methods outside one's paradigm, with reflection, would lead to a widening of one's own paradimatical stance.

Critical systems thinking's attention to boundary judgments (Jackson 2000; Midgley 2000) played a large role in the study. Aligning a common vision, or purpose, throughout several stakeholders is a challenge because it involves fluctuating between several boundaries. Personal perceptions must be aligned within an organization to blend with the organization's vision, which in turn must follow the policies and sentiments of the greater context in which the work is being done, and additionally needs to address the views and values of the communities that the work is being done with and for (see Figure 5.1). In the intervention there was a constant discussion over where the boundaries were being drawn: Do you want my opinion of what *is* going on, or what *should be* going on? Should the provocative propositions be made for our project team, or for FSG? Should we approve the action plan with partners before adding it into our project plan? These questions epitomize the multi-layered nature of strategically aligning vision between stakeholders. Constant boundary awareness is necessary, for intervener as well as all others involved.

Midgley's (2000) insistence on boundary critique in the creative design of methods as a vital part of every intervention to unmask coercion made a fundamental difference in the intervention. Without a critique of the traditional boundary placed at the organizational level, stakeholder perceptions wouldn't have been included in the intervention, which would have undermined the process of forming a common purpose and vision throughout all stakeholders (see Figure 5.1).

Striving for sustainable improvement of local situations (Jackson 2000; Midgley 2000), central to critical systems thinking, came through in the intervention. Action plans were

created that hold the potential for blending the three approaches to environmental education in a participatory and locally relevant manner. Through the process of discussing the various modes of environmental education in projects staff members became more aware of its broad applications. In these ways, improvement was made both in the tangible new activities of the action plans, which will be directly experienced by stakeholders, and to the perceptions of staff members. Whether or not this improvement is sustainable is difficult to judge at this point.

The dedication of critical systems thinking to methodological pluralism (Jackson 2000; Midgley, 2000) was evident in the intervention. Methods were mixed from a variety of methodologies ranging from systems thinking to development work to participatory action research. The methods and techniques mixed were done so with awareness of their methodologies' philosophical underpinnings. In some cases just the theory of the methodology was part of the design, without a tool. This proved to be very useful in designing methods that appropriately addressed the problem situation. The principles and assumptions guided each phase of the intervention on a theoretical level. Methods from multiple methodologies were used with awareness of all the principles and assumptions. For instance, while I was interviewing an individual, a Participatory Rural Appraisal technique (semi-structured interview), I would apply the Reality-Based Desired Future Principles (from Appreciative Inquiry). In this way I was able to apply a principle that is not an inherent part of Participatory Rural Appraisal to a technique from that methodology in order to shape the technique to the intervention's purposes.

Practice in the intervention touched on Midgley's (2000) idea that one can reinterpret methods from paradigms other than one's own. In methods that were pre-planned and in those that evolved through the study I choose what I, as the intervener, thought would be most appropriate for the situation. There were times in which I chose from methodologies that were outside of my interpretive-critical paradigm, sometimes carrying them out as the originator probably intended, for example the Excel graphing techniques in which I used the information to analyze various groupings. Sometimes I used the technique for purposes not intended by the originator, such as when I used the GenStat multiple linear regression correlation matrix to assist the school of thought emergence process, but didn't rely on it alone (see Appendix D). In carrying out these methods I understood that my comprehension of them were different from the originator's; my understanding was altered by the 'lens' of my own paradigmatical stance.

7.4 CONCLUSIONS

Environmental education can promote a Landcare ethos through a variety of methods drawn from empirical-analytical, interpretive-hermeneutical and social-critical methodologies that are tailored to stakeholder's predominant perspectives.

Common direction can be aligned through implementing the concepts of community development to organizations to form a common vision that is overlapped by individuals and stakeholders and adapts to changes in perceptions and contexts.

The research question can be answered by aligning staff members and stakeholders in common vision and action towards developing a Landcare ethos through a blend of environmental education approaches that facilitate sustainable decision making though building capacity in individuals and communities in a participatory and locally relevant manner that is attentive to predominant perspectives and adaptive to change.

7.5 RECOMMENDATIONS

7.5.1 THE BROADER CONTEXT

More interventions that include explicit intervener reflection comparing Jackson's (2000) meta-methodology 'Total Systems Intervention' with Midgley's (2000) creative design of methods would contribute to theory in the field of critical systems thinking. As a practitioner I don't think that choosing between the two methodologies would make a significant difference on how the intervention was designed. Rather, I think it would make a difference on how the intervener perceives the design of the intervention and how she reflects on it. I would venture that interventions written up using Jackson's meta-methodology would come across as perceiving that the three paradigms were really addressed through using methods from methodologies across paradigms. I would also imagine that the reports would be less reflective of the intervener's own paradigm's influence on the use of methods not from their paradigm.

More research on the potential of environmental education as a capacity building force in Landcare and other community based natural resource management strategies would add to theory in the field of environmental education and resource management strategies. Capacity building, like environmental education, has a wide range of

applications and spans across paradigms with a broad range of methods. As a force that can bring awareness to interdependencies, engender participation and ownership, empower individuals and groups, and culture critical decision-making skills so people can choose the best option for themselves, their families and future generations, environmental education has great potential in community based natural resource management.

More research stimulating individuals in organizations to view themselves as part of an interconnected web of stakeholders invested in a positive, mutual future is needed to assist strategic alignment of purpose in the multi-stakeholder context of development work. Without a common purpose and direction, development work will be ineffectual due to the effects of isolationism. The idea of organizations as communities (Senge 1994) will assist this process.

7.5.2 THE FARMER SUPPORT GROUP

My recommendation for FSG concerning critical systems thinking is to continue to embrace this type of research because it is in alignment with the organization's own philosophies. Many principles, values, and theoretical standpoints are shared, such as empowerment, improvement, flexibility, learning, reflection, pluralism of methods, mental models, and a systems perspective.

In order to fulfill the principles of the research intervention methodology the results from the school of thought analysis should be brought back to FSG staff and stakeholders. All groups and individuals who participated in the intervention process should be aware of the schools of thought that drive the development of the role of environmental education in Landcare. This knowledge could stir debate, which often leads to a wider understanding of the situation. Individuals and groups would gain a broader perspective of where they stand in relation to the greater context of CBNRM strategies. Learning, empowerment, mental models, and participation would be enhanced.

Definite improvement was made in the intervention process. Whether or not this improvement is sustainable is difficult to judge at this point. Continual monitoring and evaluation of 'Landcare ethos' activities and continual adaptation to changes in stakeholder, organization, and individual purposes is needed for the improvement to be sustained.

Regarding environmental education in community based natural resource management and Landcare I recommend continued attention to the action plans developed. This means following up on 'indicators' in project groups and having progress reports of what has happened to date at the organizational level. On both levels checks should be made to insure that sufficient overlap has occurred between activities and the mission statement. This should happen fairly soon after the creation of the action plans, to keep up the momentum. Attention should be paid to whether a mix of environmental education methods is being implemented, or if application is limited to one approach.

Views of FSG staff, partners, and clients will shift over time and the organization must recognize and adapt to the shifts. The FSG Landcare Ethos Mission Statements should be revised to reflect the new vision, and overlap with project plans, project activities and monitoring systems. Checking in on staff member's and stakeholder's perceptions will also be necessary to make sure the mission statement continues to be reflective of all perspectives. Reviewing the mission statement in a year from its development would indicate changes in 'inside' views and 'outside' contexts.

Inquiry into why some staff members, though they see the connection between environmental education practices and their project, don't take the next step toward implementation might break down personal boundaries holding back environmental education's potential in the organization. Different approaches are needed for different individuals to internalize issues and processes. The intervention's methods may have not been suited for some individuals to internalize the process. Alternatively, some individuals may never view environmental education as a realistic possibility for promoting Landcare in their project. Trying different approaches may bring forth insight into why some individuals were less likely to embrace the process.

7.5.3 INTERVENERS WORKING WITH THE FARMER SUPPORT GROUP

The atmosphere of FSG is casual and friendly, more like working in a small community than a business or industry. I was accepted, by some sooner than others, even as a foreigner. People are quick to help you when you need assistance. Timeframes are flexible; one must be patient. Rigidity doesn't last in this environment. Courteous reminders of planned meetings are helpful. People are busy and schedules change frequently, so complete attendance in meetings and workshops is an ideal to be sought. Active, participatory workshops engage more than lecturing. As for FSG stakeholders,

service provider partners were initially wary, but soon opened up. Client communities were very welcoming. Fluency in Zulu would be a great benefit when working with client communities, but not as necessary when working in the organization.

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APPENDIX A: FSG Staff Interview

The following content was addressed in each FSG Staff Member interview:

- Introductions

  Who I am: Meghan Rudd, Rural Resource Management masters student and FSG Intern

  What I am doing: project for RRM711, beginning work on my masters research exploring the role of environmental education in FSG, helping FSG staff form a unified vision of the role of environmental education in order to better promote the Landcare ethos

  Project time commitment: Interviews with representatives from each FSG project, about one hour. Group feedback and visioning session (Monday May 19th after kickoff?), about two hours

  Project process: follows "Appreciative Inquiry" methodology technique that focuses on *positive aspects* of topics covered

  Thank you for participating!

- Perspectives:

  What do you view environmental education as?

  What do you see as environmental education's role in FSG as an organization?

  Does environmental education have a role in Landcare/sustainable farming?

  What are your ideas on environmental education as a part of Landcare/sustainable farming?

  Does environmental education help support FSG's 'Landcare ethos' (promotion of responsible land management)?

❖ Stories:

What is the mission of your project?

What makes others in the community respect the group and its members?

The Discovery Phase of Appreciative Inquiry focuses on past achievements and 'peak' periods. Stories are told to identify and analyse the factors that made the time/event successful, including leadership, relationships, technologies, values, external relations, planning methods, and capacity building.

Tell a story about a time when an innovation (new way of doing something) helped to promote the Landcare ethos for yourselves and/or your clients?

Who? What? Where? When? How?

Can you recall a specific account of a successfully delivered environmental education activity in which the participants' Landcare ethos grew?

Who? What? Where? When? How?

Analysis of stories: identify strengths, values, and external conditions that enabled 'peak' experiences."

APPENDIX B: FSG Stakeholder Interview

Name:_____

Date and Time:_____

Location:_____

❖ Introductions

Who I am: Meghan Rudd, Rural Resource Management masters student and Farmer Support Group (FSG) Intern.

What I am doing: I am interviewing groups and people involved with FSG's projects to gain an understanding of stakeholders' views on the present and potential role of environmental education in the community and in FSG-related projects, and for specific accounts (stories) of successfully delivered environmental education activities in which the participant's Landcare ethos grew.

Time commitment: about one hour.

Project process: focuses on *positive aspects* of topics covered.

❖ You and your organization

1) Please describe your position and involvement in FSG-related Landcare project(s):

2) What makes others in the community respect your organization?

❖ Perspectives:

3) What does Landcare mean to you?

4) Are you familiar with the term, "Landcare ethos?"
What does it mean to you?

5) What should be the purpose of environmental education?

6) How can environmental education best help people realize the value of land/soil/earth?

❖ Stories (please answer one of the three)…

I am interested in stories reflecting past achievements and 'peak' periods. Be sure to identify and analyse the factors that made the time/event successful, including *leadership, relationships, technologies, values, external relations, planning methods, and capacity building:*

A. Can you tell a story in which an environmental education-related activity made you value the land to a greater degree? Who? What? Where? When? How?

B. Can you tell a story of a time (in your work or personally) that you felt a strong relationship to the land/soil/earth? Who? What? Where? When? How?

C. Can you tell a story of a time (in your work or personally) when you celebrated the importance of the land/soil/earth with others? Who? What? Where? When? How?

Thank you for participating!

APPENDIX C: All Staff Workshop Proceedings

1. Introduction

Background

The workshop is sequenced in the research process after FSG staff and stakeholder perspectives are collected via semi-structured interviews. The perspectives are analyzed for themes, which are presented in the workshop.

Aim

The aim of the All-Staff Workshop is to bring together FSG staff and stakeholder views on the relation of environmental education to Landcare in order to form a Landcare Ethos Mission Statement that embodies FSG's commitment to promoting a Landcare ethos.

2. Summary of process and results

Icebreaker

The "Human Knot" icebreaker was successful in that it was unexpected and physical, setting a light, interested mood. The one participant who walked in late offered to lead the 'well done' Zulu clap, so all participated in the activity.

I followed with thanking everyone for coming, giving a brief update on what stage we were at in the research process that appeared on a poster:

RESEARCH PROCESS
Interview representatives from FSG projects on environmental education and Landcare
Interview representative individuals and groups from FSG stakeholders (clients and other service providers)
All-staff workshop to finalize FSG environmental education-for-Landcare ethos Mission Statement
Create environmental education-for-Landcare ethos Action Plans and work them into Project Plans.

I then outlined the workshop's activities, using a poster to visually follow:

ALL-STAFF WORKSHOP

Ice-breaker

Research Process Update Review

FSG Staff's Perspectives and Ideas

Create "Provocative Propositions"

Present "Provocative Propositions"

Create environmental education-for-Landcare ethos Mission Statement

Finalize Mission Statement

Review and Report Back

I presented the Mission Statement that was formed during the FSG project team representatives workshop both verbally and in poster form:

FSG'S ENVIRONMENTAL EDUCATION-FOR-LANDCARE ETHOS MISSION STATEMENT

Environmental education plays and important role in achieving sustainable livelihoods within FSG's projects through promoting indigenous knowledge, capacity building and ownership to schools and client communities.

I presented a poster that outlined the 'areas of contention' that were present within the staff during the workshop that culminated in the construction of the Mission Statement:

AREAS LACKING CONSENSUS

Involvement of community (adults) in environmental education

Environmental education's relation to:
→ sustainable livelihoods
→ natural resource management

Role of environmental education in:
→FSG (as an organization)
→FSG projects

What is 'Landcare ethos' and why is it important?

Participants were divided up into cross-project team groups to discuss one of the 'areas of contention:' the meaning and significance of 'Landcare ethos.' After discussing, all groups came together to share ideas. Meanings of Landcare ethos included the natural resource management practices of taking care of the land, feelings about the land, and the values, attitudes, and actions related to Landcare. The meaning of 'Landcare ethos' as the values and attitudes that underpin Landcare emerged as the core meaning of the term for the group.

Following the discussion I presented the themes that were identified from the stakeholder interviews:

STAKEHOLDER THEMES
Celebrations have a great impact: intergenerational, capacity building, honor traditional practices (food/music/knowledge)
Stories relay information, including traditional knowledge
Traditional ways can draw a profit
Capacity building (both technical and soft) is needed for people to realize their options, so as to choose the best option for sustainable livelihood/development <education for development>
Self-accomplishment and respect earned from producing own livelihood through sustainable practices
Land, people, animals and plants are all dependent on one another
Experiential learning in "own backyard" has a greater impact than theorizing
Learning as a cyclical process
Sustainable management of natural resources for future generations
Elders and youth sharing environmental skills and knowledge with each other
Important to highlight financial benefits of sustainable resource use
Accept responsibility for environmental problems and take action to improve situation

Construction of "provocative propositions"

I introduced the concept and criteria of provocative propositions, leading to a description of the scenario: "Imagine that it is several years in the future. FSG has just been nominated for a very prestigious award for innovative work in sustainability highlighting your project team's activities. The award recognizes outstanding organizations that should serve as a model for the entire country." Groups were asked to include both FSG and Stakeholder themes, highlighting aspects that were very relevant to their project.

Participants broke up into four project teams (Mbongolwane, Msinga, Mondi and Okhombe) of 2-3 people each. The groups developed a provocative proposition based on an extension of the scenario that was tailored to their project's potential of developing sustainable communities through the enhancement of a Landcare ethos.

Although the guidelines asked for a written provocative proposition of 60-100 words, only three of the four groups produced written documentation of their provocative proposition. Although the time allotted for developing the provocative propositions was extended, some groups felt rushed.

Presentation of "provocative propositions"

Each group presented their provocative propositions according to their specific scenario. The main ideas of each presentation were as follows:

Mondi

A "road show" medium of communication helped individuals realize what they needed to do to attain sustainable livelihoods, food security, and increased self-worth as evidenced in a personal account of transformation.

Msinga

Through organic farming, business, and leadership skills farmers were able to access loans and produce food while protecting the environment. Farmers gained certification as organic producers, gaining them access to major supermarkets that double their profits.

Mbongolwane

Through establishing local enterprises, networking, partnerships, cross visits, local knowledge, and cultural days the Mbongolwane wetland is used in a profitable and sustainable manner.

Okhombe

Through an interview with a community member it was revealed that the area was being used sustainably through Landcare practices, environmental awareness, sustainable natural resource management systems, and social systems.

Finalization of Mission Statement

The finalization process of the Mission Statement was explained to the group. The guidelines were as follows:

FSG ENVIRONMENTAL EDUCATION-FOR-LANDCARE ETHOS MISSION STATEMENT

"FSG staff promotes/ encourages/ mobilizes/ provides/ supports/ etc…environmental education/ Landcare ethos…in projects…"

Should: Include → what you do
→ how you do it
→ with whom
→ for whom

Be 1-2 sentences

Agree with FSG's Mission Statement

Include the essence of all stakeholder themes

Participants were divided up into two groups that cross cut project teams. I facilitated one group and Monique Salomon facilitated the other. Both groups developed a potential 'Landcare Ethos Mission Statement.' The two were hung next to each other and read aloud. Certain aspects of each were identified as desirable and linked together to form a cohesive statement:

FSG LANDCARE ETHOS MISSION STATEMENT

FSG staff commit themselves, in collaboration with government departments, NGOs, and the private sector, to promoting values and attitudes that underpin Landcare through training, mentoring, and experimentation, celebrations, events, and cross-visits, that enable farmers, schools, unemployed youth, elders, and traditional healers to recognize and take responsibility for environmental problems and to take pride in managing their natural resources for themselves and for future generations whilst promoting traditional and sustainable practices.

3. Conclusions and recommendations

I was entertained by the presentations of the provocative propositions and thought they helped build moral in project teams.

The final Landcare Ethos Mission Statement impressed me. I think it include nearly all vital elements, excepting monitoring and evaluation and the inclusion of 'community groups' as a category that FSG both works with and works for.

I was disappointed by the low number of participants at the workshop and the number of people who decided to leave early, even though the date was given far in advance.

I was regretful that the workshop did not end at the assigned time. I believe this was partly due to starting late because of tardy participants and partly due to the fact that a lot was planned for the amount of time. The participants that stayed until the end, offering their comments, opinions, and suggestions encouraged me that many staff members were invested in the process.

Way forward
The next step in the research process is to apply the Landcare Ethos Mission Statement into project plans during the Project Team Workshops.

4. Proceedings

Participants

Monique Salomon (Director, Okhombe)
Puleng Monatisa (Okhombe)
Sifiso Ntinga (Mondi)
Thabile Khuboni (Msinga)
Thembi Ngcobo (Msinga)
Zandile Mngomezulu (Environmental Education, Mbongolwane)
Sizakele Mthethwa (Mbongolwane)
Mpilo Khanyile (Msinga)
Zanele Shezi (Okhombe)

Exercises

vi. Icebreaker: Human Knot
vii. Introductions: thank-yous, update on research, outline of workshop
viii. Review FSG staff's perspectives/ideas
ix. Report back stakeholder perspectives/ ideas
x. Project teams scenarios: construction of "provocative propositions"
xi. Presentation of provocative propositions
xii. Finalization of Mission Statement

Process and Results

i. The icebreaker was called 'Human Knot' whereby the participants stand in a circle, reach out their hands and grasp hands with two people who are not directly next to them in the circle. Then the group has to 'un-knot' themselves back into a circle without ever letting go of one another's hands.

The activity went well. It got the group communicating with each other in slightly physically challenging and awkward situations. People laughed and soon began talking more freely. At the end, when we had formed a circle without letting go, the group expressed pride in their work. Thembi, who came in late lead us in the Zulu clap signifying 'job well done.'

I briefly drew a parallel between the 'mess' we found ourselves in at the beginning of the activity and the mess of ideas that we would have to wade through before finalising the Environmental Education-for-Landcare (later termed, 'Landcare') Mission Statement. I explained that just like in the icebreaker activity, much communication is necessary, as well as everyone sticking in there, to reach the end goal together.

The purpose of the activity is not only to create a safe and fun atmosphere and to draw a parallel between icebreaker and the workshop. The team building exercise was done to encourage team learning and a shared vision, aspects important to Learning Organizations.

ii. No additions to previous description

iii. After presenting the original Mission Statement I identified the themes within it, including: environmental education being important to sustainable livelihoods, environmental education promoting indigenous knowledge, capacity building, and ownership, and environmental education's target groups being schools and communities.

The "what is 'Landcare ethos' and why is it important?" area of contention was chosen for explicit exploration out of all the Areas of Contention because the others were to be resolved inherently through the All-Staff Workshop and Project Team Meetings.

The 'meaning and significance of Landcare ethos' discussion question sought to clarify the new term so it's relation to other ideas like natural resource management, etc., could be grappled with.

The meaning of Landcare ethos as the values and attitudes that underpin Landcare emerged from the various ideas of participants. Actions (Landcare practices) were decided to be an extension of the Landcare ethos, while values and attitudes about Landcare informed the ethos.

iv. As well as reading the 'Stakeholder Themes' poster, a handout of the stakeholder themes with a key to the source of the theme was provided to participants. Themes were described as ideas that were mentioned by more than one stakeholder, expect in the case of a couple ideas that were stated by the Msinga farmers, and seemed to have sufficient significance to stand on their own.

v. The concept and criteria of the provocative propositions were explained as outlined in the handout featured below. The scenario was set up by asking the participants to close their eyes and the section starting with "Imagine..." was read aloud to the group.

Then the participants split up into their project teams.

Mbongolwane: Zandile and Sizakele
Msinga: Mpilo, Thabile and Thembi
Mondi: Sifiso and Monique
Okhombe: Puleng and Zanele
(Amaswazi and YIELD weren't represented because not enough staff from those projects attended the workshop)

Each project team was given a handout with one scenario specific to their project (see number one through six in handout below):

"A provocative proposition is a statement that bridges the best of 'what is' with your own speculation or intuition of 'what might be.'"

- **It is provocative.** It stretches and challenges the project team, forcing the team to move beyond the parameters of its normal routines.
- **It is grounded.** Similar challenges have been met in the past and, as such, the vision represents a compelling possibility.
- **It is desired.** All project team members would like to be part of the project as it is described in the statement.
- **It addresses multiple aspects of the projects' structure and activities.** This could include such things as leadership, societal purpose, communication, staff, structures, community relations, etc.
- **It is stated in the present tense and in affirmative language.**

Imagine that it is several years in the future. FSG has just been nominated for a very prestigious award for innovative work in sustainability highlighting your project team's activities. The award recognizes outstanding organizations that should serve as a model for the entire country.

1. **Mbongolwane Landcare: SABC is sending a camera crew to interview your project team. You will have one minute of airtime to describe how your project team has exceeded project goals through encouraging a Landcare ethos in client communities. [**
2. **Msinga Sustainable Farming Systems and Food Security: Your project team is invited to a 10 Years of Democracy: Examples of South African Excellence Dinner hosted by Nelson Mandela. You have a one-minute spot to introduce how you have exceeded project goals through encouraging a Landcare ethos in client communities.**
3. **YIELD: The Secretary General of the United Nations is phoning to congratulate your project team and hold you up as an example to the rest of the world. You have one minute to articulate how you have exceeded project goals through encouraging a Landcare ethos in client communities.**
4. **Amaswazi: The Times has set aside space (60-100 words) for you to cover how your project team has exceeded project goals through encouraging a Landcare ethos in client communities.**
5. **Okhombe: The national facilitator, along with top representatives from Australia's Landcare program, have chosen your project team to be on a panel of international examples of excellence in**

Landcare. You have a one-minute spot on the television broadcast to describe how you have exceeded project goals through encouraging a Landcare ethos in client communities.

6. **Mondi Social Investment in Forestry: President Thabo Mbeki wants to know why your project team deserves to receive this prestigious award. Develop a 60-100 word email explaining how you have exceeded project goals through encouraging a Landcare ethos in client communities.**

Be sure…

- **It includes the 'essential' (up to your discretion) FSG and stakeholder ideas on encouraging a Landcare ethos. Aspects that are most relevant to your project team should be included.**
- **It includes two or more programs, activities, or initiatives that your project introduced in the community**
- **It includes specific ways in which goals were met**
- **It includes how you measured successes**
- **It is 60-100 words in length, roughly one paragraph**

The purpose is to stimulate ideas, not set things in stone so be creative and have fun!

The activity of creating the provocative propositions was scheduled to take half an hour. At that time none of the groups were ready to present. The time was extended until all but one of the groups felt ready to present.

vi. At 11:50am the presentations of provocative propositions began. It took about a little over a half-hour to go through all four groups. All participants contributed to the presentations.

APPENDIX F: FSG Project Team Action Plans

AMASWAZI LANDCARE ACTION PLAN

OBJECTIVE	ACTIVITIES	INDICATORS	RESOURCES (materials, etc.)	RESPONSIBLE SUPPORT	TIME FRAME
1. Community has a shared vision of LandCare and landuse management	1.1 Review Vision (include LandCare Ethos) 1.2 Cross Visits (2x) (Visit projects were LandCare Ethos principles are practised)	1.1 LandCare Ethos is included in the Vision 1.2 LandCare Ethos is reflected in project proposals made by the community	1.1 Stationary (flip chart, kokis, etc. venue, etc.) 1.2 (transport stationary, communication)	1.1 FSG – staff 1.2 To be determined (Puleng)	1.1 April 2004 1.2 April 2004 to December 2004
2. Community facilitators competent in LandCare	2.1 2.2 2.3 Mentor and train LandCare Facilitators (LCF) and include Emphasis on LandCare Ethos	2.3 LCF use the LandCare Ethos when advising groups during the implementation of their projects LCF talk with the communities about LandCare Ethos.	2.3 Funds for FSG Staff are available transport and stationary	2.3 Vusi Thabile and Puleng	2.3 Ongoing the whole year

OBJECTIVE	ACTIVITIES	INDICATORS	RESOURCES (materials, etc.)	RESPONSIBLE SUPPORT	TIME FRAME
3. Community structure committed to LandCare and competent in facilitating collective action in agriculture and natural resource management.	3.5 Facilitate and develop a vision and mission statement within the community for the LandCare Committee, which includes/emphasises the LandCare Ethos.	3.5 LandCare Ethos is an important part of the vision and mission statement	3.5 Stationary, funds for the FSG staff, transport	3.5 Franz Puleng/Thabile	3.5 July and August 2004 ????
4. Sustainable crop/livestock systems	4.5 Training in: • ….. • ….. • Environmental Education (LandCare Ethos)	4.5 • … • …. • Workshop held and principles of LandCare Ethos applied	4.5 • … • …. • Funds for trainer and for workshop/ training including stationary available	4.5 • … • …. Zandile Puleng/Thabile	4.5 • .. • … • July and August 2004

OBJECTIVE	ACTIVITIES	INDICATORS	RESOURCES (materials, etc.)	RESPONSIBLE SUPPORT	TIME FRAME
5. Soil rehabilitation and grazing management	5.2 Training in Land Husbandry (which includes LandCare Ethos)	5.2 LandCare Ethos and principles are applied in the land management systems (grazing, cropping, general landuse)	5.2 funds for training staff, stationary, etc.	5.2 Puleng Zandile/Sindisiwe	5.2 February 2005
6. Monitoring of project activities	6.3 Training the LandCare Ethos is part of the Participatory Impact Monitoring (PIM) and develop a monitoring system	6.3 LandCare Ethos/principles are part of the monitoring system	6.3 Stationary, funds for FSG staff	6.3 Franz Thembi and Khumbu	6.3 May 2004 to February 2005
7. Effective project management and sound financial management	7.3 Include a separate part or explicitly state in all reports impact of projects towards LandCare Ethos.	7.3 Effect o project implementation on LandCare Ethos are stated and documented in the reports (e.g.	7.3 Stationary	7.3 Franz All team members	7.3 ongoing

OBJECTIVE	ACTIVITIES	INDICATORS	RESOURCES (materials, etc.)	RESPONSIBLE SUPPORT	TIME FRAME
		better environmental awareness)			

MBONGOLWANEWETLAND MANAGEMENT PROJECT ACTION PLAN

Objective	Activities	Indicators	Responsible support	Time Frame
3. Effective conservation of wetland and other water resources.	3.1?-Raising awareness of values and attitudes of landcare (landcare ethos) -Strengthen the working group that will look at the catchments through discussion on the values and attitudes surrounding landcare 3.3.3-Form links and strengthen environmental clubs through introducing teachers to landcare ethos terminology and concepts	More by in of community membersevidenced by increased membership and activity in group and by self-initiated discussion of values and attitudes of landcare.Clubs are self managing themselves	Zandile, (responsible) Zandile, (responsible) WFW, DoAEF (support)	

MONDI ACTION PLAN

OBJECTIVE	ACTIVITIES	INDICATORS	RESOURCES (materials, etc.)	RESPONSIBLE SUPPORT	TIME FRAME
3. Training, support and advice given to SDFs is effective based on the vision and mission of FSG	Introducing SDFs to Landcare Ethos	- SDFs practicing it in their meetings, workshops, etc.	Flip-chart and Khoki pens	Sifiso (responsible) SDFs and back up support from Meghan if still around	Ongoing
5. Facilitate learning in participatory approaches	SDFs introduce Landcare Ethos to community members in workshops	It's mention in the workshop reports	Flip-chart and Khoki pens	SDFs (responsible) Sifiso (support)	Ongoing

MSINGA NDA/ILIMO PROJECT ACTION PLAN

Objective	Activities	Indicators	Resources (materials)	Responsible Support	Time Frame
3. Champions in agricultural development effectively supporting and promoting sustainable farming enterprises.	3.1 Training in Ecological agriculture What is Land Care Land Care principles (ethos)	Increase in dialogue about LC ethos	Stationery, Vetiver, wild plants, etc	Ncengimpilo, Vusumuzi, Thembi and Thabile	January - February 04
	3.3 Establish support on experimentation (Include Landcare ethos values and attitudes in Discussions on site identificationcriterion for experiments)	Understanding the importance site section and planting practices	Tape measure, pegs, seeds/seedlings, fertilizers (kraal manure/synthetic fertilizers, compost etc)	Ncengimpilo, Vusumuzi, Thembi and Thabile	February – March 04
	3.4 Mentoring & support on experimentation Informal talks with study groups: ▪ What is LC? ▪ Why is it important?	LC ethos prevalent in study groups discussions	Stationery, Pamphlets and etc	Ncengimpilo, Vusumuzi, Thembi and Thabile	November 03 – October 04
5. Farming households committed to implement strategies to reduce vulnerability to HIV.	Baseline data on management functions and community facilitation on HIV/Aids 5.1 Formulate a strategy to promote health and well-being (awareness-creation and nutrition) Highlight Landcare Ethos as link between people and the land (both need to be healthy to support each other)	Interviews held with: Farmers, youth, stakeholders, NGOs, community structures, traditional healers, sangomas etc	(Kees discretion)	Kees, Mpilo and Michael	November 03 -

YIELD ACTION PLAN

Objective	Activities	Indicators	Resources	Responsible support	Time frame
1. Promoting of environmental Awareness through: **1. 1 YIELD clubs active in three communities**	**1.1.7. Creating communal linkages** **Action 1: Khumbu to discuss the mater with Zandile for Mbongolwane** **Action 2: Khumbu to discuss with OMG and LCF's in Okhombe**	Project Reports	Staff, Wetlands Committee, Monitoring Group in Okhombe	Khumbu....> Zandile &LCFs	Nov- January
	1.1.8 To create resource links **Action 1: Khumbu to continue talks with DEA which would render resource support to Mpumalanga**	Project reports	Department of Enviro. Affairs	Khumbu...> Yugeshni (DEA)	Dec

	Action 2: To continue strengthening links for vetiver supply with DoA Cedara for Mpumalanga and Okhombe	Mpumalanga group reports	DoA, vehicle to collect vetiver	Khumbu...> DoA	Dec
2. Capacity Building	**2.2. Enviro. Ed 2.2.1. Passing on Australian Land care literature to Mpumalanga Club**	Mpumalanga Group reports	Phone, fax, Australian LC review, Khumbu & Monique's paper on LC	Khumbu Meghan	Dec

APPENDIX G: Correlation Matrix

Values produced on GenStat (2002) running a multiple linear regression correlation matrix on stakeholder group themes using Table 3.1 data.

*** Correlation matrix ***

Theme_1	1.000						
Theme_2	0.122	1.000					
Theme_3	-0.189	0.258	1.000				
Theme_4	-0.149	0.000	0.632	1.000			
Theme_5	-0.149	0.408	0.316	0.143	1.000		
Theme_6	-0.141	0.194	0.050	0.316	0.000	1.000	
Theme_7	0.519	-0.258	-0.300	0.000	0.000	-0.400	1.000
Theme_8	0.372	-0.113	-0.439	-0.277	0.277	-0.175	0.439
Theme_9	-0.141	-0.258	0.050	0.316	0.000	-0.050	-0.050
Theme_10	0.122	-0.167	-0.194	0.000	0.408	-0.258	0.645
Theme_11	0.471	-0.194	-0.050	0.000	0.000	0.050	0.400
Theme_12	0.378	0.122	-0.189	0.149	0.149	0.189	0.189
Theme_13	0.378	0.122	-0.189	0.149	-0.149	0.519	0.189
Theme_14	0.189	-0.258	0.050	0.316	-0.316	-0.400	0.300
Theme_15	0.067	0.122	0.141	0.447	0.447	-0.141	0.189
Theme_16	0.122	-0.167	0.258	0.000	0.000	-0.258	-0.258
Theme_17	-0.244	0.122	0.141	0.447	0.149	0.189	-0.141
Theme_18	-0.026	0.284	0.330	0.522	0.174	0.440	-0.330

	Theme_1	Theme_2	Theme_3	Theme_4	Theme_5	Theme_6	Theme_7

Theme_8	1.000						
Theme_9	0.439	1.000					
Theme_10	0.679	0.194	1.000				
Theme_11	0.175	0.050	0.258	1.000			
Theme_12	0.372	0.519	0.122	0.471	1.000		
Theme_13	0.372	0.189	0.122	0.471	0.378	1.000	
Theme_14	-0.175	0.300	-0.258	0.050	0.189	-0.141	1.000
Theme_15	0.372	0.519	0.548	0.141	0.378	0.067	0.189
Theme_16	-0.113	0.194	-0.167	0.258	0.122	-0.304	0.194
Theme_17	-0.207	0.189	0.122	0.141	0.067	0.067	0.189
Theme_18	-0.145	0.440	-0.213	0.330	0.701	0.337	0.055
	Theme_8	Theme_9	Theme_10	Theme_11	Theme_12	Theme_13	Theme_14