

**THE APPLICATION OF SYSTEMS THINKING
IN FORMULATING
A SUSTAINABLE DEVELOPMENT AGENDA
FOR ILLOVO SUGAR LTD.'S SEZELA BUSINESS**

By

Mark Campbell

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UNIVERSITY OF KWA-ZULU NATAL**

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ABSTRACT

Ever since the 2002 World Summit on Sustainable Development in Johannesburg, the quest for 'sustainability' has gained increased prominence on the business landscape. The King Report on Corporate Governance has further heightened awareness of social and environmental considerations which had previously been overlooked, thus broadening the business agenda beyond meeting the needs of owners and shareholders.

Within the South African context, transformation imperatives have placed additional obligations on our businesses, requiring a change in corporate attitudes and business practices.

Thus, in today's business climate, where companies compete globally for customers as well as talent, where reputation is as important as financial outcome, and where social and environmental risks have become key business dynamics, companies are increasingly being called to account, by a broader range of stakeholders, across a far wider spectrum of activities and operations.

The dissertation reflects on the complexity of developing an inclusive and participatory approach to understanding the dimensions of sustainability and developing a sustainable development agenda for Illovo Sugar Sezela business.

The study presents an opportunity to apply systems thinking to consider the various perspectives and worldviews of the participating stakeholders, and to promote democratic decision-making in formulating possibilities. In this regard, it is imperative that the inquiry involves the use of methodologies appropriate to the structure and nature of the organisation, and that the outcome of the inquiry involves a 'product' that is owned by the organisation.

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DECLARATION

This whole dissertation, unless specifically indicated to the contrary in the text, is the original work of the author.



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Mark Lawrence Gerald Campbell

TABLE OF CONTENTS

| | Number | Page |
|---|--------|-----------|
| Abstract | | ii |
| Acknowledgement | | iii |
| Declaration | | iv |
| Table of Contents | | |
| | v-vii | |
| List of Figures and Tables | | |
| | viii | |
| 1. INTRODUCTION | | 1 |
| 1.1 BACKGROUND | | 1 |
| 1.2 FOCUS OF STUDY | | 3 |
| 1.3 PROBLEM STATEMENT | | 3 |
| 1.4 OBJECTIVE OF STUDY | | 4 |
| 1.5 EXPECTATIONS | | 5 |
| 1.6 ASSUMPTIONS | | 5 |
| 1.7 MOTIVATION | | 6 |
| 1.8 DELIMITATIONS | | 8 |
| 1.9 IMPORTANCE OF STUDY | | 9 |
| 1.10 CHAPTER OUTLINE | | 9 |
| 2. ILLOVO SUGAR LTD., SEZELA AS A SYSTEM | | 11 |
| 2.1 INTRODUCTION | | 11 |
| 2.2 THE SOUTH AFRICAN SUGAR INDUSTRY | | 12 |
| 2.3 ILLOVO SUGAR LTD. | | 15 |
| 2.4 ILLOVO SUGAR, SOUTH AFRICA | | 15 |
| 2.5 ILLOVO SUGAR, SEZELA | | 17 |
| 2.6 THE UGU DISTRICT MUNICIPALITY | | 20 |

| | |
|---|-----------|
| 3. SYSTEMS THINKING | 24 |
| 3.1 AN INTRODUCTION TO SYSTEMS THINKING | 24 |
| 3.2 SYSTEMS METHODOLOGIES | 29 |
| 3.2.1 Organisations-as-Systems | 29 |
| 3.2.2 Hard Systems Thinking | 30 |
| 3.2.3 Organisational Cybernetics | 32 |
| 3.2.4 Soft Systems Thinking | 37 |
| 3.2.4.1 Soft Systems Methodology | 38 |
| 3.2.5 Critical Systems Thinking | 40 |
| 3.2.5.1 Critical Systems Heuristics and Boundary Critique | 43 |
| 3.2.5.2 Total Systems Intervention | 45 |
| 4. SUSTAINABILITY | 54 |
| 4.1 INTRODUCTION | 54 |
| 4.2 THE CONTEXT | 55 |
| 4.3 DEFINING THE CONCEPT | 56 |
| 4.4 FROM PERIPHERAL TO MAINSTREAM | 58 |
| 4.5 THE BUSINESS CASE FOR SUSTAINABILITY | 61 |
| 4.6 SUSTAINABILITY IN THE SOUTH AFRICAN CONTEXT | 71 |
| 4.7 SUSTAINABILITY AND LEADERSHIP | 77 |
| 5. CONCEPTUAL AND METHODOLOGICAL FRAMEWORK | 86 |
| 5.1 INTRODUCTION | 86 |
| 5.2 SYSTEMS METAPHORS | 87 |
| 5.2.1 The Brain Metaphor | 88 |
| 5.2.2 The Culture Metaphor | 88 |
| 5.3 CHOICE OF METHODOLOGY | 89 |
| 5.4 CONCEPTUAL FRAMEWORK | 90 |
| 5.5 KEY PHRASES IN THE INQUIRY | 93 |

| | | |
|--------------|--|------------|
| 5.6 | BOUNDARY CRITIQUE | 95 |
| 6. | IMPLEMENTING THE INQUIRY | 98 |
| 6.1 | OBSERVING, EXPERIENCING AND UNDERSTANDING THE PROBLEM SITUATION | 98 |
| 6.1.1 | Metaphors | 99 |
| 6.1.2 | Socio/Cultural Analysis | 100 |
| 6.1.3 | Political Analysis | 101 |
| 6.1.4 | Stakeholder Analysis | 103 |
| 6.1.5 | Structural Analysis | 116 |
| 6.2 | INTERPRETING AND STRUCTURING THE PROBLEM SITUATION | 121 |
| 6.2.1 | Selecting Relevant Human Activity Systems | 121 |
| 6.2.2 | Naming the Systems | 123 |
| 6.3 | DECIDING ON POSSIBILITIES | 134 |
| 6.3.1 | Modelling Relevant Human Activity Systems | 134 |
| 6.3.2 | The Conceptual Models | 135 |
| 7. | OBSERVATIONS AND CONCLUSIONS | 139 |
| | REFERENCE LIST | 143 |

LIST OF FIGURES AND TABLES

| | |
|--|------------|
| Figure 1: Organisation of the South African Sugar Sugar Industry | 13 |
| Figure 2: Map of Illovo's South African Operations | 16 |
| Figure 3: Map of the Ugu District Municipality | 21 |
| Figure 4: The System of Systems Methodologies (Midgley, 1997, 253) | 46 |
| Figure 5: The 3-Phase TSI Methodology (Jackson, 1991, 276) | 47 |
| Figure 6: Influence Diagram Depicting Structural Features of Sustainable Development and Interrelationships | 70 |
| Figure 7: Categorising the Elements of Citizenship (Freemantle and Rocky, 2004, 34) | 76 |
| Figure 8: Integration of SSM and Learning Cycle (Lockett, 2003, 16) | 92 |
| Figure 9: Summary Cognitive Map of Sustainability Issues at Illovo, Sezela | 114 |
| Figure 10: Illovo Sugar, Sezela as a 'System in Focus' | 117 |
| Figure 11: The Five Human Activity Systems | 134 |
| | |
| Table 1: Performance in key areas, 2000/01 - 2003/04 | 19 |
| Table 2: Complement Details, 2000 vs 2005 | 20 |

CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND

A phenomenon of the modern world is Globalisation. This has been defined as, “The process whereby individuals, groups, companies and countries become increasingly interdependent” (<http://www.cafod.org.uk/POLICY/policyguide.html>). A feature of this global world is increasing competition and the concomitant demands on companies and countries to be more competitive. The paradox, however, is that this cannot be achieved via a “win at all costs” approach because a further obligation of the global competitor is to ensure sustainability, that is, the need to meet the challenges of the present without compromising the ability to be successful in the long-term. Credence to this contention was provided by delegates to the 2003 World Economic Forum who identified sustainable development as one of the top three challenges facing the international business community.

South Africa is a country that is attempting to establish itself as a meaningful participant in the global economy. This is a particularly challenging goal, not only because of the “catch-up” necessary as a result of the apartheid-induced exclusion from this economy, but also because the world is becoming ever more complex and fast-changing. In addition to having to be economically competitive, South Africa is also faced with the demands for transformation; in particular, for economic freedom to complement the political freedom enjoyed since 1994. To facilitate the participation of its formerly excluded citizens from the country’s economy, the government has enacted a plethora of legislative interventions. Of particular relevance to this study are The Employment Equity Act No. 55 of 1995, The Skills Development Act. No. 97 of 1998, The National Environmental Management Act No. 107 of 1998, and The Black Economic Empowerment Act No. 53 of 2003.

It is important to acknowledge that the intention of the South African government is not merely to redress the wrongs of the past but also to enable the country to take its place in the global economy. Such an objective has been articulated by the erstwhile Minister for Tourism and Environmental Affairs in his preamble to new environmental legislation: “South Africa’s reintegration into the global economy [means having] growing obligations to meet international commitments and to be a globally responsible country” (Government Gazette No. 20978 17 March 2000, 15).

In addition to legislation, the responsibilities of South African business are further enunciated in the 2002 King Report on Corporate Governance (King II). Although drafted entirely within a South African context, King II also refers to international standards including The Global Sullivan Principles of Corporate Social Responsibility, The AA1000 Standard Compact and The Global Compact (Freemantle and Rocky, 2004).

An analysis of King II reveals the importance of sustainability. Section 4 of this report that deals with “Integrated Sustainability Reporting” clarifies the author’s stance in that it deals with: stakeholder relations; ethical practices and organisational integrity; safety, health and the environment; social and transformation issues; and human capital. Further focus on these and related issues is provided by the call for ‘Triple Bottom Line’ reporting, whereby organisations are evaluated according to their balanced and integrated economic, social and environmental performance.

The links between the concept of globalisation, sustainable development and the obligations of corporations to be responsible corporate citizens are made apparent in the book, *Corporate Citizenship – Successful Strategies for Responsible Companies*. The profiles support the following principles:

- Business is a major player in world affairs, and there is a new balance of power between business, government and civil society.
- Businesses and individuals are thinking globally.
- Business thrives where society thrives.

- For people to thrive, the planet must thrive.
- Businesses are communities of people.

(McIntosh, Leipziger, Jones and Coleman, 1998)

1.2 FOCUS OF THE STUDY

The focus of the study is on the environmental and societal components of sustainable development and, in particular, how they could be applied in the context of a South African manufacturing organisation that is also involved in primary agriculture.

1.3 PROBLEM STATEMENT

The aim of the study is to reflect on the complexity of developing an inclusive and participatory approach to understanding the dimensions of sustainable development and developing a sustainable development strategy for Illovo Sugar Limited's Sezela operation.

The problem statement emerged from my observation of the company's response to calls for it to demonstrate its commitment to serving the interests of the broader society and the environment in which it operates.

At a national level, a call for such has been articulated by Nelson Mandela who has asked for a greater partnership between governments, businesses and communities to achieve sustainable development (Grayson and Hodges, 2001).

At a company level, there are the requirements imposed by certain codes. These include the 2002 King Report on Corporate Governance and the Johannesburg Security Exchange's Social Responsibility Investment (SRI) Index. The former obliges companies to report "Integrated Sustainability" performance (King Report on Corporate Governance, 2002, Executive Summary, 35), whilst the latter encourages listed

companies to integrate the principles of social responsibility and sustainability into their business activities (JSE SRI Index, 2003).

With the above as background, and having been both a participant and observer in relevant company initiatives, I am mindful of the gap that exists between what is espoused in speeches and reports and that which actually takes place. I was particularly captivated by the advice to be aware of organisations that think that, “they can climb aboard the citizenship bandwagon merely by repackaging themselves in sustainability language and reporting, whilst in reality carrying on as before” (Freemantle and Rocky, 2004, 5).

It is this which prompted me to assess the ‘on-the-ground’ evidence of sustainable development, and to explore the possibility of developing an appropriate agenda, within the organisation for which I work.

1.4 OBJECTIVE OF THE STUDY

The study involves the conducting of a systemic approach to explore the suggested problem situation. The process is systemic in that an appropriate mix of suitable systems methodologies will be utilised to take into account the complexities of the situation. By using systems thinking it is anticipated that a multiple stakeholder perspective will be generated, thus helping participants to shift their established way of thinking about the situation.

The study further aims to demonstrate by way of a systems approach the links between the traditional business agenda and that of sustainable development, and that the two need not necessarily be seen as independent of one another.

The process also aims to produce an output that can be used by the study participants to further their transformation endeavours. In this regard, it is hoped that the output, or product, will be perceived as credible and therefore enjoy the support of the participants.

The study will conclude with a reflection on and discussion of the lessons learned during the inquiry process.

1.5 EXPECTATIONS

I am of the opinion that we as individuals, and the companies for which we work, need to make a positive contribution to society. In this regard, I have long considered how one can achieve alignment between our own personal contribution and that of the organisations in which we work to making the world a better place. The answer, I suspect, may lie with sustainable development, in that it could provide the framework within which individuals can satisfy personal aspirations and make a contribution towards the sustainability of the organisation and, in turn, society.

My expectation of the study is that it will serve to highlight to the organisation the need to integrate sustainable development principles with traditional business practices and, in so doing, provide the vehicle for individuals to identify with these broader objectives. This will potentially promote a greater pride in the organisation and, consequently, enhanced contributions from a critical mass of its employees.

1.6 ASSUMPTIONS

I make the following assumptions:

- For employees to want to make a meaningful contribution they need to identify with the goals of the organisation.
- In addition to their efforts contributing to the success of the organisation, they need to believe that they are also benefiting at a personal level.
- An organisation's long-term viability depends on its ability to add value on a number of fronts; that is, economically, ecologically and societally.

- There are sufficient issues of common interest and shared values that promote action towards a systemic and creative development of strategy.
- It is possible to facilitate a shared ideological understanding and to reach agreement on a sustained development agenda between stakeholders within the system.

1.7 MOTIVATION

For the past seventeen years I have worked for Illovo Sugar Ltd. (formerly C.G. Smith Sugar) and have seen the company grow from a Kwa-Zulu Natal-based sugar enterprise to one that has operations in several African countries.

A feature of this time was South Africa's first democratic election in 1994, heralding significant change at all levels of society and within the company. With the calls for economic freedom to supplement the recently-attained political freedom, the challenges to the organisation have been great and these have manifested themselves in a cry for transformation.

As a role-player in the Human Resources arena, the challenges have been primarily with regard to Employment Equity and Skills Development. However, despite not inconsiderable efforts, we have not been able to satisfy the demands of those employees who, in the jargon, are referred to as 'previously disadvantaged'. The Employment Equity Act defines these as black people, women and people with disabilities (Employment Equity Act No. 55 of 1995). Attempts to affect change in these areas have been negatively impacted by the mature state of the South African Sugar Industry and a general shrinking of complements and training budgets.

Faced with this predicament and increasing criticism of the business' apparent unwillingness to change, I have come to the opinion that the definition of transformation

needs to be broadened beyond Employment Equity and Skills Development; in other words, it needs to be more broad-based.

Ironically, whilst criticism abounds, Illovo Sugar has taken its transformation obligations seriously. The Company's 2004 Annual Report highlights performance in this regard. Mention is made of the need to progress Black Economic Empowerment in South Africa, and highlights progress in the fields of human resource development, outsourcing to black enterprises and service providers, and social investment projects. The Report also includes sections on Environment and Sustainability (Illovo Sugar Ltd., Annual Report, 2004).

From the above, one might argue that there already is a sustainable development agenda in place. However, it is my contention that whilst activities supportive of sustainability do take place, they are perceived to be in response to legislation rather than as an attempt to add value to the business. Indeed, they are seen as 'nice-to-do' but not as integral to the business strategy. As a result of broad-based sustainability issues not being debated at entity level, the transformation agenda is restricted to recruitment, promotion and training. By including environmental and societal issues on the business agenda, and by promoting focus thereon at entity level, it is anticipated that Sezela will be able to consider itself as adding value to the society and environment in which it operates.

My studies at the Leadership Centre have exposed me to a number of concepts and issues that have made me consider my organisation's approach to establishing its credibility on the South African business landscape.

The first of these is the concept of systems thinking and, in particular, its components of holism, interconnectedness and interdependence. A holistic and integrated business strategy is not yet a reality. The notions of interdependence and boundaries also raise the question of linkages with other stakeholders and stakeholder entities such as surrounding communities. Other relevant systems concepts that are especially relevant in attempting to design a shared strategic intent are stakeholders, perspectives and worldviews. Given

the variety of stakeholders, both within and external to the organisation, it is inevitable that a plethora of perspectives need to be taken into account should ownership and commitment be your goal.

My studies have also introduced me to the concept of sustainability and the interrelated elements of economic productivity, ecological protection and enhancement, and provision of social infrastructure. In addition to its systemic features, I believe that sustainable development could well be the platform from which to develop a meaningful business strategy. Meaning could evolve at two levels. First, in that it would enable the organisation to deal with the challenges of globalisation; and, second, it would serve as a rallying cry for a broad spectrum of stakeholders.

My motivation in pursuing the above is the desire to investigate a problem situation that I have identified – the lack of a broad-based business strategy that gives due consideration and credence to environmental and social issues. This study, I believe, can be enhanced by using systems thinking and methodologies, thereby providing evidence of the application of theory to improve a real problem situation.

1.8 DELIMITATIONS

The study is positioned within the confines of Illovo Sugar Limited's Sezela business and whatever emerges will be relevant to that situation. It is intended that the emerging model could be utilized within other Illovo operations within South Africa. However, given the dynamic nature of the business environment, the study may only be relevant for a short period of time although the conceptual model developed could be used into the future.

1.9 IMPORTANCE OF THE STUDY

The study will be of value to those interested in developing a sustainable development agenda as a vehicle for making a contribution society and for enhancing stakeholder support for the organisation.

1.10 CHAPTER OUTLINE

The structure of the study is as follows:

Chapter Two provides the context for the study by describing Illovo Sugar Limited's Sezela operation. This operation is presented as a system within a system; that is, it is shown how the business is located within a broader community. The business therefore has a direct impact on the community, both socially and economically. This chapter will illustrate the relationship that exists between the business and the community.

Chapter Three presents a literature review of the key aspects of systems thinking and how these can be applied in the context of the research.

Chapter Four continues the literature review by providing an overview of research and debate on sustainable development.

Chapter Five gives an account of the study process, firstly in terms of the design of the inquiry and, secondly, in terms of implementation. Central to the chapter is the choice of methodology and in this regard a number of systems metaphors are utilised. Implementation is structured around the stages of the enquiry process – 'observing and understanding the problem situation', 'interpreting and structuring' the situation, and 'deciding on new possibilities' to improve the situation. It must be acknowledged that, given the time frame of the process, it is not possible to implement the model in totality.

Chapter Six outlines the process of interaction within the inquiry process and details the outcomes and findings of the stages conducted.

Chapter Seven summarises the findings of the study and considers the applicability of these within the context of the system under review, as well as their relevance to the current debates on sustainability.

CHAPTER TWO

ILLOVO SUGAR LTD., SEZELA AS A SYSTEM

2.1 INTRODUCTION

“Places can be understood as distinct localities with unique economic, social and physical characteristics” (Massey and Jess in Houghton, 2004, 2).

This chapter aims to provide a background to the report by providing information on the ‘the place’ covered by the study, Illovo Sugar’s Sezela business, as well as giving an overview of the South African Sugar Industry, Illovo Sugar Ltd. and the Ugu District within which Sezela is located.

It is important that an appreciation of the systemic nature of the relationship between the above systems and structures, and the prevailing dynamics, is understood if a sustainable development agenda is to be defined. The advice of Midgley, Munlo and Brown (1998) is also important. They suggest that researchers should access a diverse variety of stakeholder views in defining problems so as to ‘sweep in’ relevant information.

These authors also reflect Ulrich’s warning that, whilst it is theoretically sound to include the maximum amount of information when seeking to make improvement, one should limit the ‘sweep in’ process in the interests of pragmatism (Midgley, Munlo and Brown, 1998).

The first subsection of the chapter will give an overview of the South African Sugar Industry; the second will introduce Illovo Sugar Ltd., and the third, Illovo’s South African operations; the fourth will focus on the Sezela business; and the fifth on the Ugu Municipality and the local communities.

This will enable an appreciation of the systemic nature and complexities of the relationships that exist amongst the stakeholders. Further, it will help inform the

methodological framework to be employed to explore the situation and hence formulate options for improvement.

2.2 THE SOUTH AFRICAN SUGAR INDUSTRY

“Because of an extraordinarily distorted world market, sugar is the most volatile of all commodity markets and it makes sugar production a risky business. The partnership spreads this risk through the whole value chain from tilling the soil to refining and packing the sugar. Were the risks to be borne entirely by either partner any industry, significantly exposed to the world market, would collapse” (Ardington, 2001).

Of the fourteen countries that constitute the South African Development Community (SADC), ten produce sugar. South Africa is the largest producer, accounting for about 2.6 million tons of the total SADC output of 5.1 million tons in 2003/04. Of this production, approximately 3.4 million tons were consumed on the local market with the balance of just over 2 million tons being exported into a complex and volatile world market (Illovo Sugar Ltd., Annual Report, 2004) . Unlike the rest of the SADC countries which enjoy preferential access on a quota basis to EU and US markets, South Africa sells excess sugar on the world market at prices below the cost of production. In light of this market reality, it is imperative that that costs of production are kept to a minimum.

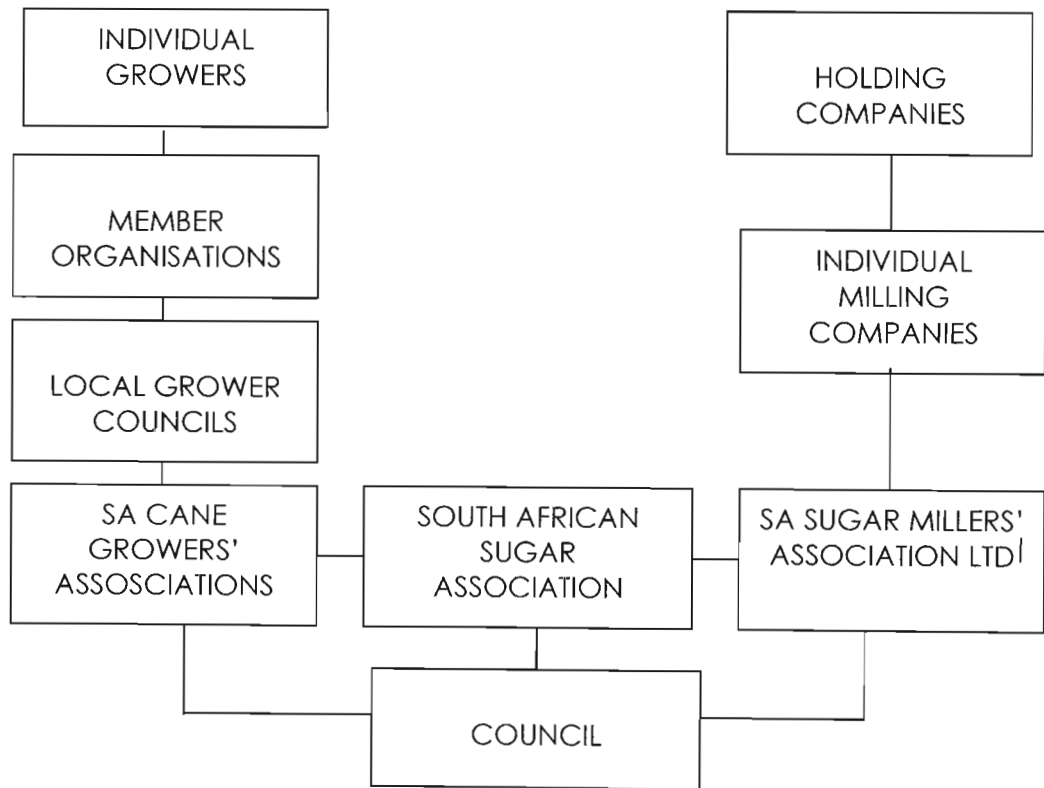
The distortion and volatility of the world market has led to almost worldwide protection of sugar industries by tariffs and other barriers. The result has been two-fold. First, there has been an increase in world production and, second, a number of the world's sugar ‘regimes’ have been largely unaffected by the liberalisation of agricultural trade arising from the Uruguay Round of the GATT currently administered by the World Trade Organisation.

The primary impact on the South African Sugar Industry is its dependence on tariff protection and thus is dependent on government support for its cause. In this regard, the industry has protested to the National Department of Trade and Industry (DTI) that it is

not possible to continue sugar production in a distorted market if there is no protection. The South African sugar industry is wary that government, in respect of their competitive economic policy, will attempt to force a deregulated industry to compete in a regulated market. Thus, it is necessary to constantly assure the government of the need for assistance by way of tariff protection. In support of its case, the industry needs to demonstrate economic viability, a sharing of benefits amongst industry partners, and a contribution to the welfare of the broader society.

One of the features of sugar industries worldwide is the partnership that exists between Growers and Millers. It is the former who are unable to sell their produce except to a sugar mill, and it is the latter who have dedicated factories totally dependent on a regular supply of sugar cane. Regulating this relationship is an arrangement of various support institutions established by the industry and maintained via the Sugar Act and the Sugar Industry Agreement (see Figure 1).

Figure 1: Organisation of the South African Sugar Industry



(From: South African Sugar Association, 2004)

Growers

According to the South African Sugar Industry's Directory (2003/04), 50 000 registered sugarcane growers produce more than 27 million tons of cane from fifteen mill supply areas, extending from Northern Pondoland in the Eastern Cape to the Mpumalanga Lowveld. More than 48 000 are small-scale growers who, in 2003/04 delivered approximately 13% of the total crop. With the growth of economic development and empowerment of previously disadvantaged people, a growing number of medium-scale farmers are entering sugarcane agriculture on farms made available at market-related prices by the major milling companies.

There are approximately 2 000 large-scale growers who produce 75% of total sugarcane production. Milling companies with their own sugar estates produce 12% of the crop. This percentage of the total crop produced by these miller-cum-planter estates continues to decrease as the companies promote more medium-scale farming development.

The interests of the independent growers are administered by the South African Cane Growers' Association.

Millers

The milling sector of the industry employs around 11 000 people in fifteen sugar mills. Of these, five are owned by Tongaat-Hulett Sugar Limited, two by Transvaal Sugar Limited, one by Union Co-operative Limited, two by Ushukela Limited, and the balance by Illovo Sugar Limited.

The South African Sugar Millers' Association Limited represents the interests of all millers and refiners.

2.3 ILLOVO SUGAR LTD.

Illovo Sugar is listed on the JSE Securities Exchange, South Africa and is a leading, global, low-cost sugar producer and a significant manufacturer of high-value downstream products. The group has extensive agricultural and manufacturing operations in six African countries. Downstream products include furfural, furfuryl alcohol, Crop Guard, diacetyl, 2,3-pentanedione, ethyl alcohol, lactulose and syrup.

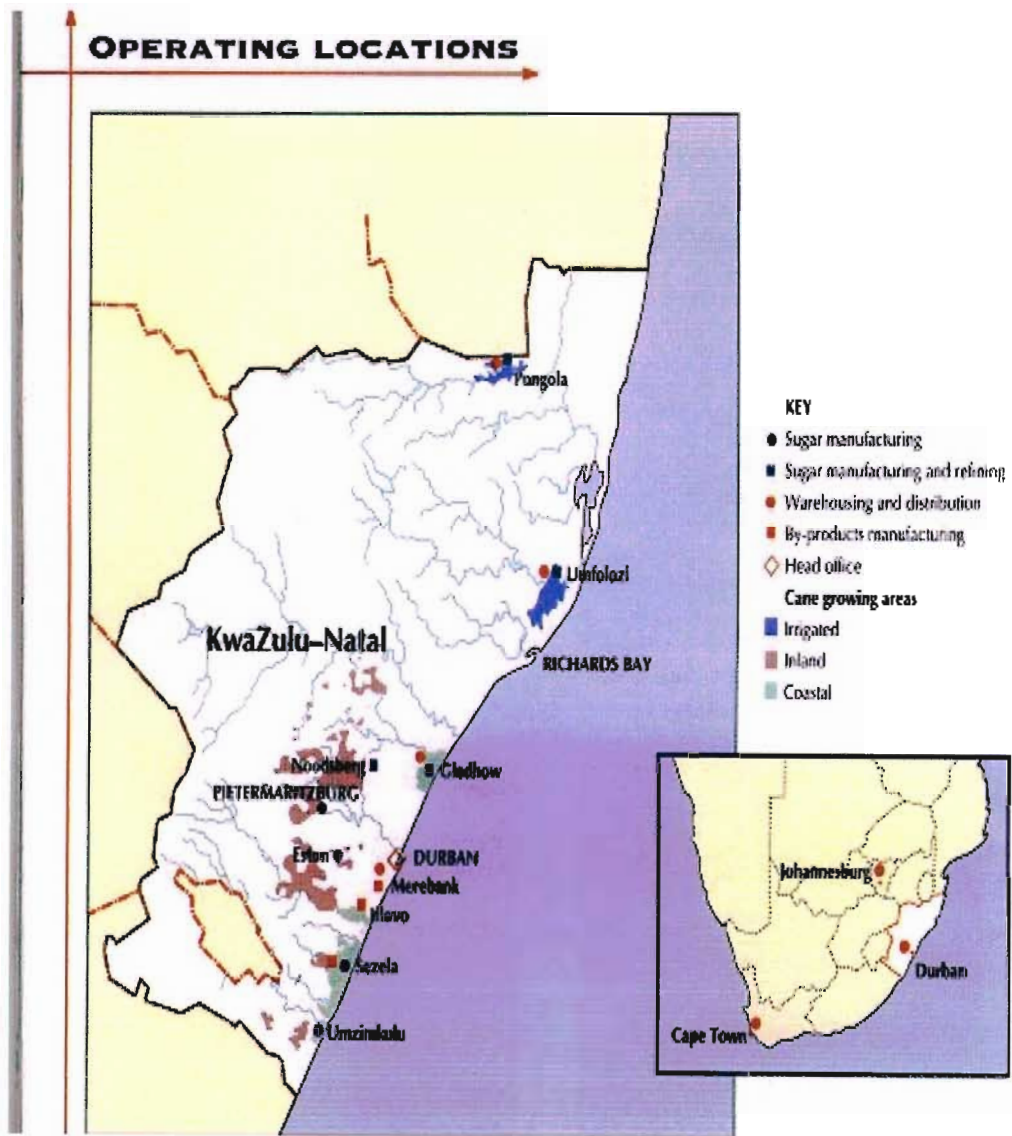
Excellent climatic and soil conditions found in the group's African countries of operation, accompanied by irrigation from secure water sources are ideal for the cultivation of high-yielding and good quality sugar cane. Annual cane production of approximately 5.8 million tons is produced on agricultural estates in South Africa, Malawi, Zambia, Swaziland, Tanzania and Mozambique. Annual sugar production amounts to approximately 2.15 million tons comprising 1.25 million tons made in South Africa, Malawi 260 000 tons, Zambia 230 000 tons, Swaziland 215 000 tons, Tanzania 125 000 tons and Mozambique 65 000 tons (Illovo Sugar Ltd., Annual Report, 2004).

The group is a major supplier of sugar to African consumer and industrial markets particularly in Africa. In South Africa, the group manufactures 48% of all locally produced sugar. Illovo has significant access to preferential markets in Europe and the United States while African operations outside South Africa also have access to the South African Customs Union market in terms of the South African Development Community Sugar Protocol on Trade (Illovo Sugar Ltd., Annual Report, 2004).

2.4 ILLOVO SUGAR, SOUTH AFRICA

Illovo Sugar's South African operations comprise the biggest of the four member companies of the South African Sugar Millers' Association which, together with the South African Cane Growers' Association, are the equal partners in the country's sugar industry.

Figure 2: Map of Illovo's South African Operations



(From: Illovo Sugar Ltd., Annual Report, 2004)

The geographical spread of Illovo's operations ranges from Pongola in northern Kwa-Zulu Natal to Umzimkulu on the province's lower South Coast. Between these two extremes are Noodsberg in the Northern Midlands, Eston in the Southern Midlands, and Sezela on the mid-South Coast. The company also has a downstream operation at Merebank in Durban and a distillery at Glendale. Recently the company has sold its concerns at Gledhow and Umfolozi to Ushukela Milling as part of a Black Empowerment deal, although retaining responsibility for management of the operations for a four year period.

The strategic locations of the operations across the length of the eastern section of Kwa-Zulu Natal maximises the benefit of the diverse growing conditions to be found on the coast, in the midlands and in the irrigated northern regions.

The northern mills at Pongola and Noodsberg manufacture refined sugar and the southern mills at Eston, Sezela and Umzimkulu manufacture raw sugar.

Illovo has also established itself as a leading producer of sugar by-products, the majority of which are sold into international markets. Furfural and its derivatives are made at the Sezela complex as is a variety of flavour compounds, whilst high quality ethyl alcohol, from which various grades of alcohol are made, is produced at the Merebank plant and the Glendale distillery. Lactulose is manufactured at Merebank whilst syrup and speciality sugars are also produced.

2.5 ILLOVO SUGAR, SEZELA

Illovo Sugar's Sezela operations are located in the mid- South Coast within the Umdoni district of the Ugu Municipality.

Established in 1915, the manufacturing operations consist of a sugar mill and a downstream products plant. The former manufactures raw sugar for the export market,

whilst the latter produces a variety of chemical products. These are furfural, furfuryl alcohol, and a range of diketones, including diacetyl, acetoin and 2,3-pentanedione.

With the addition of the downstream operation and the ongoing development of sugar-related by-products, the Sezela site is a practical example of a key element in the company's strategic intent, that is:

- *'to optimise the return on every stick of sugar cane by adding value to its core commodity products'* (Illovo Sugar, Annual Report, 2004).

Critical to the success of both operations is a continuous supply of sugar cane during the crushing season (approximately April to December). To ensure the supply of raw material the company relies on a variety of sources. An analysis of statistics pertaining to the 2003/04 year reveals that of the 43 248 hectares cane supply area, 8 233 (19%) belongs to the company and is farmed as part of its miller-cum-planter operation. A further 35 015 hectares belongs to private growers and this is in turn categorised into large-scale commercial growers (29 056 hectares), and small-scale Black growers (5 959 hectares). Together, these farms grew 2 014 283 tons of sugar cane in the year and this yielded 241 320 tons of sugar. In addition to these sources of sugar cane, and to optimise the mill's crushing capacity, Sezela also takes cane from outside of its official cane supply area by way of diversions from the Eston and Umzimkulu cane supply areas.

The changing profile of the protagonists within the cane supply arena has been a feature of recent years. As part of its commitment to Black Economic Empowerment, and in order to promote agricultural and economic development at a grass-roots level, the company has embarked upon a land reform programme. This initiative has seen the transfer of a significant percentage of its land holdings to communities previously unable to own land and, or lacking the resources to farm effectively. The majority of these medium (average size of farm 100 hectares) and small-scale farmers (average size of plot 1 hectare) are Black, and there are various programmes in place to assist local people to purchase their own farms and establish their own cane-growing operations. Within the

Sezela cane supply area, a total of 2 331 hectares, equating to 21% of company property, has been transferred to Black and Asian farmers since 2000.

Table 1 below illustrates performance in key areas over the past four years.

| | HA CANE | | | TONS CANE | | | TONS SUGAR | | TONS FURFURYL | |
|----------------|--------------|-------|----|--------------|---------|----|--------------|--------|---------------|-------|
| 2003/04 | TOTAL | 43248 | % | TOTAL | 2014283 | % | TOTAL | 241320 | TOTAL | 20190 |
| | Diversions | | | Diversions | 261884 | 13 | | | | |
| | MCP | 8233 | 19 | MCP | 323481 | 16 | | | | |
| | Comm | 29056 | 67 | PG | 1249264 | 62 | | | | |
| | S/MSF | 5959 | 14 | S/MSF | 179653 | 9 | | | | |
| 2002/03 | TOTAL | 45324 | | TOTAL | 2321366 | | TOTAL | 283436 | TOTAL | 21151 |
| | Diversions | | | Diversions | 138015 | 6 | | | | |
| | MCP | 9620 | 21 | MCP | 437134 | 19 | | | | |
| | PG | 28566 | 63 | PG | 1489302 | 64 | | | | |
| | S/MSF | 7138 | 16 | S/MSF | 256916 | 11 | | | | |
| 2001/02 | TOTAL | 45933 | | TOTAL | 2187376 | | TOTAL | 234637 | TOTAL | 19877 |
| | Diversions | | | Diversions | 171827 | 8 | | | | |
| | MCP | 10410 | 23 | MCP | 467417 | 21 | | | | |
| | PG | 28474 | 62 | PG | 1290760 | 59 | | | | |
| | S/MSF | 7049 | 15 | S/MSF | 257373 | 12 | | | | |
| 2000/01 | TOTAL | 44996 | | TOTAL | 2490169 | | TOTAL | 271422 | TOTAL | 21674 |
| | Diversions | | | Diversions | 104781 | 4 | | | | |
| | MCP | 11177 | 25 | MCP | 525392 | 21 | | | | |
| | PG | 26717 | 59 | PG | 1556746 | 63 | | | | |
| | S/MSF | 7102 | 16 | S/MSF | 303250 | 12 | | | | |

Regarding staffing, as of February 2005 the company employed 701 permanent employees, 464 in the Industrial sector and 237 in the Agricultural. The latter operation also employs, on average, 550 cane-cutters on a fixed-term contract basis and 700 field workers on a seasonal basis.

When compared with those of 2000, the complement statistics indicate a significant reduction in the number of permanent employees. This has been a result of changes in technology and business processes, the sale of assets such as farms, and the outsourcing of certain functions.

Full complement details are indicated in Table 2 below.

Complement tables

2005

| INDUSTRIAL & AGRICULTURAL | | | | | | | | | Total |
|---------------------------|-----|--------|-----|--------|----|-------|----|--------|-------|
| GRADE | A | % | B | % | C | % | W | % | |
| SM | 2 | 10.00% | 1 | 5.00% | 0 | 0.00% | 17 | 85.00% | 20 |
| MM | 5 | 20.83% | 3 | 12.50% | 0 | 0.00% | 16 | 66.67% | 24 |
| FLM | 18 | 33.96% | 10 | 18.87% | 5 | 9.43% | 20 | 37.74% | 53 |
| C BAND | 47 | 43.93% | 43 | 40.19% | 3 | 2.80% | 14 | 13.08% | 107 |
| B BAND | 96 | 24.43% | 286 | 72.77% | 2 | 0.51% | 9 | 2.29% | 393 |
| A BAND | 2 | 1.75% | 112 | 98.25% | 0 | 0.00% | 0 | 0.00% | 114 |
| Grand Total | 170 | 23.91% | 455 | 63.99% | 10 | 1.41% | 76 | 10.69% | 711 |

2000

| INDUSTRIAL & AGRICULTURAL | | | | | | | | | Total |
|---------------------------|-----|--------|-----|--------|----|-------|----|--------|-------|
| GRADE | A | % | B | % | C | % | W | % | |
| SM | 2 | 13.33% | 1 | 6.67% | 0 | 0.00% | 12 | 80.00% | 15 |
| MM | 4 | 22.22% | 2 | 11.11% | 0 | 0.00% | 12 | 66.67% | 18 |
| FLM | 21 | 35.59% | 13 | 22.03% | 4 | 6.78% | 21 | 35.59% | 59 |
| C BAND | 57 | 46.72% | 42 | 34.43% | 5 | 4.10% | 18 | 14.75% | 122 |
| B BAND | 111 | 23.32% | 357 | 75.00% | 2 | 0.42% | 6 | 1.26% | 476 |
| A BAND | 6 | 3.82% | 151 | 96.18% | 0 | 0.00% | 0 | 0.00% | 157 |
| Grand Total | 201 | 23.73% | 566 | 66.82% | 11 | 1.30% | 69 | 8.15% | 847 |

2.6 THE UGU DISTRICT MUNICIPALITY

As indicated earlier, the Sezela business is located within the Ugu District Municipality in the south east of the province of Kwa-Zulu Natal and consists of six local municipalities that together cover an area of 5866 km². The Ugu District incorporates both coastal and interior areas, each with a variety of social, economic and political characteristics.

Figure 3: Map of the Ugu District Municipality



(From: Ugu District Municipality, Annual Report, 2002/03)

Ugu has a population of about 710 000 people. Just sixteen percent of the population is classified as urban while the balance dwells in rural areas. Sharp divisions of wealth and development needs and opportunities exist between the coastal and interior of the District because of the disparate histories of group areas that resulted in unequal resource allocation between previously demarcated black interior areas and white coastal areas. The former black areas are characterised by poor infrastructure, minimal service delivery and much reliance on subsistence agriculture.

To compound problems in the area, unemployment figures within the Ugu District are high. As of 2002, an average of 47.7% of the potentially economically active people within the District were unemployed although within the rural areas the rates are far higher than on the coast, reaching 70-80% (Ugu District Municipality, 2002/03).

It is realities such as those outlined above that impact upon Illovo's Sezela business. Not only are the company's agricultural and manufacturing operations located within the region and, therefore, affected by the transformation that prevails at a social, economic and political level, but there is an expectation that the company be an active participant in change initiatives across each of these arenas.

As a guide to transformation, the government has introduced legislation that has a strong sustainable development focus. Examples such as the National Environmental Management Act and the Urban Development Framework have placed responsibility on local authorities to manage their environments. However, the local authorities lack the resources to deal with these challenges and to facilitate rapid development in previously disadvantaged areas (O' Riordan, Preston-Whyte, Hamann and Manqele, 2000, in Houghton, 2004).

In an effort to assist local governments to improve levels of sustainability, Local Agenda 21 can be a useful tool to raise environmental awareness and build environmental decision-making skills within local authorities. It is this programme that was used in a workshop run by University of Durban-Westville in partnership with the University of Natal, Durban. Emerging from a workshop which focused on the Ugu District Council, were a number of key issues that needed to be addressed. These were social justice, improved health care, clean water, electricity, educational facilities and housing. In addition, the workshop identified activities which would address past injustices and contribute to improving levels of equity. These activities included the improvement of economic opportunities so that communities could begin to support themselves (Houghton, 2004).

A review of some of the challenges facing the Ugu District reveals that they are particularly relevant to the environs within which Sezela's manufacturing and agricultural operations are located. It is for this reason that any exploration of a sustainable development strategy developed by the company needs to take these realities into account.

In considering the relationship between place and society, I was mindful of Oelofse's opinion that localities can influence both the ways in which people interpret the nature of a place and the kinds of individual and collective actions that occur in places. In addition, localities can also prevail upon an individual or group to create particular understandings and consequent actions. As Houghton says: "Because society and place are integrally linked in localities, individuals and groupings within society should be seen as key to local level changes in development practices, environmental management and improvements in quality of life that result in improved sustainability" (Houghton, 2004, 2).

In summary, this chapter introduces the 'place' in which the study is located. It further illustrates the contextual reality of Illovo Sugar Limited as Sezela's 'holding company', as well as the South African sugar industry in which the company is located. It outlines the partnership arrangement between the growers and the millers and indicates the structures that support democratic leadership. The chapter also provides insight into the socio-economic realities of the Ugu District and indicates the potential of local development activities to ensure support for economic productivity.

CHAPTER THREE

SYSTEMS THINKING

3.1 AN INTRODUCTION TO SYSTEMS THINKING

A central tenet of the Leadership Centre and one that is critical to my particular course of study is that of Systems and Systems Thinking.

This chapter will attempt to explain Systems and related elements and will, *inter alia*, trace the development of systems theory, expand on key concepts, and review certain methodologies. In an attempt to focus this, I will make reference, in the main, to those which are of relevance to organisations.

Following a theoretical exposé, one (or more) of these methodologies will be used to address the particular system of interest that I have selected for the dissertation.

In attempting to ascertain when it was that Systems Age began and, indeed, having some difficulty, I was comforted by the opinion of Ackoff who contends that no age has a definite starting point. Instead, it emerges incrementally so that an awareness that something fundamental is happening, thus providing a new world view (Ackoff, 1999).

Ackoff goes on to say that a catalyst for doubting the prevailing view is the emergence of dilemmas that cannot be solved within the existing paradigms. The latter part of the nineteenth century and the early part of the twentieth saw an increasing amount of these dilemmas, as well as an increasing inability to deal with them. Such an awareness became particularly apparent in the years immediately prior to, during, and after the Second World War.

What emerged in response to these difficulties was the realisation that they could not be broken down into their component parts and dealt with in isolation of each other. In fact,

the interaction between the parts was of greater importance than the independent consideration of solutions.

This realisation was to have a profound impact in that it challenged the traditional method of problem-solving via the doctrines of reductionism and determinism. In essence, this entailed analysing the situation by reducing it to its elements, trying to understand the behaviour of the parts taken separately, and then trying to assemble this understanding into an understanding of the whole. Important in developing this understanding was an explanation of the relationship between the parts and how they interacted. The prevailing opinion was that a simple cause-and-effect relationship was enough to explain all interactions. These doctrines of reductionism and determinism led to the world being viewed as a machine; that is, as mechanistic. It was this worldview that was challenged by the proponents of the systems approach.

According to Flood and Jackson (1991, 3), “systems thinking is traditionally accepted as emerging in the 1940’s as a response to the failure of mechanistic thinking to explain biological phenomena.” By “mechanistic thinking”, they refer to the Cartesian philosophy or paradigm, advanced by Copernicus, Galileo, Descartes, Bacon, Newton and others, that states that complex phenomena can only be understood by analysing the elementary parts. This belief is a product of analytical thinking.

Opposed to this paradigm were the organismic biologists who, as Capra points out, recognised that complex phenomena such as living organisms and social organisations are made up of interrelated, interacting and interdependent parts (Capra, 1996). As Capra indicates: “From that time on, a system has come to mean an integrated whole whose essential properties arise from the relationship between its parts, and ‘systems thinking’ the understanding of phenomena within the context of the whole” (Capra, 1996, 27).

In line with this paradigm, Joseph Woodger studied the organisational complexity of living organisms and concluded that the organisational structure of such organisms is hierarchical in nature. He further recognised that each hierarchical level of living

organisms represents a system within the larger system, which operates under its own laws (Capra, 1996). Each of these systems, according to Woodger, forms a whole with respect to its parts whilst at the same time being a part of a larger whole. Related to the notion of hierarchy is the concept of “emergent properties” which refers to those properties that emerge at a certain level of complexity but do not exist at lower levels.

Another important observation of the supporters of the organismic view is that the study of organised complexity in living organisms must be contextual; that is, each observed phenomenon within the system must be understood in light of both its internal and external environments. In their view there are two types of system – open and closed. The former is seen as a system of high complexity in that it is in constant interaction with its external environment with each modifying the other and being modified in turn. The latter is, on the other hand, cut off from its external environment with the result that there is no exchange of energy or information (de Rosnay, 1975). This distinction is critical in understanding organisational complexity.

The ideas of the organismic biologists had an impact upon other academic disciplines. This led to the emergence of an inter-disciplinary approach called “the systems approach”. According to de Rosnay (1975, 1), this approach is “a new methodology that makes possible the collection and organisation of accumulated knowledge in order to increase the efficiency of our actions.”

In his view, the systems approach inherited three basic principles of organismic biology:

- The concept of a system - complex phenomena are understood as systems.
- The notion of contextuality – organised complexity can best be understood by exploring the interactions and relationships among the various parts of the complex system as well as by exploring their external environment in the case of open systems.
- The notion of emergent properties – that within a complex system are other systems with varying amounts of complexity.

Ackoff has also commented on systems thinking and the systems approach. He has commented that the key to systems thinking is the belief that a whole cannot be understood by analysis, or the breaking down of the whole into its constituent parts. Instead, it is synthesis, or putting things together, that is essential to gaining understanding. As opposed to the reductionist focus of the Machine Age, the focus is on expansion. To illustrate this, I refer to the three steps of the systems approach outlined by Ackoff:

1. Identify a containing whole (system) of which the thing to be explained is a part.
2. Explain the behaviour or properties of the containing whole.
3. Then explain the behaviour or properties of the thing to be explained in terms of its role(s) or function(s) within its containing whole (Ackoff, 1999).

At this stage I believe it necessary to engage with what is meant by the concept of systems. Particular focus will be on that which is applicable to the organisational context.

Once again, I refer to the work of Ackoff who defines a system as, “A set of two or more elements that satisfies the following three conditions:

- The behaviour of each element has an effect on the behaviour of the whole.
- The behaviour of the elements and their effects on the whole are interdependent.
- However subgroups of the elements are formed, each has an effect on the behaviour of the whole and none has an independent effect on it” (Ackoff, 1999, 15/16).

Ackoff has identified three basic types of systems and models of them: Deterministic, Animated and Social. Of relevance in this instance is the last-mentioned that have purposes of their own, contain parts that have purposes of their own, and are usually parts of larger social systems that contain other social systems.

Regarding models, it is argued that it is important to apply the appropriate model to the system in question if one wants to use the model to usefully describe and understand the behaviour of a particular system. To illustrate this, Ackoff argues that it is necessary to apply social-systemic models to social systems. To expand on this, he proposes an organisational design, based on a social-systemic model that has the following five characteristics:

1. It is a democratic organisation.
2. It has an internal market economy.
3. It has a multi-dimensional organisational structure.
4. It uses interactive planning.
5. It contains a decision support system that facilitates learning and adaptation

(Ackoff, 1999).

Ackoff has developed a behavioural classification of systems.

The first of these is referred to as a *state-maintaining system*, and reacts only to changes and has the function of maintaining the state it produces. The second is a *goal-seeking system*, or one that is able to respond differently to a particular event in an unchanging environment until it produces a particular outcome. Implicit in this system is choice and the sequence of behaviour that results in the goal being achieved is a process. Thirdly, there is a *multi-goal-seeking system* that is goal-seeking in each of two or more external or internal states. Different goals in at least two different states are sought with the goal being determined by the initial state. Fourth is the *purposeful system* which can produce the same outcome in different ways in the same state and can produce different outcomes in the same and different states. Such a system can change its goals under constant conditions (Ackoff, 1999).

The type of system that it is most important to management scientists is the organisation which, based on the afore-mentioned classification, has been defined as, “A purposeful

system that contains at least two purposeful elements which have a common purpose relative to which the system has a functional division of labour; its functionally distinct subsets can respond to each other's behaviour through observation or communication; and at least one subset has a system-control function" (Ackoff, 1999, 61).

3.2 SYSTEMS METHODOLOGIES

In an attempt to provide some structure to the various strands that make up the systems movement, Michael C. Jackson has identified five distinct systems methodologies that can be used for the purpose of understanding or intervening in the real world. These are: the organisations-as-systems tradition, hard systems thinking, organisational cybernetics soft systems thinking, and critical systems thinking (Jackson, 1991).

3.2.1 Organisations-as-Systems

Jackson notes that from the 1930's onwards, three schools of management were dominant – the traditional approach, human relations theory, and systems theory (Jackson, 1991). Supporters of the last-mentioned maintained that organisations should be seen as whole systems comprising inter-related parts. This approach was deemed 'holistic' in that it looked at organisations as wholes. Furthermore, the systems approach saw the organisation as an 'open system' in that it was in constant interaction with its environment. These opinions were in contrast to the traditional and human relations approaches that were 'reductionist' and 'closed' in that they saw parts of the organisation as independent of one another and ignored the external environment.

In tracking the organisation-as-systems approach, Jackson refers to certain landmark models for studying organisations. These are Barnard's Systems Thinking based on the notion of 'equilibrium', Sociological Systems Theory, and General System Theory. In addition, reference is made to Contingency Theory and Sociotechnical Systems Thinking. Notwithstanding the fact that the organisation-as-systems tradition is regarded as an improvement on the traditional and human relations approaches, it has been criticized.

In the first instance, because it sees survival as the primary objective of organizations, purposeful goal-oriented activity is discounted. Implicit in this is the contention that centres of command and control in organizations are not properly located and that little is done to measure the organisation's ability to achieve its goals.

This approach gives organizations the power of independent thought and action and that activity is in response to the need to adapt to the environment and to maintain the status quo by preserving the structures. The approach does not adequately explain why this adherence to existing structures is so important.

A further criticism of the approach is its emphasis on social order in organizations and the exclusion of diversity, instability and conflict. There is an over-emphasis on unity of purpose and interdependence amongst the component parts. This view sees the organization as a unified whole, working for the good of all it serves, and any conflict that prevails is a threat to all. This disguising of conflict leads to the criticism that the approach is biased towards management.

A final weakness of the organization-as-systems approach is that many of its remedies for changing organizations are vague and untested. In fact, because the preferred option is to preserve the system, any radical ideas for improvement are not considered.

3.2.2 Hard Systems Thinking

Hard systems thinking may be seen as a process of performance optimization, the aim of which is to improve knowledge about the 'world' by building formal, representative models of this 'world'. The best known of the variants in this arena include Systems Engineering, Systems Analysis, Systems Dynamics and Operational Research. Regardless of the methodology chosen, the objective is either to improve the performance of the system given predetermined measures of performance, or to design a system to achieve a given purpose.

It was Checkland who identified the basic premise of the above methodologies as, “the assumption that the problem task they tackle is to select an efficient means of achieving a known and defined end” (Jackson, 1991, 73).

The hard systems approaches are based on the following assumptions about the problem situation:

- The problem has been clearly identified, the objectives of the decision-maker(s) are known and there exist criteria to ascertain when they have been achieved; the alternative courses of action are specified, either as a list of options or sets of decision variables; the constraints on the decision choices are known; and all necessary input data is available.
- The problem is relatively well structured, meaning that the relationships between the variables are tractable; they can be expressed in quantifiable form; and the computational effort for determining the optimal solution is economically feasible.
- The problem can be sufficiently well insulated from its wider system of interest.
- The problem is of a technical nature, largely devoid of human interests.
- The decision maker can enforce implementation of the solution.

A review of hard systems thinking reveals a number of weaknesses in the approach. The first of these is the requirement that objectives are clearly defined at the outset of the methodological process. Whilst this may be appropriate for situations in which the ends are clear and easy to specify, in most situations this is not the case. This difficulty in defining objectives is especially apparent when a number of parties are involved, each with their own worldviews and perspectives. In the event of disparate views and opinions, the temptation of the hard systems thinkers is to try and fit the nature of the problem situation with their preferred methodology.

A second criticism is the failure of the hard systems approach to acknowledge sufficiently the human element within the system under review. The system is put before people and the latter are seen as mere components to be engineered, as are other

mechanical parts of the system. Proponents of the approach ignore the fact that people can influence what happens to them; instead the belief is that the future is shaped by factors beyond human control.

A third criticism is leveled at the demand for quantification and optimization. Once again, this is relatively easy to do in an 'engineering-type problem' but less so in highly complex situations. Often this demand for quantification leads to an ignoring or distortion of factors that are not easily quantifiable. This sometimes leads to flawed quantitative models with irrelevant solutions.

The fourth criticism pertains to the preference of the hard systems thinkers to maintain the status quo and to bury conflict. Given the complicated technology that is used, the consultants using this approach are seen as experts. This is a reputation that they enjoy and they can use this as a tool to protect their position as the elite. Ordinary people are intimidated by the complicated modeling techniques and lack the confidence to contribute to decision-making. The end result is that the consultant favours the most powerful stakeholders, thus ensuring that change is kept to a minimum.

With increasing criticism of the hard systems approach, largely as a result of its inability to deal adequately with the behavioural and social aspects of complex situations, alternative systems approaches began to appear. One of these was Organisational Cybernetics.

3.2.3 Organizational Cybernetics

In reviewing this field of study, one becomes aware of the distinction between 'management cybernetics' and 'organisational cybernetics'. The former, according to Jackson, promotes the tendency to treat organisations as machines and, therefore, can be criticised for having the same weaknesses as hard systems thinking. These he articulates as an inability to deal with subjectivity and with complex organisation systems, and an inherent conservatism (Jackson, 1991). On the other hand, 'organisational cybernetics'

offers a break with the assumptions of the hard approach. It is this approach that I will look at it in some detail.

However, before looking closer at this particular version of cybernetics, it is necessary to look at the historical development of, and key principles underlying the methodology.

The term cybernetics originates from the Greek term for “the art of steersmanship” and was introduced as an interdisciplinary science by Norbert Wiener in 1947. The two key concepts introduced by Wiener were those of communication and control and central to understanding the latter was the concept of negative feedback. In essence, he said that to control the actions of a machine or a person one needs to communicate with that machine or person. Thus, control involves the communication of information.

Barry Clemson sees cybernetics as introducing a framework for thinking about organisations and management. He sees it as providing a set of natural laws, theorems and principles that specify the limits for organisations (Clemson, 1984) In other words, much like physics places boundaries about what is scientifically possible, cybernetics identifies limits on what is possible for organisations and what is not.

Three of the most important principles are what are known as the Laws of Cybernetics, namely Self-organisation, Feedback, and The Law of Requisite Variety. It is these that provide guidance and limits for organisational interventions, particularly when dealing with social systems and institutions. Let me explore each of these in turn.

The *Self-organising Systems Law* states that complex systems organise themselves and that the characteristic structural and behavioural patterns in such a system are primarily the result of interactions among the system parts. In short, systems are the way they are because they have organised themselves to be that way. Complex systems have basins of stability separated by thresholds of instability, meaning that some configurations of the system are stable and others not. The imperative suggested by this law is that the

designers and reformers of organisations need to understand into which catchment basin they are setting their systems (Clemson, 1984).

The output of a complex system is dominated by feedback and, within wide variations, the input is irrelevant. Moreover, all inputs that are important to the system will have associated feedback loops. The *Feedback Systems Law* can be stated, as any desired result that has no systemic feedback loop will not be achieved, or any system that lacks a feedback loop for desired output is defective. Feedback loops are one of the critical elements that make self-organising systems work the way they do. The particular behaviour of self-organising systems can largely be explained by invoking states of interlocking feedback loops.

Ross Ashby's *Law of Requisite Variety* states that a regulator has requisite variety; that is, has the capacity to maintain the outcomes of a situation within a target set of desirable states. This means that the regulator must have the capacity to produce responses to all the disturbances that are likely to take the outcomes out of its target set. Therefore, to maintain a situation under control, there must be at least as much variety available to the controller as is exhibited by the system itself. At a practical level, and given that variety is the number of possible states of the system, the objective of the manager is to balance variety. This can be done by increasing or amplifying their own variety whilst reducing income variety. This will actually increase the range of options available and the effectiveness of these in managing complexity.

One who has made an enormous contribution to the field of cybernetics is Stafford Beer who expanded Weiner's original definition and articulated cybernetics as, "the science of effective organization" (Clemson, 1984, 19). Beer also developed a model of any viable system, the Viable Systems Model (VSM), which could be used to diagnose the faults in any existing organisational system or to design new systems along cybernetic principles (Jackson, 1991).

The VSM is a model of the organisational features of any viable system and is generally considered the most developed and usable expression of organisational cybernetics. In the following critique of the methodology, the VSM will be used as its representative. The strengths of the model are explained below.

In the first instance, the VSM as a result of the notion of 'recursion', is able to deal with organizations that are both horizontally and vertically interdependent. This is a result of the model allowing the sub-systems a degree of autonomy within the overall systemic cohesiveness. This ability allows the VSM to deal with the centralisation versus decentralization issue, a feature of many organisations.

Secondly, because the parts within the VSM are given relative autonomy, control is spread throughout the system. This feature enables the self-organising tendencies inherent in complex systems to be utilized effectively, as well as allowing problems to be corrected at source. From a human perspective, the model leads to increased motivation at lower levels within the organisation and allows management to focus on the higher-level functions.

A further positive feature of the VSM is that it uses information requirements and information systems as the basis of organisational design. This is contrary to the traditional and outdated hierarchical model.

Fourthly, the model promotes close interaction between the organisation and its environment. This, in turn, enables the organisation to both influence and be influenced by its environment.

Another advantage of the VSM is that it can be used as a tool to diagnose and make recommendations for improving the performance of the organisation. This is important in ensuring survival and effectiveness.

Finally, as the model is based on a democratic paradigm, it goes a long way to acknowledging the human element within organisations. Decentralisation of control and maximizing the autonomy of each of its parts and, in particular, the individual therein, is promoted; in fact, the only constraint allowed is that which is necessary for overall system cohesion and variety.

In reviewing the VSM as the representative of organisational cybernetics, one is also made aware of some of the criticisms leveled at it.

The first of these comes from Checkland who maintains that the VSM represents only a part of the organisation and, in fact, excludes the most important component, its people (Jackson, 1991). This opinion is echoed by other critics, including Ulrich, who also criticize the model for underplaying the role of individuals in organisations. Ulrich maintains that cybernetic models omit the important features of human purposefulness and self-reflectiveness. This could have the effect of managers placing too much emphasis on organisational design and not enough on the role of individuals in organisations (in Jackson, 1991). Allied to the above is the further criticism that, when applied in practice, the VSM serves the narrow interest of elite groups. In this instance, it is suggested that there are autocratic implications.

In terms of a progression, it may be said that organisational cybernetics is more concerned with the non-human aspects of complexity and subjectivity than is hard systems thinking. Similarly, soft systems thinking is further advanced along the dimension concerned with people issues such as their perceptions, values and interests. In acknowledging that there are multiple perceptions of reality, soft systems thinking introduces yet another opinion on how systems ideas can be used to help with problem solving and decision-making. This methodology is particularly useful in trying to deal with messy and poorly structured problem situations.

3.2.4 Soft Systems Thinking

Soft systems approaches, also known as interpretive systems approaches, address problem situations that are messy, ill-structured, and ill-defined in terms of their human components and relationships. In addition, the situations are not independent of the people involved and the different stakeholders have different world views, different perceptions, and there may not be agreement on the objectives or even the possible actions.

Characteristics of such approaches include:

- Structuring the problem situation, rather than by problem solving.
- Facilitating dialogue between the various stakeholders with the aim of achieving a greater degree of shared perceptions about the problem situation, rather than providing a decision aid to the decision maker.
- Asking more 'what' than 'how' questions.
- Eliciting the resolution of the problem through debate and negotiation between the stakeholders, rather than from the analyst.
- Changing the role of the problem analyst to one of becoming a facilitator and resource person who relies on the technical subject expertise of the stakeholders.

The soft systems approach emerged as a result of dissatisfaction with the limitations of hard systems thinking and, in particular, the failure of systems engineering to cope with anything other than well-structured problem situations. Fundamental to the approach is the acknowledgement that to understand social systems it is necessary to understand the perspectives and intentions of the people who create those systems. Given that it is humans who give meaning to those systems, it was suggested by theorists that it was impossible to use the methods of the natural sciences to study such systems (Vickers in Jackson, 1991).

Central to soft systems thinking was thus an understanding of the Weltanschauungen, or worldviews, or the ‘appreciative systems’ employed by individuals to understand and construct their social world (Jackson, 1991). It was Churchman who first used the term, ‘Weltanschauung’ to encapsulate the beliefs, assumptions, values and interests that people bring to any situation. The notion of appreciative systems was developed by Vickers who defined them as, “the interconnected set of largely tacit standards of judgement by which we both order and value our experience” (Vickers in Jackson, 1991, 135). It is these systems that determine how we see situations, make judgements and take action; in other words, how we contribute to the construction of the social world. Soft systems thinking is represented by the work of Churchman’s Social Systems Design, Mason and Mitroff’s Strategic Assumption Surfacing and Testing, Ackoff’s Social Systems Sciences, and Checkland’s Soft Systems Methodology (SSM).

3.2.4.1 Soft Systems Methodology

SSM, as a variant of soft systems thinking, may be summarised as follows:

“SSM is a methodology that aims to bring about improvement in areas of social concern by activating in the people involved in the situation a learning cycle which is never ending. The learning takes place through the iterative process of using systems concepts to reflect upon and debate perceptions of the real world, and again reflecting on the happenings using systems concepts” (Checkland and Scholes, 1990, 28).

More precisely, the methodology may be described as a collaborative approach to managing human beings, involved in messy complex situations, for purposeful activity (Lockett, 2003).

As indicated above, SSM is closely allied of the concept of learning and, in fact, the cyclical nature of the process may be linked with Kolb’s Learning Cycle. This link is clarified by Checkland and Scholes who contend that experiential learning, manifested in Action Research, means “involvement in a problem situation and a readiness to use the

experience itself as a research object about which lessons can be learned by conscious reflection” (Checkland and Scholes, 1990, 16). Immersion in the situation will ideally reveal issues that can be addressed, thereby leading to an improvement in the problem situation.

The linkages between SSM and The Learning Cycle are illustrated below:

| SSM | LEARNING CYCLE |
|---|----------------|
| Experiencing a real world situation | Observing |
| Developing relevant models | Connecting |
| Comparing models with perceived situation | Deciding |
| Taking action for improvement | Implementing |

The main strength of soft systems methodologies lies in their ability to secure and expand mutual understanding amongst individuals within social systems. They certainly promote intersubjective understanding. However, just as communication and understanding are seen as strengths, we are reminded that communication must be free from distortion, otherwise genuine shared purposes may not materialise.

As Jackson (1991) points out, the only justification for implementing the results of a soft systems intervention is that the results and implementation have been agreed upon via process that has involved full and voluntary debate amongst all stakeholders. It is therefore imperative that everything possible is done to promote such openness and participation. Once again, the key is effective communication.

Critics of the soft systems approach are, however, critical of it for not always ensuring the social arrangements that facilitate this. Practitioners too often fail to take into account the possibility and, indeed, existence of distorted communication.

Central to criticism is that the conflict dynamic is downplayed or ignored. This is a very artificial situation given the prevalence of conflict in organisations and society.

A further perceived weakness is the reliance that soft systems practitioners place on participation. Not only do they see it as essential to their methodology, but they believe that all stakeholders will participate willingly. Emerging from this conviction is an unwillingness to acknowledge the obstacles to meaningful participation. Aligned to the notion of participation is the misplaced belief that stakeholders will be involved as equals. The reality, it is pointed out, is that the more powerful will be able to 'threaten' the less-privileged to limit their demands. This unequalness is a function of power. In short, the results obtained by soft systems methodologies are said to favour the powerful.

Soft systems practitioners are also criticised for their unwillingness to challenge the interests of their clients or sponsors; in other words, the stakeholder with the power. All too often, it is contended, important issues are kept off the agenda, information is restricted, and the choice of changes to implement is controlled by them. As Thomas and Lockett note: "... working for powerful clients will restrict the emergence of alternative, radical world views in SSM and lead only to reformist recommendations for change" (quoted in Jackson, 1991, 164).

Whilst acknowledging the above criticisms, there is no doubt that theorists such as Churchman, Ackoff and Checkland have gone a long way to helping managers sort out real problems, problems where neither the problem nor the values underpinning an improvement are well-defined.

3.2.5 Critical Systems Thinking

Just as soft systems thinking developed as a response to perceived shortcomings in the hard systems approach, so critical systems thinking developed out of the criticisms leveled at soft systems thinkers. Whilst it is difficult to identify a particular starting point, it is considered that critical systems thinking (CST) has its roots in the early 1980's work of Jackson, Mingers and Ulrich.

CST aims to foster systemic debate on social ends and power relationships, as well as on the relationships between various systems approaches and their underlying paradigms in an effort to assess their suitability for various problem solving characteristics and guide their use. The latter has led to the recognition of *methodological pluralism* – that by a critical awareness of the strengths and weaknesses of different methods and methodologies the most appropriate ones can be chosen to address a wider range of problem issues than a single method; or *multimethodology* – that various methods and methodologies are used in combination for different aspects of the intervention or aspects of one can be borrowed and incorporated into another for more effective results. A further feature is that of *boundary critique*, which is seen as the necessary front-end for all interventions in order to assess and manage conflicts of values and interests and power relationships.

One of its original proponents, Michael Jackson, identified five major commitments, or features, of CST (Jackson, 1991). Midgley, however, points out that these were later reduced to three (Midgley, 1996).

The first of these was the commitment to *critical awareness*. Midgley refers to three forms of critical awareness. First, there needs to be an understanding of the strengths and weaknesses and the theoretical underpinnings of the available systems methods, techniques and methodologies. Second, there must be an understanding of both the context of application and the possible consequences of using the methodology. Third, there has to be a close examination of the assumptions and values entering into actually existing systems designs (Midgley, 1996).

The second is *social awareness*, or the recognition of pressures and circumstances within the organization or the broader society that can influence the applicability of certain methodologies. Such awareness should guide practitioners to use appropriate techniques with a view to minimising or avoiding any undesirable social consequences emerging from the intervention.

The third commitment is a dedication to *human emancipation* that, according to Jackson, is the seeking: “to achieve for all individuals the maximum development of their potential” (Jackson, 1991, 186). This, he maintains, is achieved by improving the quality of work and life in the organisations in which they work and in the societies in which they live. Further, all three human interests – in prediction and control, mutual understanding, and freedom from power relations – must be in place if emancipation is to result. Flood and Jackson later included social awareness in the commitment to emancipation (Midgley, 1996).

Closely aligned with this notion of human emancipation is the commitment to the *complementary and informed development of all varieties of systems approaches*. This complementarism acknowledges the existence of diverse approaches, each of which is only used in situations appropriate to the theory underpinning the approach.

Jackson’s final commitment is to the *complementary and informed use of systems methodologies in practice*. This implies a search for a methodology that uses all four of the above features and also demonstrates understanding of each individual systems approach.

The above two forms of complementarism were later expressed as a single commitment to methodological pluralism, defined as, “using a variety of research methods in a theoretically coherent manner, becoming aware of their strengths and weaknesses, to address a corresponding variety of issues” (Midgley, 1996, 11).

In summarising his opinion, Jackson notes that, “critical systems thinking is about putting all the different systems approaches to work, according to their strengths and weaknesses and the social conditions prevailing, in the service of a more general emancipatory project” (Jackson, 1991, 187).

In attempting to evaluate the value of critical systems thinking, I was directed by the opinion of Midgley who, when trying to determine what CST is, would respond that there

is no such thing. Instead, as he points out, it is a debate around a set of themes which has given rise to a variety of interpretations and understandings that are evolving with time (Midgley, 1996). This, in itself, is a good thing and has led to a number of contributions. Schechter has articulated them as follows:

“... it has brought greater theoretical depth to discussions and produced some strong original work in metatheory; it has produced challenging critiques of earlier systems work; it has put issues of power and human emancipation on the agenda and put its commitment to emancipation into action; it has produced a framework for the complementary development of all different systems approaches; and it has championed a commitment to careful, critical, self-reflective thinking” (Schechter, quoted in Jackson, 1991, 209).

3.2.5.1 Critical Systems Heuristics and Boundary Critique

Werner Ulrich, in his book *Critical Heuristics of Social Planning* (1983), criticised both the hard and systems approaches. He noted that the systems approaches did not allow for critical reflection upon the goals attained and the means used by hard systems thinking, or upon the nature of the consensus achieved and changes brought about by soft systems thinking. To address these shortcomings, Ulrich developed Critical Systems Heuristics (CSH).

CSH is a systems methodology that seeks to unravel the ‘normative content’ of actual and proposed systems designs. By ‘normative content’ he refers to both the value assumptions that underpin the intervention and the consequences that such an intervention imposes on the participants and non-participants. CSH differs from hard and soft systems approaches in that it critically reflects upon the goals that have been attained and the nature of the consensus that has been achieved. Flood and Jackson describe CSH as a “means of interrogating systems design to reveal the boundary judgement being made and a means of postulating alternative boundary judgement, that is of asking what the boundaries should be” (Flood and Jackson, 1991, 205). They further argue that CSH

sets a philosophy for an emancipatory systems approach which planners and other stakeholders can use to reveal the normative content of actual and proposed system designs. In summary, CSH aims to ensure that the views of all stakeholders, including those who are not visible but who could be affected by the proposed design, are taken into consideration. In this way it is able to address coercive situations and question the true interests and motives underlying proposed design processes.

To allow planners and systems designers to establish the normative content of proposed systems, CSH uses twelve boundary questions. These are:

1. Who is the actual client of the system design?
2. What is the actual purpose of the systems design?
3. What is the built-in measure of success?
4. Who is actually the decision-maker?
5. What conditions of successful planning and implementation of the system are really controlled by the decision-maker?
6. What conditions are not controlled by the decision-maker i.e. are in the environment?
7. Who is actually involved as a planner?
8. Who is involved as an expert, and of what kind of expertise?
9. Where do the involved seek the guarantee that the planning will be successful?
10. Who among the involved witnesses represents the concerns of the affected? Who may be affected without being involved?
11. Are the affected given an opportunity to emancipate themselves from the experts and to take their fate into their own hands?
12. What worldview is actually underlying the design of the system?

Midgley elaborated on Ulrich's notion of boundary judgement in his paper, *What is This Called Critical Systems Thinking* (1996). Here he proposes the idea of "boundary critique" which entails making judgement about what must be part of the intervention and what must be excluded from it. In other words, the boundaries of systems designs must

be fully explored and identified. “Boundaries” refer to social or personal constructs that define the limit of knowledge that is to be taken as pertinent to the analysis (Churchman in Midgley, 1996). Churchman maintains that in most instances people tend to assume that boundaries are clearly defined when in actual fact this is not the case. He further noted that, in the case of human systems, extending the boundaries of analysis may also lead to questions as to who is the decision-maker, what knowledge is pertinent, and who are people who generate that knowledge (Midgley, 1996).

In an attempt to operationalise CST the meta-methodology for guiding the practice of systems interventions within a critical systems thinking framework was developed. This has become known as Total Systems Intervention.

3.2.5.2 Total Systems Intervention

Total Systems Intervention (TSI) methodology is described by Jackson and Flood and Jackson (1991) as a metamethodology that offers an integrative and systems-based approach to problem solving. The underlying premise is that of CST; that is, all problem-solving methods are complementary. TSI advocates the simultaneous use of different systems approaches.

There are actually two versions of TSI as indicated by Midgley (1997). The first (Flood and Jackson, 1991) has been superseded by the second (Flood, 1995). To differentiate the two, the original is referred to as TSI 1 and the second as TSI 2.

According to Jackson, TSI is a systems-based methodology that uses a range of systems metaphors to encourage creative thinking about organisations and their problems. These metaphors are linked by a framework - *the system of systems methodologies* – to various systems approaches, so that once agreement is reached as to what metaphor is most relevant to the organisation’s concerns, an appropriate systems-based intervention methodology (or set of methodologies) can be employed (Jackson, 1991).

| | | SYSTEM | |
|--|-----------|---|--|
| | | SIMPLE | COMPLEX |
| Relationships Between Participants | Unitary | Simple-Unitary: key issues are easily appreciated, and general agreement is perceived between those defined as involved or affected. | Complex-Unitary: key issues are difficult to appreciate, but general agreement is perceived between those defined as involved or affected. |
| | Pluralist | Simple-Pluralist: key issues are easily appreciated, but disagreement is perceived between those defined as involved or affected. | Complex-Pluralist: key issues are difficult to appreciate, and suppressed disagreements are perceived between those defined as involved or affected. |
| | Coercive | Simple-Coercive: key issues are easily appreciated, but suppressed disagreements are perceived between those defined or involved or affected. | Complex-Coercive: key issues are difficult to appreciate, and disagreement is perceived between those defined as involved or affected. |

Figure 4 : The System of Systems Methodologies (Midgley, 1997, 253)

Flood describes TSI as a process whereby a manager operates three main types of activity: *think creatively* about the problem; *choose* a method(s) with which to address the problem; and *implement* the systems methodologies that will yield the change proposals (Flood and Jackson, 1991).

Figure 5 : The 3-Phase TSI Methodology

| | |
|---------------------------|---|
| Creativity | |
| <i>Task</i> | To highlight aims, concerns, and problems |
| <i>Tools</i> | Systems metaphors |
| <i>Outcome</i> | Dominant and dependent metaphors highlighting the major issues |
| Choice | |
| <i>Task</i> | To choose an appropriate systems-based intervention methodology or methodologies |
| <i>Tools</i> | The ‘system of system methodologies’ and the relationship between metaphors and methodologies |
| <i>Outcome</i> | Dominant and dependent methodologies chosen for use |
| Implementation | |
| <i>Task</i> | To arrive at and implement specific proposals |
| <i>Tools</i> | Systems methodologies employed according to the logic of TSI |
| <i>Outcome</i> | Highly relevant and coordinated change improving effectiveness and efficiency |

(Jackson, 1991, 276)

Each of these phases will be considered.

During the *Creativity* phase the problem solver thinks creatively about the organisation and its problems, using a particular metaphor of the organisation. These metaphors are drawn from the work of Morgan who in his book, ‘Images Of Organisation’, identifies such metaphors which, Flood and Jackson maintain are useful in that they enhance creativity (in Midgley, 1997).

Central to Morgan’s work is his belief that an organisation can be seen as an image of a particular system e.g. machine, brain, organism. The objective of the problem solver during this phase is to adopt a systems metaphor (or metaphors) that best describe the organisation in question. It is this process that enables him/her to gain insight into the organisation and help to consider appropriate methodologies.

During the *Choice* phase the problem solver selects a systems-based methodology (or methodologies) related to the metaphor(s) adopted in the previous phase. In this regard, the system of systems methodologies is used to classify systems methodologies on the basis of the assumptions they make about the nature of the problem situation or the “problem context” (Jackson, 1991, 27). This “context” refers to the nature of the system(s) in which the problems are located and the nature of the relationship between the participants. It is these two variables, Jackson argues, that allow the construction of a grid of types of problem contexts which, in turn, can be used to classify systems methodologies.

In essence, as Flood and Jackson have indicated, “the choice of systems methodology should be informed by the system of systems methodologies, it should not be determined by it” (in Midgley, 1997, 259). However, as Jackson has further commented (1993), the most probable outcome is the choice of a dominant methodology, one that will address the most obvious problems whilst managing the less dominant ones.

During the phase of *Implementation*, the chosen methodology or methodologies is/are implemented so as to, translate the vision of the organisation into reality. The main task in this phase is the addressing of problems identified in the creativity phase and the introduction of systemic improvement within the organisation.

As with the other systems methodologies, TSI Version 1 is not without its critics. As Midgley points out in his work, *Mixing Methods: Developing Systemic Intervention*, there are many criticisms that have been levelled at TSI (1), some methodological, others philosophical. In response to critics, Flood developed a second version of Total Systems Intervention.

Total Systems Intervention – Version Two remains a metamethodology based on the three phases of creativity, choice and implementation. There are, however, significant differences between the two approaches.

An important innovation in TSI (2) is the recursive nature of its structure; in other words, within each phase, the structure is replicated. A second change was prompted by criticism that the original was too restrictive. To correct this, Flood encourages practitioners to generate their own metaphors. The creativity phase now involves: “divergent” metaphorical analysis; the use of creativity-enhancing techniques; and an understanding of the “ergonomics of reflection” (quoted in Midgley, 1997, 270/1). A further innovation was made in response to the criticism that the original version was too academic in nature. To make the methodology more user-friendly Flood replaced the system of systems methodologies with a more basic framework that simply categorises four domains in which practitioners can intervene.

These domains are outlined below.

The *organisational process* is concerned mainly with the core output and sub-output of a particular organisation. It identifies the main processes that add value to the customers and processes that are mainly internal in this situation. In effect, the original processes have to do with the flow of events from the input through the main process to the output.

The *organisational designs* are the functions within which the organisational process takes place. The designs are functions, and not people or lines of authority, that coordinate and control processes. This is particularly evident in the VSM methodology.

Organisational culture has to do with the creation of a culture that will be shared by all members of the organisation, regardless of their cultural backgrounds. TSI (2) recognises that individuals bring to the organisation distinct cultural experiences which when mediated may prove disastrous for decision-making and overall performance. The version helps managers avert such disaster by helping them develop a communication system imbued with cultural symbols, thus creating team cohesion.

Organisational politics assist in identifying the location of power and how it is exercised. Organisational politics is associated with decision-makers and influences the flow of events within the organisation.

The principles of TSI (2) emanate from its philosophy and are important when evaluating the effectiveness of the intervention. Flood has identified four principles: being systemic; achieving meaningful participation; being reflective; enhancing human freedom (Flood, 1995).

Being systemic encourages problem solvers to look at organisations from a holistic perspective. Specifically, this means acknowledging the existence of a hierarchy with technical and human activities at the levels of system, subsystem and suprasystem. Interactions between all parts and at all levels must therefore be taken into account.

The principle of *meaningful participation* requires the involvement of all in order to allow the surfacing of new and diverse opinions and ideas. Important in this regard is the notion of boundaries; wide boundaries will deliver diversity; narrow ones will muzzle certain voices and distort the organisational picture.

Reflection, according to Flood (1995), requires one to consider the relationship between different organisational interests, and to reflect upon the dominance of particular favoured approaches to intervention. Both of the above, if not taken into account, have the potential to restrict fair and effective management.

The fourth of Flood's principles, the goal of *enhancing human freedom*, provides the moral justification for the methodology and is closely linked with the process of reflection.

In summary: "Freedom is enhanced through the process of reflection. Reflection helps to achieve meaningful participation, which in turn promotes being systemic and taking into account the whole. Taking into account the whole is an important step toward better

informed management, effective problem solving and minimising counter-intuitive consequences” (Flood, 1995, 28).

As far as the process of TSI (2) is concerned, there are three modes of operation: critical review, problem-solving and critical reflection. Let me consider each of these in turn.

TSI (2) incorporates a range of problem solving methods in its schema. According to Flood, it does this by critically evaluating models and methodologies with a view to incorporating them in the system of approaches operated through the Problem Solving Mode, using to structure the critique the three phases of TSI and the four key dimensions of the organisation (Flood, 1995).

Flood further points out that the *Critical Review Mode* has two starting assumptions that are tested out. The first of these is that each method being reviewed advocates forms of creativity, choice and implementation. The second is that each method asks four questions that reflect the four key dimensions of organisation: ‘How can we efficiently design processes?’; ‘How can we realise effective organisational design?’; ‘What options should we debate and decide upon?’; ‘Why should we accept a design or a decision, who is likely to benefit and has fair practice operated in generating these change proposals?’ (Flood, 1995).

The *Problem Solving Mode* employs a selection of problem solving methods brought together through the Critical Review Mode and operates through the three phases of TSI – creativity, choice and implementation.

The task of the creativity phase is to surface problems to be dealt with, to demonstrate how they are linked, and to identify the core problems to be dealt with. The choice phase involves choosing the method(s) that are best suited under the circumstances to deal with the problem(s). The implementation phase employs the chosen method(s) to develop and implement innovative change proposals that tackle the core problems.

The Critical Reflection Mode, as does the previous two, uses the creativity, choice and implementation process. In essence, the mode uses the three phases to help problem solvers to consider the adequacy of the output of the Problem Solving Mode. This is done by asking whether the methods used were the most suitable and whether the outputs were the most appropriate (Flood, 1995).

Flood explains this form of analysis for each of the TSI phases as follows:

- The Implementation phase receives methods reasoned to be most suitable for managing the problems surfaced by the Creativity phase.
- The Choice phase receives details of problems to be managed and, on the basis of this, chooses methods of implementation.
- The Creativity phase receives details of change proposals judged to be the most adequate to manage the problems surfaced by creative thinking. (Flood, 1995).

Having discussed the two versions of Total Systems Intervention, there is a need to compare and evaluate each.

The first version is divided into three phases – creativity, choice and implementation – with different functions being executed in each phase. During the creativity phase the focus is on the identification of a suitable metaphor, the difficulty being that there is only a limited number of metaphors from which to choose. This metaphor-based analysis not only fails to adequately describe the problem situation on occasions when the problem situation does not lend itself to the restricted choice, it is also too rigid in that it suppresses the creativity of TSI users. A further shortcoming of the original version is that the system of system methodologies is difficult to understand and apply. This difficulty is particularly apparent to non-academic practitioners.

TSI (2) purports to address some of the difficulties with and weaknesses of version one. The three modes – Critical Review, Problem Solving and Critical Review – have been added. The version also has as its intended aim the simplification of version one in order

to make it practical for both academic and non-academic audiences. However, it is debatable whether this has been achieved, particularly given the recursive and iterative nature of the evaluative process.

CHAPTER FOUR SUSTAINABILITY

“Imagine a world of relentless drought, storms and famine; of islands, deltas and coastal regions flooded by rising sea levels; a world where millions die of air and water pollution, while millions more flee in search of safer places to live, and yet others fight each other for scarce natural resources.

Alternatively, imagine a world of clean water and air; of green technologies, and where houses, transport and industry are all energy efficient; where everyone shares the benefits of development and industrialization, and of the earth’s natural resources, yet those benefits can be sustained from one generation to the next.

The choice between these visions is ours to make.”

(Kofi Annan in World Business
Council and University of Cambridge, 2003)

4.1 INTRODUCTION

This chapter reviews the subject of sustainability, a concept that is beginning to command an increasingly higher profile on the business agenda. Apart from introducing the reader to the subject, the chapter reflects on the impact of sustainability on organisations, both internationally and within South Africa, and considers whether the concept makes business sense. Further, an attempt is made to illustrate the role of leadership in contributing to the sustainability of organisations and, in turn, society.

The aim of considering these trends and influences is to provide a framework against which my organisation can evaluate its contribution towards sustainable development, and to test whether sustainability can be the catalyst for enhanced employee ownership and, ultimately, organisational effectiveness.

4.2 THE CONTEXT

“... customers increasingly believe that the role of large companies in our society must encompass more than the traditional functions of obeying the law, paying taxes and making a profit. ... They also want to see major corporations helping to ‘make the world a better place’” (HRH The Prince of Wales, in Grayson and Hodgson, 2001, 8).

The above sentiment is becoming more and more apparent within the business community and is indeed reshaping the agenda of corporations and companies worldwide. A significant driving force in this regard is the phenomenon of globalisation, a term that is overused and defined in a variety of ways, but which, in essence, refers to the development of global financial markets and the growth of transnational corporations that increasingly dominate national economies.

Whilst not wanting to create the impression that globalisation is a bad thing, there is a concern is that it perpetuates the poverty and inequality that bedevils our societies. To illustrate the point, let us consider the following: twenty percent of the world’s population, mainly from the western economies, is responsible for ninety percent of its consumption of goods and services; nearly seventy percent of four billion people survive on less than two dollars a day; more than fifteen percent of the Earth’s surface is degraded by human activities, a figure predicted to be close to seventy percent by the year 2030 (Fincham, Lawrence and Oelofse, 2002).

On the environmental front, the global economy is also wreaking havoc. There is no doubt that business may rightfully be accused of unsustainable exploitation of the environment. Business has been extracting resources and impacting on the environment at a rate and scale that is unsustainable, given that the planet’s ecosystems are unable to regenerate themselves infinitely. Evidence of this destruction lies in the fact that we have lost more than ten percent of the species that were living a few hundred years ago. Conservation biologists predict that half of the diversity of life will be lost in the next century unless the present rates of habitat destruction abate. According to the World

Resources Institute, we have already lost, destroyed or depleted two thirds of the world's agricultural land, half of the freshwater wetlands, mangrove swamps and rivers, a quarter of the marine fish stocks and one fifth of the forests (Sunter and Visser, 2002).

It is realities such as these that prompted delegates to the Millennium Summit of the United Nations in September 2000, to commit themselves and their countries to addressing global stability. Over 150 Heads of State agreed to the Millennium Development Goals, an ambitious agenda to reduce poverty, improve lives, and protect environmental resources. Building blocks included the ending of war; the reduction of poverty and hunger, stabilization of the global environment, and ensuring basic human rights for all.

It is in response to circumstances such as those indicated above, that society in general and business in particular, has embarked upon a quest for 'sustainability' and, in doing so, forge a reputation as good 'corporate citizens'. In order to gain this reputation, business needs to give consideration to its responsibilities within a broader societal context. It needs to make a contribution socially and environmentally, as well as in the economic domain.

4.3 DEFINING THE CONCEPT

In researching the topic of 'sustainability' it has become apparent that the term is not a new one and has been part of the business lexicon since the 1980's. It is further apparent that there is a variety of related terms, each of which may be seen as a variation on a theme. Terms such as sustainable development, sustainability and corporate citizenship, whilst each being unique, have enough in common that they may well be used interchangeably. In attempting to outline the evolution of sustainability, I will make reference to, and define, these related concepts.

The concept of sustainability was first promoted in 1980 with the launching of the World Conservation Strategy and popularized in 1987 by the final report of the World

Commission on Environment and Development, entitled “Our Common Future”. In what became known as the Brundtland Report, sustainable development was defined as: “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (Elkington, 1999, 55).

The term sustainability is derived from ‘sustainable development’ and refers to “a pathway to a state where nature and humanity have come to terms with themselves in a demonstration of mutual respect and forgiveness” (O’Riordan, et al, 2000, 1).

A fuller definition is that of Bell and Morse who define sustainability as: “..... a dynamic balance among three mutually interdependent elements:

- i. Protection and enhancement of natural ecosystems and resources;
- ii. Economic productivity; and
- iii. Provision of social infrastructure such as jobs, housing, education, medical care and cultural opportunities” (Bell and Morse, 1999, 43).

A more recent addition to the jargon is ‘corporate citizenship’, a term that considers the rights and responsibilities of organisations within a broader societal context. An appropriate definition is that developed by the Working Group on Corporate Citizenship Commonwealth Business Council: “..... the commitment of business to contribute to sustainable economic development, working with employees, their families, the local community and society at large to improve their quality of life” (Freemantle and Rocky, 2004, 8).

Whatever the definition one favours, they have one thing in common. They share an interest in improving human wellbeing by seeking an appropriate balance between social, economic and environmental change. It is these that are the three prongs of the sustainability fork, a term coined by John Elkington (1999) to refer to social justice, economic prosperity and environmental quality. In his book, *Cannibals With Forks*, Elkington argues that integrated and balanced performance across each of these three

dimensions will become the triple bottom line – the means and ultimate measure of corporate success in the twenty-first century.

Given the importance of this three dimensional approach to performance evaluation, each aspect will be elaborated upon.

The economic pillar focuses on economic growth that aims to ensure that people have access to jobs and resources in a society that is capable of providing for the needs of its people. Economic security also involves the need to achieve a balance between the scale of the economic system and the limits of the ecosystem in which it operates.

The ecological pillar focuses on limiting the use of natural resources to a level that allows natural regeneration. It also aims at reducing the amount of waste and pollution that is released into the biophysical system, and not over-extending the carrying capacity of the global sinks such as the atmosphere and oceans.

The socio-political, or community, pillar focuses on empowering communities to manage their own environments and meeting people's basic needs in a way that does not degrade ecological systems.

In acknowledging that these three components may, on occasion, contradict one another, it is imperative that activities within each be managed in a balanced and integrated fashion. Rather than managing each as a system on its own we need to view them as interdependent and seek synergies wherever possible. Trade-offs between the elements will need to be made, but given South Africa's history it is probably most important that we elevate social and ecological issues and seek new approaches to economic growth.

4.4 FROM PERIPHERAL TO MAINSTREAM

Sustainability began as something of an ideological crusade some fifty years ago. Among the early prophets in the 1960's were economists such as Kenneth Boulding and Gareth

Hardin and their respective 'cowboy versus spaceman economy' and 'tragedy of the commons' theories. A seminal author in the field was Donella Meadows who added sociology and computer science to economics and whose findings showed an 'overshoot-and-collapse scenario' for human civilization. Of particular relevance have been her projections on rising pollution levels and population growth.

Also in the 1970's, James Lovelock asked the question: what are the conditions which sustain life on Earth? He discovered that the Earth appears to have the capacity to self-regulate innumerable conditions in order to create a sustainable environment for life to flourish. In other words, the Earth was displaying the same characteristics as are found in living organisms. Of greater concern was the fact that the system could be overloaded if Man continued to dump waste at the rate he was.

The 1980's and 1990's saw a number of economists who questioned the sustainability of prevailing economic theories and practices. A common theme in their works was that the current definition of wealth related to money was deficient, and that the science of economics needed revision. One of these was Karl-Henrik Robert who derived the four sustainability 'systems conditions' that have formed the basis of an international organisation and framework called The Natural Step (McIntosh, et al, 1998).

More recently, there have been a number of business consultants who have attempted to convince organisations to become more civilised and, thereby, sustainable. Two of the more influential consultants are Paul Hawken and John Elkington, the latter coining the term, 'The Triple Bottom Line'.

The sustainability agenda has also resulted in the formation of a variety of international bodies, forums and protocols. The movement was given impetus by the findings of the Brundtland Commission (1984) which examined the planet's people and resources and recommended long-term strategies to deal with environmental issues and achieve sustainable development. In 1987 the Montreal Protocol was signed by twenty four countries to control, and eventually phase out, production and consumption of

compounds that deplete the stratospheric ozone layer. In 1989 the Coalition for Environmentally Responsible Economies (CERES) was founded. CERES is a network of environmental, investor and advocacy groups that promote sustainability, and is best known for its ten values covering waste disposal and reduction, energy conservation, public safety and risk reduction. A milestone event was the United Nations (UN) Conference on Environment and Development (UNCED) held in Rio de Janeiro in 1992. At this conference, known as The Earth Summit, nations of the world agreed on a human and environmental plan for the next century, entitled Agenda 21. Emerging from the Rio Conference was the Commission on Sustainable Development, developed by UNCED to supervise the implementation of the Earth Summit commitments, especially Agenda 21. The Caux Roundtable Principles for Business emerged in 1994, embodying the aspirations of principled business leaders on ethical and responsible corporate behaviour, and which provided business leaders worldwide with a foundation for action. At the 1996 UN Special Session of the General Assembly, Agenda 21 was appraised and a working programme for its further execution over the following five years was adopted. The Kyoto Protocol of 1997 committed 38 industrialised countries to limit their greenhouse gas emissions. The new millennium has seen the 2000 UN Global Compact, the Millennium Summit, and the World Summit on Sustainable Development held in Johannesburg in 2002.

Running parallel with the above was the development of a number of sustainability indexes, principles and charters aimed at achieving balanced and integrated economic, social and environmental performance. Amongst the better known are the ISO 14 000 and 18 000 Series, the Dow Jones Sustainability Indexes, the FTSE4Good Indexes and the Global Reporting Initiative. Within the South African context, the more prominent developments have been the King Reports, the JSE Socially Responsible Investment Index, and the various Sector Charters aligned with Black Economic Empowerment legislation.

4.5 THE BUSINESS CASE FOR SUSTAINABILITY

As indicated previously, sustainability has been on the business agenda for a number of years. However, it would be fair to say that the driving force has traditionally been the environmental movement and the proponents of corporate social responsibility, rather than business itself. In other words, sustainability was relegated to a specialist department, and was deemed to be peripheral to decision-making, and, only incidental to business success.

This scenario is no longer the case, and what was previously regarded as ‘nice-to-do’ is now ‘having-to-do’. The case for change in business practices is driven by a combination of global forces. Spearheading the demand for change are investors, customers and employees who are taking an active interest in the value of their interests. The inter-relationship and interdependence between stakeholders is captured in the following opinion, “... what happens to business matters to society, so what happens to society should matter to business” (Grayson and Hodges, 2001, 7).

In the not too distant past, organisations were able to operate largely as they pleased, unrestrained by external pressure. They were accountable only to owners and shareholders and as long as they abided by the laws of the countries in which they operated, they were able to continue with their intent of making as much money as possible. Business was conducted in an environment in which there was a belief that the earth’s natural resources were infinite and thus ripe for plundering, and in certain areas there was a general disregard for human rights. In short, business did not see any obligation to society and the driving force was to get away with whatever they could.

Such an approach is captured by Clem Sunter and Wayne Visser who describe business in terms of a lion metaphor in their book, *Beyond Reasonable Greed: Why Sustainable Business is a Much Better Idea*. The authors point out that as the nations of the world have become increasingly tied into the capitalist economy, they have become more and more dependent on its main agent – business. Business, in turn, has grown in size and

power, until today, it is the most influential organisation in global society. Unfortunately, as the lion believes that other species and the environment exist purely for its own gratification, so too do many organisations, having an insatiable appetite for satisfying short-term needs at the expense of long-term sustainability. Companies constantly ignore their social and environmental impacts because their economic contribution and financial profit are seen as more important and as ends in themselves. In short, business views its economic contribution in terms of profits, foreign exchange earnings and jobs as a justifiable end in its own right, irrespective of the social and, or environmental side effects it might cause in pursuit of this definition of success (Sunter and Visser, 2004).

Pursuing the lessons of nature, Sunter and Visser make a case for a different approach. Gone are the days when companies, like the lion, could roam freely over vast distances, hunting their prey without restriction, going wherever the food supply is plentiful, letting no animal stand in its way. Business has roamed far and wide, ever hungry to conquer new markets and to track down fresh consumers; going where conditions are best for profit-taking; where taxes are most lenient, where skilled labour is cheapest and where environmental standards are lowest (Sunter and Visser, 2004).

One of the realities of globalisation is that actions in one part of the world quickly impact on a company's reputation in another. This creates an increasingly complex operating dynamic, in which companies have to maintain their overall business interests, whilst at the same time responding to international and local pressures to act responsibly. In such an environment, argues Rosabeth Moss Kanter, companies should be promoting cooperative relationships. This, she calls, "becoming better PALS with other organisations – the new breed *pool* their resources, create opportunity-based *alliances* and *link* systems in a partnership" (quoted in Sunter and Visser, 2004, 44). This approach is echoed by Sunter and Visser who suggest that, "Sustainable companies will need to learn to survive not by their ability to hunt and kill, but by their capacity to identify, nurture and sustain cooperative relationships" (Sunter and Visser, 2004, 52).

Sunter and Visser believe that the new scenario demands an elephant-type approach. They argue that elephants are the epitome of sustainability. Like the elephant, sustainable companies will need to change to environmentally-friendly processes in their factories and plants, invest more in social responsibility programmes, allow their staff to lead more balanced lifestyles, and never become too complacent with their success (Sunter and Visser, 2004).

These changing times, illustrated by a number of global trends, have determined that organisations have to adopt a far more serious approach to issues of corporate citizenship and sustainability.

In attempting to explore these forces for change, I will refer to the work of Grayson and Hodges. They summarise these forces as revolutions in technology, markets, demographics and values and it is these that are combining to affect the manager's job (Grayson and Hodges, 2001).

The convergence of telecommunications and information technologies has resulted in ever-increasing levels of connectivity within companies, between businesses and supply chains, between businesses and customers, and among customers. This connectivity has transformed the way business operates, both in the manufacturing and service sectors. Given the pace of technological innovation it is likely that the potential for further development is limitless. Indeed, what is there to stop it? It is suggested that, "the capacity of business to do things in the first decades of the twenty-first century will have less to do with technological constraints and more to do with how far business can win support for the use of the new technologies – from both consumers and society in general" (Grayson and Hodges, 2001, 13). Examples of opposition to unfettered technological advancement are already apparent in the ethical debates in the fields of genetics and cloning. Other ethical debates in this regard are those concerned with the restructuring of companies and the outsourcing of non-core business operations, and the ecological impact of the growing demand to move people, materials and products around the globe.

The revolution of markets has further complicated our environment. Since the collapse of Communism, the world has seen a relentless process of globalisation, liberalisation and privatisation. In addition to the huge daily flow of funds and global trade, and the growing range of goods and products, “the institutions of the global market economy – governments, multilateral and bilateral organisations, corporations and non-governmental organisations – are undergoing a constant reinvention” (Grayson and Hodges, 2001, 27).

This revolution has resulted in a blurring of roles and responsibilities between the aforementioned institutions, with each sector taking on characteristics of the others. For example, governments and NGO’s are adopting the financial and management skills and customer focus of business; business is taking on the roles traditionally reserved for the public sector and is learning to balance the concerns and interests of different stakeholders; and government and business are finding ways to attract and retain talent by creating a sense of passion inspired by the best NGO’s. This blurring of boundaries is realising new opportunities and expectations.

A third force is that concerned with demographic change and the process of development. Together, these encompass population growth and composition, as well as interrelated issues such as income distribution, access to health and education services, jobs, security and freedom. Globalisation has resulted in companies operating in countries in which there are limited resources and inadequate infrastructure, bringing into question the relationship between business and community. Fundamental to the modern equation is the premise that business does not operate in a vacuum but, rather, is intimately connected with its community. This link between the revolution in demographics and development and business is articulated by the Resource Centre for the Social Dimensions of Business Practice. They say that for companies to prosper, that is, to ensure economic growth and market stability, they require, “A competent, reliable, healthy and efficient workforce; an expanding market and customer base; and a stable and safe environment” (quoted in Grayson and Hodges, 2001, 42). The sad reality is that in many countries these conditions do not prevail, largely as a result of demographic and development issues.

Recent times have seen a revolution in values with more and more people being willing and able to question what they are being told. With this, has come a decline in government, the political process, and business. In essence, “values, the concepts people believe in, the standards they live by, and the views they hold and by which they measure others, are shifting” (Grayson and Hodges, 2001, 63). Given that business is the main engine for economic growth, its responsibilities are changing and it is increasingly under public and media scrutiny. How business responds to these new challenges is crucial to its sustainability.

With the decline in deference to ‘The Establishment’ comes an increased questioning of the behaviour of institutions. Coinciding with this is a quest for a common, global culture. Allied with this, is the view of Professor Martin Prozesky who maintains that there are core moral values that are universal across different cultures, religions and nations. These, he believes, can be manifested in what he calls the Global Ethic of treating people as you would like them to treat you (Prozesky, 2003).

These shifts in values are leading to changing expectations of business that are being articulated by various stakeholder groupings. Indeed, there is a greater questioning of the role of business in society. The following opinion expressed by South Africa’s erstwhile State President, Nelson Mandela, exemplifies the new expectation: “Development can no longer be regarded as the responsibility of Government alone. It requires ... partnership ... with the private sector, labour and non-government organisations ... There are many ways in which the special skills and know-how of the business community can help achieve development objectives” (Grayson and Hodges, 2001, 70). Similar sentiment is echoed in the findings of research studies that there is an increasing awareness of environmental and sustainability issues and an understanding that corporations can minimise the negative effects they cause, and can make a positive contribution in many areas (Grayson and Hodges, 2001).

But does it really make business sense?

Whilst to many, the case for sustainability is obvious, there are others who are less convinced. The sceptics are still to be convinced that the financial benefits outweigh the cost and burden of pursuing good citizenship practices. Such sentiment is reflected in the words of the 1976 Nobel Economics Prize winner, Milton Friedman: “Few trends could so thoroughly undermine the very foundations of our free society as the acceptance by corporate officials of a social responsibility other than to make as much money for their stockholders as possible” (World Business Council for Sustainable Development, et al, 2003).

Fortunately for the proponents of sustainability, there are a growing number of business leaders who support the opinion of Chad Holiday, Chairman and CEO of DuPont that “Business must play an important and proactive role in developing a sustainable society” (World Business Council for Sustainable Development, et al, 2003).

One of the most vociferous advocates of business’ involvement in social responsibility is Anita Roddick, founder of The Body Shop International. In an interview with The Leader to Leader Institute, she made it clear that she sees almost no distinction between a business and a social institution. In clarifying her stance, she indicated that businesses are increasingly adopting almost a nonprofit agenda, in terms of defining their mission. They are looking not only at the enhancement of profits but at how the business is perceived in the local community

(<http://leadertoleader.com/leaderbooks/121/summer2000/roddick/html>).

Closer to home, the founder and driving force behind one of South Africa’s most successful companies, Raymond Ackerman, commented in his biography that, as strange as it may have seemed, the more Pick ‘n Pay invested in people and social issues, the more profit it seemed to make (Ackerman, 2002).

I would now like to explore the business case for sustainability, or corporate citizenship, and substantiate the contention of Sir Philip Watts, the Chairman of the Royal Dutch/Shell Group, that, “(it) is not a luxury, especially in these difficult times. It’s a

sensible part of good business” (Freemantle and Rocky, 2004, 10). Let me begin by citing the opinions of various business leaders as quoted in the World Business Council for Sustainable Development and University of Cambridge’s Chronos e-tutorial. Amongst these are:

Ben Cohen of Ben and Jerry’s Ice-cream: “What I’m talking about is not a programme, it’s not a separate department, it’s not giving away money, it’s not an expense, it’s not social needs versus profits; it is serving a community in order to create a profit-making business.”

Pasquale Pistorio, CEO of SMTElectronics: “The wealth of a corporation can only be amplified if we upgrade the wealth of the society in which we operate I want our employees to understand that this kind of commitment is not only good for themselves, their children and their grandchildren, but is also good for the company’s bottom-line.”

John Browne, Group CE of BP: “The simple fact is that business needs sustainable societies in order to protect its own sustainability.”

The editors of the Chronos programme highlight that, in addition to companies needing to act in a certain way because of their moral duty to society, a focus on sustainability adds value in three critical dimensions. In the first instance, it protects the business by reducing risk, strengthening the licence to operate, and by increasing brand value and reputation. Secondly, it contributes to the running of the business by reducing costs, both direct and indirect, by enhancing productivity, by attracting talent to the organisation, and by nurturing knowledge. Thirdly, an integrated approach to sustainable development helps grow the business by improving access to capital, by promoting revenue growth, by improving market access, and by stimulating innovation.

In today’s business environment, characterised by companies competing globally for customers and talent, where reputation is as important as financial outcome, and where social and environmental risks are critical business dynamics, organisations are

accountable for a wide spectrum of their activities and operations. Sustainable development needs to be seen as a potential benefit rather than a burden, as providing savings and opportunities as well as the costs and difficulties. Companies must appreciate how important it is to contribute to a more stable and prosperous society, as it is only in such a society that their profitability is sustainable.

In an article entitled, *Value Creation: The New Millennium Management Manifesto*, Ghoshal, Bartlett and Moran argue that institutions lose value when they lose their social legitimacy. This, they maintain, results from a preoccupation with economic performance and that, unless the same priority is accorded to rebuilding the credibility and legitimacy of the company in the eyes of society, organisations will go the same way as relics of the past such as the monarchy, organised religion and the state (in Chowdhury, 2000).

Other similar sentiments have been expressed by John Neill, CEO of Unipart, who speaks of 'Shared Destiny Relationships'. He refers to the engaging with, and energising of, all stakeholders – customers, employees, suppliers, governments and communities – in pursuit of mutual gain. He sees the corporation as, “both a powerful economic entity and an important social institution, using its economic resources to add value to society generally and to people’s lives individually” (Neill in Chowdhury, 2000, 140).

If Neill’s advice is to be taken seriously, organisations need to be questioning the essence of their being. In other words, questioning their purpose and what it is that they about. Regarding ‘purpose’, it is Charles Handy’s opinion that organisations have a responsibility to provide a purpose based on a cause. He maintains that, “ ... we will have to change the meaning of business from being an instrument of the owners to make them rich, and which employs other people as instruments of the organisation to help make that aim come true, to being something more like a community with purpose” (quoted in Gibson, R, 2002, 32).

Such an opinion resonates with that of Maynard and Mehrtens who see business today as, “... a vehicle through which individuals can realise their personal vision, serve others and

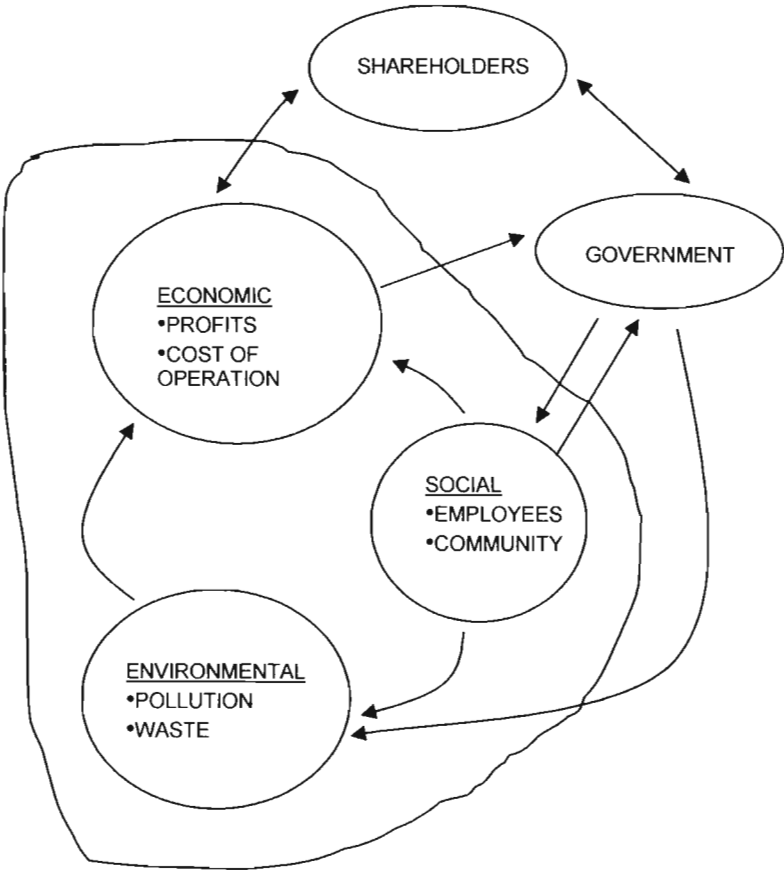
the planet, and make a difference in the world” (in Scott and Harker, 1998, 105). Get that right and I believe individuals will find fulfilment, and both the organisation and, in turn, society will be sustainable.

Those who see an investment in sustainable development as a cost and burden, and who ignore the global sentiment, are likely to be forced into corrective action at some future point, when the cost to company will be substantially greater.

For the final word on the business case for sustainability, let me once again refer to Sir Philip Watts: “It is my firm belief that business is good for sustainable development and sustainable development is good for business” (World Business Council for Sustainable Development, et al, 2003).

The tripartite structure of sustainable development and the interdependent relationships that exist between the components are illustrated in Figure 6.

**FIGURE 6 : INFLUENCE DIAGRAM DEPICTING STRUCTURAL
FEATURES OF SUSTAINABLE DEVELOPMENT AND
RELATIONSHIPS BETWEEN THEM**



4.6 SUSTAINABILITY IN THE SOUTH AFRICAN CONTEXT

“Ten years into our nascent democracy, many of us are taking the time to reflect on what we have achieved as a nation, as a society, as individuals and as businesses. Our successes are many and remarkable, and we are living in a country with such promise, such potential. Yet many challenges lie in wait, and much work is still required to move us further along the road towards sustainable prosperity” (Pityana in Freemantle and Rocky, 2004, ix). These words of Barney Pityana capture the essence of the challenges with which we have to contend in South Africa. In addition to the international imperative for organisations to pursue a sustainability agenda, the new South Africa has particular consequences for businesses in the country.

Since the 2002 World Summit on Sustainable Development in Johannesburg, sustainability has featured on the corporate agenda and has broadened the compass of corporate responsibility. Allied with this has been the clarion cry of ‘transformation’, supported by a raft of legislation, demanding a paradigm shift in corporate attitudes and business practices. Like their international counterparts, South African business leaders are beginning to heed the realities of a wider spectrum of risks and opportunities.

If one heeds the advice of O’ Riordan and others who view sustainability as, “a very broadly based policy arena: its success lies in capturing economically and democratically redistributive processes and placing them in ecological and social frames of empowerment and mutual respect” (O’ Riordan, et al, 2000, 1), I believe that there is real congruence between the fundamentals of sustainability and those of business transformation. These authors go further to say that the concept of sustainable development is particularly appropriate in South Africa, because it unites the principles of living within the framework of planetary life support and of seeking to embrace justice, fairness, health, security and reasonable life chances.

Supportive of these ideals is a plethora of policies, programmes and initiatives that encompass the economic, social and environmental patterns. Government, business and

non-governmental organisations need to become partners and take advantage of the fact that “South Africa is constitutionally, politically and socially poised to embrace sustainable development through a myriad of initiatives that have never heard of that phrase” (O’ Riordan, et al, 2000, 1).

At the United Nations Conference on Environment and Development, commonly known as the Rio Conference of 1992, Agenda 21 was developed as a programme that indicated what actions should be taken to achieve sustainable development. The programme had as its catchphrase, *Act Local and Think Global*. In considering this catchphrase as a guide for practical implementation, and in an effort to translate the theory to reality, I think it useful to visit the seven conditions that the Brundtland Commission listed as supportive of the principles of sustainable development. These are:

- A responsive political decision-making process.
- An economic system that does not generate the same resource demands as the present system.
- A responsive social system that redistributes the costs and benefits of unequal development.
- A system of production which is sensitive to the carrying capacity of the ecological system.
- Innovative developments in technology that enable better uses of resources.
- A global alliance to support sustainable development initiatives.
- A responsive, flexible system of governance that enables public participation in decision-making (Oelofse, 2002).

The above can, I believe, be used effectively to manage the three systems of Economy, Ecology and Community, in such a way that the goals and principles of sustainability can be met. A closer look reveals that as much as they may be applicable in any community, there is a great deal of similarity between them and what is the crux of the transformation agenda in South Africa. Indeed, the so-called transformation agenda is becoming the

business agenda, with the principles of sustainability enjoying an ever-increasing profile on the South African corporate landscape.

A catalyst for change has been the demands made of organisations by the King Committee on Corporate Governance. The tenor of the King Report is illustrated by the words of Lord Cadbury, in many respects the doyenne of corporate governance. In writing an overview of corporate governance in the 1999 World Bank Report, he suggested that “Corporate governance is concerned with holding the balance between economic and social goals and between individual and communal goals ... the aim is to align as nearly as possible the interests of individuals, corporations and society” (quoted in the Executive Summary of the King Report on Corporate Governance for South Africa, 2002).

The King Committee was formed in 1992 to consider corporate governance in the context of South Africa. This coincided with profound social and political transformation at the time with the dawning of democracy and the readmission of this country into the community of nations and the world economy. The purpose of the 1994 King Report was to promote the highest standards of corporate governance.

The King Report went beyond the financial and regulatory aspects of corporate governance and advocated an integrated approach to governance in the interests of a wide range of stakeholders having regard to the fundamental principles of good financial, social, ethical, and environmental practice. In adopting a participative governance system, the Committee acknowledged and formalised the need for companies to recognise that they no longer acted independently of the societies and environment in which they operate.

Since the publication of the first King Report in 1994, the country has witnessed far reaching legislation regarding social and political transformation. Some of the more significant have been the Labour Relations Act (No. 66 of 1995), the Basic Conditions of Employment Act (No. 75 of 1997), the Employment Equity Act (No. 55 of 1998), the

National Environmental Management Act (No. 107 of 1998), and the Broad-based Black Economic Empowerment Act (No. 53 of 2003).

The period since 1994 has also witnessed the emergence of triple bottom line reporting which acknowledges the relevance of non-financial aspects to company business. The environmental aspects include the effect on the environment of the product or services produced by the company; and the social aspects embrace values, ethics and the relationships with stakeholders, rather than just with shareholders.

A closer look at the 2002 King Report (King II) reveals guidelines for ‘Integrated Sustainability Reporting’ within its code of corporate practices and conduct. These suggest annual reporting on, “... the nature and extent of its social, transformation, ethical, safety, health and environmental management policies and practices” (Executive Summary of King Report on Corporate Governance for South Africa, 2002, 35). Such an obligation makes it clear to companies that they have a broad citizenship responsibility and that governance must apply across all citizenship elements.

The King Report makes reference to the Global Reporting Initiative (GRI) and recommends the GRI as a framework for sustainability reporting. Established by the Coalition for Environmentally Responsible Economies in 1997, the aim of the GRI was to elevate sustainability reporting practices to a level equivalent to those of financial reporting. The first set of Sustainability Reporting Guidelines was published in June 2000, followed by a second release in 2002. Organisations consult the GRI Guidelines to create a framework for triple-bottom-line reporting and to inform their sustainability reporting. Performance indicators as recommended by the GRI are categorised in economic, social and environmental terms, and it is in line with these that King II recommends that companies should report their non-financial information.

More recently, South Africa has seen the Johannesburg Securities Exchange launch its Socially Responsible Investment (SRI) Index, aimed at tracking listed companies’ responsiveness to the country’s socio-economic and environmental challenges. The

introduction to the Index indicates its purpose as, “meeting the emerging requirements of investors and civil society for companies to demonstrate more socially responsible behaviour and hence for companies to truly embrace the triple bottom lines of environmental, economic and social sustainability” (JSE SRI Index – Background and Selection Criteria, 2003, 2). In essence, the reporting requirement aims at encouraging companies to integrate the principles of sustainability into their business activities. Aligning itself with the generally accepted sustainability framework, and ensuring congruence with King II and the GRI, as well as South Africa’s own constitution and legislation, the Index is structured along the three pillars of the triple-bottom-line, namely environment, society and economy.

In an attempt to illustrate that many South African organisations are indeed beginning to take sustainability issues seriously, and also in an attempt to dispell some of the mystique surrounding it, I will refer to research undertaken by Trialogue and published in their March 2004 edition of *The Good Corporate Citizen*.

A necessary first step is to categorise the elements of good citizenship and how they relate to one another. To assist in this, Trialogue designed a matrix diagram (see Figure 7 below), delineating the elements according to functional areas of supply chain, workplace, marketplace and society. The diagram also shows how these elements are associated with the triple- bottom-line, and provides three overarching themes that apply across all functional areas and all triple bottom line elements of governance, human rights and transformation.

Figure 7 : Categorising the elements of citizenship

| Governance and Management | | | | |
|---------------------------|--|---|--------------------------------------|---|
| | Supply Chain | Work-place | Market-Place | Society |
| Environment | Supply chain impact | Impact of operations | Impact of products | Impact of operations & products |
| Economic | Enterprise Support Preferential Procurement | Company control | Enterprise Support Product access | Economic value Enterprise Support Social investment |
| Social | Supply chain compliance | Employees Workplace equity Skills & training Health & safety HIV/Aids | Product Stewardship | Social impact of operations HIV/Aids |
| Transformation | | | | |
| Human Rights | | | | |

(Freemantle and Rocky, 2004, 34)

Following research conducted in 2003 to ascertain the status quo of citizenship and sustainability practices in South African companies, the elements were distilled. These are listed as follows:

- Governance
- Employees
- Skills and Training
- Workplace Equity
- Health and Safety
- HIV/AIDS
- Society
- Enterprise Support
- Product Access
- Product Stewardship
- Social Investment
- Employee Relations
- Environmental Impact
- Company Control
- Procurement
- Supply Chain

As an extension of the survey, respondents were asked to consider the principle motivation for embracing good citizenship practices. Responses were used to define the rationale for citizenship as follows:

- It makes business sense
- Good ethics and values are good for business
- For long-term sustainability of the business
- Good for the future of South Africa
- Our responsibility as a business
- To abide by laws and regulations / King II
- In the interests of all stakeholders
- A response to peer pressure

(Freemantle and Rocky, 2004).

There is no doubt that business the world over is having to take the issue of sustainability seriously. South Africa is no exception. Indeed, the case for it is perhaps even more compelling here than in many other countries. The challenge is for business leaders and their people to change the way they think about their organisations and how they do business. They need to prove that, whilst in pursuit of economic success, they have the interests of the environment and broader society at heart.

4.7 SUSTAINABILITY AND LEADERSHIP

From the above, it is clear that the demands of the global economy are presenting a wide range of challenges to organisations, not least of which is to satisfy the needs of the present whilst not prejudicing the opportunities of the future. The agenda has been broadened far beyond the once good enough profit motive. I would, therefore, contend that the leadership of contemporary organisations needs to align itself and their organisations with the demands of society. This broader agenda needs to be seen in a positive light and not merely as ‘something extra’ or a ‘distraction’ from what

traditionalists see as the purpose of business – the making of money. Instead, I believe that these challenges need to be embraced as they could provide the ingredient missing in many organisations: a real sense of meaning and purpose that is not only aligned with the global agenda, but which also galvanises and motivates the people that work for those enterprises.

It was Victor Frankl, a survivor of the Holocaust and the author of *Man's Search for Meaning*, who asserted that the primary motivational force for people resides in a desire to find life meaningful (Frankl, 1984). He maintained that we all desire to have a core purpose that gets us up in the morning, guides us through adversity, and constantly commits us to meaningful action. Frankl's thesis is echoed by Anthony Campolo who points out that our true selves are discovered through "commitment to a cause, a future, a value we hold dear, which creates meaning" (Charlton, 2004, 2). If the above holds true for individuals does it not stand to reason that an organisation with a clear and meaningful purpose stands more chance of survival than one without? Is this not the reason that non-governmental organisations whose employees, I dare say, are aligned with an obvious cause, are more highly regarded than corporations and governments?

Pursuing the theme of 'Meaning', let me comment on an article written by Charles Handy entitled, *Finding Sense in Uncertainty*. Handy argues that in the confusing and ever-changing times in which we live, we cannot rely on the traditional institutions to give structure and support. Gone are the days when we could rely on others to be our crutches. In this world of uncertainty, he suggests that it is the organisation's responsibility to stand for a purpose, or a cause, if it wants to attract and retain talent. He goes on to say that "the great and most satisfying thing in life is a sense of purpose beyond oneself. If the purpose is only for yourself, it rapidly dissipates" (in Gibson, 2002, 32).

There is resonance here with the opinion of Frankl who, based on his Auschwitz experience, maintains that a man who is conscious of his responsibility towards another human being will never be able to throw away his life. Knowing the 'why' for one's existence enables one to bear almost any 'how' (Frankl, 1984). Similarly, business has to

find a purpose beyond itself, otherwise it will not endure. Handy maintains that business will have to change its meaning from being a vehicle for wealth creation to being a “Community with a purpose” (in Gibson, 2002). Surely then, one of the challenges of leadership is to help people add meaning and purpose to their lives, especially if one is to heed the advice of Jim Collins that, “.....it is impossible to have a great life unless it is a meaningful life. And it is very difficult to have a meaningful life without meaningful work (Collins, 2001, 210).

This theme of finding meaning and purpose is echoed by Scott and Harker in their publication, *Humanity at Work*. The chapter entitled, ‘The social purpose of organisations’, begins with the opinion that, “Management of meaning is a key issue in gaining workforce commitment” (Scott and Harker, 1998, 105). Elaborating on this, they contend that meaning is gained through the organisation’s commitment to the welfare of the broader society. The optimum situation exists when there is alignment between the individual, the organisation and society. To create such an environment, it is necessary for individual employees to see the connections between what they do on a daily basis and what the organisation is trying to achieve overall. This alignment will help the individual see how they can influence the achievement of a superordinate goal they believe to be worthwhile. It is this that makes work meaningful.

Commenting on the distinction between personal welfare and that of the bigger group and, indeed, the organisation, Scott and Harker acknowledge that “the first duty of each manager and each employee is towards his or her own humanity” (Scott and Harker, 1998, 106). Within the organisation, such personal objectives are superseded by those of the larger entity. However, leaders cannot expect individuals to abandon their personal interests for the sake of the collective if they do not have a personal belief in the purpose of the organisation.

It is something of a paradox that in a world that is becoming more competitive and cut-throat, there is also an acknowledgement that a win-at-all-costs approach cannot prevail.

In addition to the obvious need to be economically competitive, organisations need to blend the profit motive with their obligations to the broader society. This view has been shifted from the altruistic/philanthropic to the imperative through the demand for improved standards of corporate governance. In South Africa, we have the King Reports, with King II commenting specifically on the need for companies to establish a code of ethics that aligns with organisational values and promotes ethical practices and integrity.

In exploring the concept of Ethical Leadership, I would like to refer to the work of Laura Nash and in particular, to what she refers to as a 'Covenantal Business Ethic'. Such an ethic has three essential aspects: value creation is seen as the primary objective; profit is a result of other goals rather than being the overriding objective, and business problems are approached more in terms of relationships than tangible products (Nash, 1993). This is the basis for Nash's contention that the purpose of business "is not just the receipt of a healthy return, but the creation of value and the maintaining of respect for other people" (Nash, 1993, 161). Integral to such an approach to business, is the promotion of the individual employee's sense of self-worth. Furthermore, is the belief that all individuals are worthy of respect and service, rather than being of worth only in terms of what the organisation can get out of them. There is a profound belief that the worth of the individual is more important than the mechanics of the system or its financial strategy.

This, I believe, is resonant with Scott and Harker's opinion that the first duty of organisational leadership is not to ensure the employee's contribution to profitability, but instead, to ensure his or her own humanity and integrity. Without these, leaders will not be able to persuade or influence others to follow them (Scott and Harker, 1998). I believe that ethical leadership is not merely an altruistic obligation that will assuage the organisational conscience, but will serve to ensure its long-term success measured in a variety of ways, including economic prosperity. Such sentiment is supported by Deon Rossouw who contends that, "ethics seems to be a prerequisite for sustained success, and more so for excellence in business" (Rossouw, 2002, 16).

The concept of Servant-Leadership was first articulated by Robert Greenleaf in 1970 and has inspired a shift away from the traditional autocratic and hierarchical models of leadership, towards leadership as a 'way of being' in relationship with others. Such leadership involves others in decision-making, is strongly based on ethical and caring behaviour, and enhances the personal growth of employees whilst improving the quality of organisational life (<http://www.greenleaf.org/leadership/servant-leadership/What-is-Servant-Leadership.html>).

Larry Spears has identified a set of ten characteristics of servant-leaders, several of which deserve comment. The first of these is 'Stewardship' which Spears sees as the responsibility for serving the needs of others and holding the organisation in trust for the greater good of society. Secondly, a 'Commitment to the growth of people' based on the belief that employees have an intrinsic value that goes beyond the tangible contributions they make as workers. The third characteristic is a commitment to 'Building community' among those who work within an organisation (<http://www.greenleaf.org/leadership/read-about-it/articles.html>).

Within the African context, I believe that the concept of Ubuntu has much in common with Servant-Leadership. Both are based on the assumption of common values, and both see the organisation as more than the sum of its operations and systems. Instead, they perceive commercial enterprises as communities and emphasise the social fulfilment of staff. Translated from Xhosa, Ubuntu means that, "a person is a person through other persons" (Senge, 1994, 3). Mbigi argues that the African genius in management lies in people management because African cultures emphasise humanism, the interdependence and solidarity of humanity (Mbigi, 1995). Central to this are a collectivist rather than an individual focus, a focus on the follower rather than the organisation, humility, trust and empowerment.

There are few greater African leaders than Nelson Mandela, and I believe the following extract from his autobiography goes a long way towards illustrating, in a practical sense, the idea of Servant-Leadership: "I have always endeavoured to listen to what each and

every person in a discussion had to say before venturing my own opinion. Oftentimes, my own opinion will simply be a consensus of what I have heard in the discussion ... a leader ... is like a shepherd. He stays behind the flock, letting the most nimble go ahead, whereupon the others follow, not realising that all along they are being directed from behind” (Mandela, 1995).

Supporters of Servant-Leadership believe that such an approach will lead to better and more caring institutions. Their views are gaining credence in the aftermath of scandals such as Enron. An increasing amount of thought is now going into reputation management and issues of corporate culture, humanity, values and community.

Pursuing the contention that ethical business practices and Servant-Leadership have a proven economic as well as a moral track record, I would like to refer to two people as symbols of ethical leadership.

The first of these is Max de Pree who helped grow Herman Miller to an economic powerhouse by focusing on people and growing them through encouraging the heart. Central to de Pree’s thinking is his belief that, in addition to leaving behind assets, it is as important to leave a legacy. In an interview with Frances Hesselbein, he explained this as, “articulating and bringing to life the kind of organisation or community that you want to be part of” (<http://www.leadertoleader.org/leaderbooks/121/fall97/depre.html>). He further explained that the legacy involves a common good that everyone in the organisation is connected to and has a right to.

When asked what a leader owes his followers, de Pree’s response highlighted something which, for me, is critical to organisational well-being; that is, ‘hope’. He maintains that without hope an organisation cannot be more than ordinary. The leader has to instil hope by designing and matching the individual’s tasks with the gifts that he brings to the organisation; people need to see and understand how their jobs are designed.

In his book, *Leadership is An Art*, de Pree further articulates his thoughts on what leadership is. He indicates that whilst leaders owe their institutions financial health, they must focus just as much on the relationships and reputation that enable continuity of that financial well-being (de Pree, 1989). In addition to the above, he maintains that leaders owe their people respect, fairness, and the opportunity for personal development and self-fulfilment in the attainment of the organisation's goals.

A reading of de Pree's work indicates a genuine commitment to what has been referred to as Servant-Leadership and this is reflected in Herman Miller being rated regularly as one of the '100 Best Companies to Work for in America'. A study of the company's results indicates regular appearances in The Fortune 500 as well. This is certainly evidence that financial performance and ethical leadership are two sides of the same coin.

A second example of the integration of individual, organisational and societal goals is provided by Anita Roddick, founder of The Body Shop International. I believe that is the purpose or mission of The Body Shop that enables it to pursue the objectives of its founder. The mission which is, in part, the pursuit of environmental and social change, seems to indicate that it is almost pursuing a non-profit agenda. Whilst this is perhaps naïve and indeed not true, it does indicate that the company is not just looking at the enhancement of profits, but also at its role as a social institution assisting communities.

Roddick makes an interesting comparison between her business philosophy and that of the Quakers: whilst they were successful business people, the Quakers also cared about the community. They saw business as a community of peoples and they recognised their responsibility for the protection of those people

(<http://leadertoleader.com/leaderbooks/121/summer2000/roddick/html>).

When asked how to measure success in business, Roddick's response indicates a view that is certainly non-traditional. In addition to the financial criteria, she makes a case for measuring joy in the workplace and for meeting environmental standards. However, she

is also of the opinion that there is a tyranny in measures and that these have led to business becoming a financial science with a language that is not easily understood.

On the subject of leadership, Roddick suggests that the role of the leader is to articulate a moral agenda and to make clear the connection between the organisation and the larger community. At a personal level, she speaks of the need to go far beyond the 'me', and to evaluate herself in terms of how influential, persuasive and progressive she is.

Once again, we have an example of an organisation that provides evidence of what the theorists I have cited espouse. Not only is The Body Shop recognised for its social and environmental practices, and not only does it strive to create sustainable local economies, it is also one of the world's most recognisable and successful retail brands. Here, clearly, is an example of the environmental, social and business agendas working together and being bound by respect for the humanity of the individual employee.

In the above I have attempted to paint a picture of what I believe to be a theme central to contemporary leadership. My thinking has been influenced by a study of relevant literature practical application. In essence, the critical learnings can be articulated as follows:

- Organisations have a responsibility to society. In addition to pursuing the profit motive, they need to be deemed socially legitimate.
- The purpose of the organisation is critical as it sets the boundaries and framework for its activities. It is this purpose that helps promote meaning and influences the commitment levels and behaviours of stakeholders.
- In return for employees illustrating a commitment to the organisation, their self worth needs to be promoted and their talents developed and utilised.

- The ideal is an alignment between the goals of the individual, organisation and society.

These, I believe, are the key challenges facing the leaders in contemporary organisations. At one level there is a responsibility for positioning the organisation as a whole and, at another, there is a leadership role within the organisation. The former is the obligation of those charged with the strategic positioning of the enterprise, the latter the obligations of all who influence the lives of others who contribute (or should be contributing) to the fulfilment of the organisation's purpose.

Finally, with regard to sustainability, sustainable development, or corporate citizenship, I believe that it can provide a framework within which organisations can find meaning and purpose, not only for the enterprise as a whole but for different stakeholder groupings and individuals. In support of this contention, I refer to the following interpretation of sustainability: "... it's about ensuring a higher quality of life – both now and in the future – through economic growth, environmental protection and social equity" (Sir P. Watts in World Business Council for Sustainable Development, et al, 2003).

CHAPTER FIVE

CONCEPTUAL AND METHODOLOGICAL FRAMEWORK

5.1 INTRODUCTION

“Reasoned intervention based on theory can help us learn and can reduce the costs. If you do not know what your theories are you cannot make links with other disciplines. If you do not know what your theories are you cannot explain your knowledge and pass it on to the next generation ... If you do not have a theoretical check then you cannot appreciate that the methods you use might be working for the ‘wrong’ reasons – perhaps because they appeal to the powerful and lend themselves to authoritarian usage.

(Jackson, 1995, 38)

This chapter describes the design of the inquiry process and is important, in that in order to learn why an intervention succeeds or not, it is necessary to have an explicit theoretical basis to facilitate reflections on outcomes and recommendations. Unless the assumptions made are understood and it is clear why specific methodologies are chosen the ability to learn from the intervention would be compromised.

The chapter therefore defines a methodological framework and structure to guide the inquiry process. The intervention makes use of systems models to interrogate the debate surrounding the issue of a sustainable development strategy for Illovo’s Sezela business.

Generally speaking, systems thinking is about:

- Using systemic ideas consciously to interpret the world, that is, to conceptualise the perceived reality as a system. This means that one chooses to treat a problem situation as if it were a system; that is, “a whole with emergent properties, a layered structure and processes of communication and control which in principle enable it to adapt to environmental pressures” (Checkland and Scholes, 1990, 22).

- Approaching problem situations from new and different angles in order to generate a range of complementary and competing insights and to learn to build on the strengths of different points of view. In other words, “A (systemic) ‘reading’ that grasps the key dimensions of a situation in a way that challenges taken for granted assumptions can open new perspectives for action” (Morgan, 1996, 4).

5.2 SYSTEMS METAPHORS

The conceptual and methodological framework of this study needs to capture both of the above ideas and use them to draw attention to the most significant aspects of the particular problem situation. One way of enhancing creative thinking about a problem situation in such a way has been articulated by Morgan. His methodology of ‘imaginisation’ aims to create sensitivity for different dimensions of a situation by using metaphors. It is built on the premise “that all theories of organisation and management are based on implicit images or metaphors that lead us to see, understand, and manage organisations in distinctive yet partial ways” (Morgan, 1996, 4).

Morgan further notes that a) any theory or metaphor brought to the study of a particular situation, whilst capable of creating valuable insights, is therefore also incomplete, biased and potentially misleading; b) different metaphors and models will lead to quite different perceptions of a problem situation and therefore to different conclusions and different types of action; and c) what one sees and judges as important depends not only on the evidence but also on the ‘conceptual lenses’ through which one looks at the evidence.

Thus, no single theory or model can fully capture the complexity of strategy formulation or policy implementation. Considering the nature of the conceptual and structural aspects involved it makes sense to capture and deal with them by adopting two main perspectives: a functionalist/cybernetic and a soft/interpretive. To enhance the creative thinking within the framework of these two logics Morgan employs the ‘brain’ and ‘culture’ metaphors.

5.2.1 The Brain Metaphor

Morgan (1996) sees the brain metaphor inviting one to think of systems where qualities of the whole are enfolded in all the parts so that the system has the ability to self-organise and regenerate itself on a continuous basis. It favours a more decentralised, distributed form of intelligence and control. Data is stored and processed in many parts simultaneously, and patterns and order emerge from the process, rather than being imposed from a central point. Communication and control secure the conservation of the 'whole', and allow the system to adapt in the changing context due to its capacity to:

- Sense significant aspects in the environment;
- Relate this information to the operating norms that guide the system behaviour;
- Detect significant deviations from these norms;
- Initiate corrective action when discrepancies are detected.

Despite the emphasis on decentralisation, such types of self-organising systems always require an element of hierarchical ordering. However, this hierarchy must be allowed to emerge and change as different elements of the system take the lead in making their various contributions. Organisations with such characteristics reflect the qualities and principles of a complex learning system.

The phenomenon of decentralised emergence is an aspect of the brain metaphor that has strong implications as it counters the top-down approach to management, characterised by centralised direction, leadership and control. The application of ideas associated with the brain metaphor therefore requires a shift in power and in mind-set, both factors which lead to resistance from supporters of the status quo.

5.2.2 The Culture Metaphor

The culture metaphor, as described by Morgan (1996), focuses attention on the fact that the challenge of creating new forms of organisation and new ways of doing things is very

much a matter of culture change. It is a challenge to change mind-sets and beliefs, as well as to develop shared systems of meaning that are accepted by and acted upon at all levels of the organisation.

Morgan further notes that culture is less the result of committed leadership of an individual or of centralised control, than the result of many complex interactions between people, actions, events and circumstances. In any complex organisation the ability to manage a variety of competing cultures and sub-cultures is dependent on the ability of the participants to consider differing worldviews and perspectives and to develop an awareness of the value systems that influence the problem situation.

According to Morgan (1996), there are three main aspects that may result in a breakdown of the cultural perspective when applied in practice. These are:

- The potentially dangerous trend that a manipulative and totalitarian interpretation of the metaphor may turn management into a process of ideological control and create resentment and resistance.
- The time it takes to change a culture and thus its limited use when it comes to solving short-term problems.
- The deficiencies of the metaphor to surface the deeper and more fundamental structures that might determine cultural, social and political trends and developments.

5.3 CHOICE OF METHODOLOGY

On the basis of that argued above, Checkland's Soft Systems Methodology (SSM) and Beer's Viable Systems Model (VSM) were chosen as dominant methodologies to conduct the study. The methodologies were used to address both the substantive issues and concerns relevant to the problem situation, and the structural context in which these arise and need to be dealt with.

SSM represents an interpretive paradigm and is mainly concerned with managing debate between people so that learning can happen, ideas can be evaluated and actions can be taken. The *System of Systems Methodologies / Total Systems Intervention* frameworks relate SSM to “complex-pluralist” problem contexts and consider it most relevant in situations where the issues of concern become particularly apparent under the lens of the culture metaphor.

VSM reflects a cybernetic, structuralist paradigm, has ‘modelling’ as its central activity, and aims to create viable self-organising structures. Within the *SOSM/TSI* frameworks VSM is regarded as suitable in “unitary-complex” problem situations and suitable to respond to issues that emerge via the lens of the brain metaphor.

5.4 CONCEPTUAL FRAMEWORK

A conceptual framework defining the methodology is intended to contribute to the effective diagnosis of the situation and to design an appropriate learning and problem-solving problem.

Informing the choice of framework was David Kolb’s Learning Cycle which refers to the process by which individuals, teams and organisations attend to and understand their experiences and consequently modify their behaviours. Kolb’s experiential model of learning is based on his contention that there are four distinctive kinds of knowledge and that each is associated with a distinctive kind of learning. The four kinds of learning are *concrete experiencing*, *reflective observation*, *abstract analysis* and *active experimentation* (Kolb, 1984). Kolb suggests that the ideal form of learning is one that integrates all four of these, with integration being achieved by a cyclical progression through them.

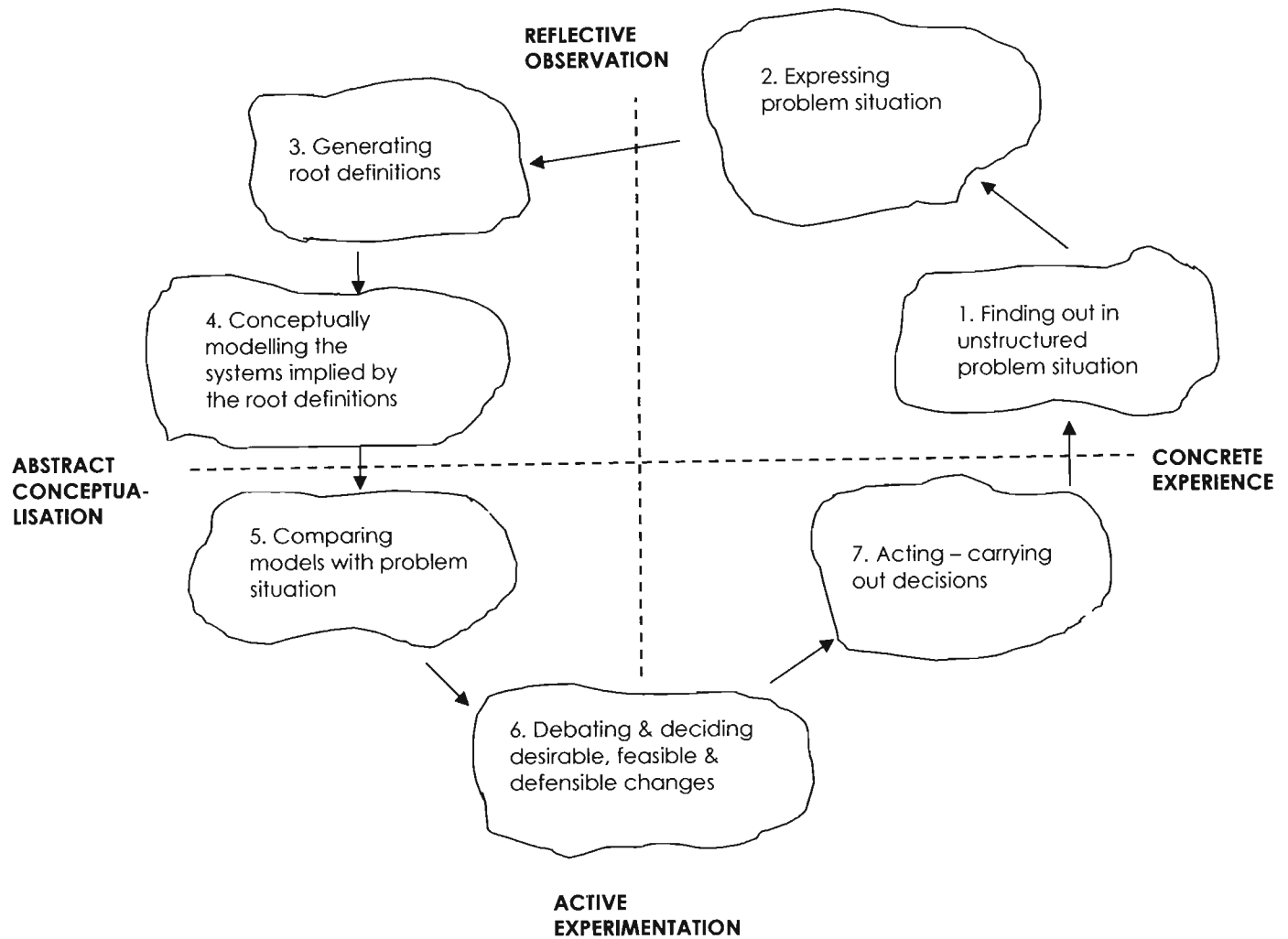
Kolb’s cycle comprises four stages, the first of which is *Experiencing*, or immersing oneself in the doing of a task. The second stage, *Reflection*, involves stepping back from task involvement and reviewing what has been done and experienced. The third stage of

Conceptualisation involves interpreting the events that have been noticed and understanding the relationships between them. The final stage of *Planning* enables taking the new understanding and translating it into predictions about what is likely to happen next or what actions should be taken to refine the way the task is handled.

Central to the above is the fact that each requires a systemic and iterative approach. They ask that during each phase continual reference be made, back and forth, to the likely conclusions of the other phases. In addition to periodically reflecting on experience in order to revise learning, one must also reflect on core beliefs, assumptions and values that need to be challenged and revised if necessary.

Given that the problem situation identified was indeed messy and complex and the objective was to apply an effective inquiry process, thus requiring a soft systems thinking approach, it was deemed appropriate to facilitate a process aligned with a learning cycle. Of the methodologies available, each of which operates according to the learning cycle, Checkland's Soft Systems Methodology (SSM) is the most rigorous.

The integration of SSM with the Learning Cycle is illustrated in Figure 8 below.



(Luckett, 2003, 16)

The above model provides the framework for the inquiry, the critical stages being:

- i. Immersion in the new experience and observing the experience from as many perspectives as possible (Diverging/Observing).
- ii. Interpreting our observations and making connections with existing theories and mental models (Assimilating/Connecting).
- iii. Focusing on what is important in our new understanding, developing plans, and deciding on possible courses of action (Converging/Deciding).

- iv. Implementing the plans to improve the situation that we originally experienced (Accommodating/Implementing).

(Luckett, 2003, 10)

5.5 KEY PHASES IN THE INQUIRY

The inquiry follows the phases indicated above.

Phase 1 – Observing, Experiencing and Understanding The Problem Situation

During this phase the concept of sustainable development was introduced to participants and the intention was primarily to ‘find out’ about the perceived problem situation.

SSM was applied to conduct a socio-cultural and political analysis, as well as capturing the thoughts and ideas of selected stakeholders. The latter involved a number of techniques which surfaced the worldviews and perceptions of the stakeholders, their attitudes and values, and the relationships between them. Specifically, the intention was to identify the issues that people involved in the situation think problematical, to identify the roles that people have in the organisation, and to identify the relationships of power that prevail within the situation.

In evaluating the system from a structural perspective, and to identify and diagnose the ‘system in focus’, the VSM was used.

Phase 2 - Interpreting and Structuring The Problem Situation

Having observed and assessed the situation, the next step was to retreat from the real world in order to generate root definitions of systems relevant to the identified problems and to construct conceptual models.

Luckett defines the root definition and conceptual model respectively as:

“A root definition is a definition, or a very brief summary, of a system which will bring about a desired outcome. The core of a root definition is the transformation process. This process is defined in such a way that a defined input is transformed into a defined output” (Luckett, 2003, 23).

“Formal systems models, logically contingent on the root definitions, are constructed. The model is an account of the activities, and the relationship between them, necessary to make the system work” (Luckett, 2003, 15).

To test that the root definitions were well formulated and complete, each was evaluated against the mnemonic CATWOE, explained by Luckett as:

- C - Customers or beneficiaries of the programme.
- A - Actors in the system; that is, the people who make the system work.
- T - The transformation.
- W - The Worldview or assumptions underlying the system; what assumptions are necessary for the desirability and existence of the system.
- O - The Owners of the system; that is, those people in the designed system who have the key decision making authority. It is often these people who have the power to stop the system fulfilling its purpose.
- E - The Environment of the system, or more precisely, those elements over which the owners have no control, but which have an impact on the system.

(Luckett, 2003, 25)

The activities necessary to effect the required transformations and the relationships between these activities were then demonstrated in conceptual, or, Human Activity Systems (HAS) Models.

Phase 3 - Deciding on Possibilities

At this stage, one re-entered the real world and compared the conceptual models developed in the previous stage with the real world situation. The purpose of this comparison was to generate discussion about present activities and one was mindful of Checkland and Scholes' advice that, "Models are only a means to an end, which is to have a well-structured and coherent debate about a problematical situation in order to decide how to improve it" (Checkland and Scholes, 1990, 42).

The discussion generated in the comparison exercise led to decisions about changes that could be brought about to improve the problem situation. These changes could be one of three kinds – in structure, in process, or in attitude. When considering what changes to make, one needed to ensure that they met three criteria:

Systemically desirable - instituting monitoring processes, developing adequate decision-making, ensuring appropriate information flows, making sure that the necessary resources are available, ensuring that the logical connections between activities are reflected in real world actions, etc.

Culturally feasible - ensuring that the myths and meanings which have been constructed within the organisation are respected. Implementation of the changes will affect the organisational culture and therefore the proposed changes will only be acceptable if they are perceived as being meaningful within the organisational culture.

Ethically defensible - ensuring that human values are upheld.

(Luckett, 2003, 31)

5.6 BOUNDARY CRITIQUE

The first consideration was to implement an Intervention Analysis, or Analysis One in SSM. The objective was to consider the definition and roles of the 'client', the 'problem

solvers' and the 'problem owners' so as to bound, firstly, the intervention itself and, secondly, the problem situation.

The Client(s): It is this person(s) who causes the analysis/intervention to take place. Given that it is the client who has the power and discretion to determine the actual happening of the analysis, it is generally a person of appropriate rank and influence. Ideally, the client in this situation would be the General Manager of Illovo's Sezela business. However, it was not he who commissioned the inquiry. As indicated above, the intervention was initiated by me and my motive was two-fold. In the first instance, I was required to write a Master's Dissertation using systems methodologies and in searching for a topic I was influenced by my observations and role within the organisation. Secondly, I was prompted by the perceived need of the business to broaden its focus beyond financial and operational activities. In doing so, it was hoped to include sustainable development issues on the strategic agenda.

The purpose and nature of the study are influenced by my intentions to employ a study approach that provides me with the opportunity to apply systems-based methodologies and, in so doing, satisfying the academic requirements of the university. The need to complete the Masters programme within a specified time period forced me to maintain a timeframe to meet this requirement. It is for this reason that I have avoided confrontational methodologies and techniques which could cause conflict with and resistance from potential resource persons.

In discussing the matter with the General Manager, he encouraged me to pursue the matter. I therefore believe there to be two clients: the primary client being the General Manager, and the secondary client being me.

The Problem Solver(s): SSM suggests that this is the person who undertakes the inquiry. This is obviously the author as nobody else played a role in facilitating the inquiry. However, if one considers the view of Checkland that the problem-solver "uses the systems methodology to take action to improve aspects of the problem-content system" (Checkland, 1981, 238), one needs to consider other role-players who identified

themselves as wanting to do something about the problem situation. To determine who was interested in the situation, presentations were made to several forums and, thereafter, invitations were extended to those parties who expressed an interest in getting involved. By responding to the invitations, the problem solvers identified themselves and they were involved in both the inquiry and the assessment of the proposed future direction.

In addition to them, both primary and secondary clients could be considered problem solvers. As the emerging strategy unfolds it is anticipated that the ranks of the problem solvers will increase.

The Problem Owners(s): In this category are those who have views on and perceptions of the problem situation. It is their knowledge that is considered in the inquiry and thus they have a strong influence on the outcome. Given the nature of the problem situation it would have been of benefit to include a broad spectrum of problem-owners. However, this was not possible and the voices most heard were those who participated actively in the process. Nevertheless, they did represent the views of other non-participatory problem-owners but in a filtered form. It is the active problem-owners who would have a direct influence over the actual implementation.

To assist in the identification and selection of potential participants in the inquiry, Ulrich's 'boundary questions' were used. They were asked in an attempt to locate the following 'sources' in social systems:

- The source of motivation: who are the actual 'clients' of the system design; and whose interests are being served?
- The source of control: who are actually the decision-makers; and who is in a position to change the system design?
- The source of knowledge: who is actually involved as 'planner' or 'expert'; and who is considered to be competent and what expertise counts?

CHAPTER SIX

IMPLEMENTING THE INQUIRY

The inquiry was conducted on the basis of semi-structured interviews, individual conversations with resource persons, and several workshop situations. In the interests of completing the study within a specific timeframe as well as emerging with a meaningful outcome, the selection of stakeholders was particularly critical. Those that were involved in the study, once made aware of the concept of sustainable development, were keen to learn more and apply its principles within the context of the business. Whilst one remained aware at all times that there could well be opposition to such, confrontational methodologies that could cause resistance and therefore delay the completion of the study were avoided.

6.1 OBSERVING, EXPERIENCING AND UNDERSTANDING THE PROBLEM SITUATION

The initial stage was initiated in response to the perception that there was a problem situation or room for improvement. Soft Systems Methodology suggests that the term ‘the problem’ is inappropriate as it serves to narrow the view of the situation. Rather, one should refer to the ‘problem situation’ as there may be more than one problem that needs to be addressed. The SSM commences with an analyst entering the situation to observe the problem situation. It is imperative that one is aware that the presence of the analyst will impact the situation and possibly alter its dynamics.

The problem situation that formed the basis of the study was identified by me but not without having observed and been part of the situation for some time. In addition to being aware of the dangers of a limited perspective, I was further guided by Lockett (2003) who suggests that the initial investigation of the problem may be enhanced by divergent thinking and looking at the situation with one’s mind as open as possible and being especially mindful of the limitations of one’s own mental model. I was also aware of the dangers of applying my own interpretation to the situation and influencing options that

would possibly be of personal value to me. The latter was a function of the impact that a perceived successful intervention could have on my role and future within the organisation.

Given the reluctance to burden the participants with academic technology and jargon, neither SSM nor VSM were described to them in much detail. Instead, the discussions were facilitated around themes with certain key questions being posed. The outcomes of such were then extracted and distilled according to the logic and language of SSM.

6.1.1 Metaphors

To facilitate creativity, to deepen understanding of the character and functions of the system, and to generate deeper insight into the organisation context, the following metaphors, or ‘images of organisation’ were used to depict the situation.

Illovo Sugar, Sezela as a Machine: This model reflects the structure of the organisation which many see as hierarchical and bureaucratic. The organisation structure has been designed to enable control by its architects and rules, policies and procedures abound. It is often said that the prevailing culture is one of command and control and that rank and status is of more consequence than wisdom and knowledge. The style is possibly borne out of the history of both the organisation and the industry of which it has been part for so long. This is compounded by the critical success factors in both the agricultural and manufacturing entities of operating efficiencies and cost control. Doing the same things better has been the rallying cry. Change is greeted with suspicion and innovation is weighed up against risk, thus slowing the decision-making process.

Illovo Sugar, Sezela as an Organism: Despite the prevailing tendency to control, there is an acknowledgement that the organisation is an open system and therefore needs to be responsive to environmental changes. Furthermore, it is acknowledged that the organisation is made up of a number of parts which need to work interdependently if the whole is to be effective and survive. This is recognised in a closer integration of the components within the value chain, from securing supply of the primary raw material to

the marketing and sale of the finished products. A conscious effort has been made to break down the departmental silos reflected on the organogram.

Illovo Sugar, Sezela as a Psychic Prison: Given the fact that the organisation has been in existence since 1915 there is a strong case for those who protest that the key to viability is more of the same. There is, however, a case for those who believe that the seeds of failure are to be found in past successes, and that the organisation could well become a victim of its successful past. A reluctance to seek counsel from outside of the company and, or industry is a noticeable characteristic of the organisation.

6.1.2 Socio/Cultural Analysis

The use of metaphors indicated a diversity of perspectives pertaining to the culture of the organisation. Given the range of stakeholders and the roles that each have, it is not surprising that the interaction between the elements of roles, norms and values is dynamic. The perspectives of the stakeholder groupings were to a large extent determined, or at least influenced, by their roles in the organisation.

Given the historic protection given to the sugar industry by way of regulation and the lack of a customer focus, there is a tendency to view any outsider as the opposition. This xenophobia extends to the agents of government legislation and to the communities that neighbour the operation. Indeed, there is a strong resentment to any perceived interference from outsiders, including 'Head Office'. The relationship with the corporate headquarters has long been the subject of the centralisation vs. decentralisation debate.

There are, however, protagonists who support the idea of a more inclusive approach to business. It is they who are beginning to question the 'purpose' of the business and who are expressing resistance to the view that its *raison d'être* is the pursuit of shareholder profits via the manufacture of sugar and related products. There is a growing belief that questions should be asked as to the 'footprint' of the business and the legacy that it will leave for future generations.

The above stance is countered by the traditionalists who maintain that there are enough difficulties in keeping the business viable within a narrow scope without having to broaden and, in their eyes, dilute the focus on operational efficiency. In support of their argument, defenders of such an approach point to the current economic difficulties facing the South African Sugar Industry and Illovo's operations in this country.

In exploring the concept of sustainable development with parties, a diversity of attitudes became apparent. Regarding the economic dimension, employees at all levels were to some degree aware of the situation facing the industry and the company and with it the challenge to remain economically competitive. However, those representatives of the lower echelons were more concerned with the short-term prospects, whereas those at higher levels understood the need to make short-term sacrifice for long-term sustainability. Those at the lower levels also took a more parochial view on environmental and societal issues. Examples of this were the concern for the pollution of dams in close proximity to their homes, the lack of jobs for local residents, and for the wish to return to the more paternalistic employer-employee relationship of the past that characterised the sugar industry. These differences of opinion have the potential to cause conflict amongst stakeholders when efforts are made to identify priorities and allocate resources.

It must be pointed out that with regard to norms and values, the opinions expressed are often not the truth. Rather, they are reflective of what people believe you want to hear, or they are in line with the official company line. The opinion expressed above is somewhat subjective but it has been formulated through an active observation over a number of years.

6.1.3 Political Analysis

This analysis revealed the differing levels of power exerted by the different role-players in the situation. As alluded to in the metaphor discussion, a strong sense of hierarchy abounds within the organisation and with it a historically exclusive approach to decision making.

Within the organisation itself, a noticeable power dynamic exists in the relationship between the Sezela entity and its corporate principles, referred to as 'Head Office'. Evidence of the locality of the seat of power is cited by the fact that the local operation does not control its own social investment budget. Instead, it competes with other operating centres for budget allocation. This, it is believed, disempowers local agents in their efforts to position the entity as a meaningful social partner with community bodies.

Within the local community there are also a number of political forces at play. The most apparent of these is the tension that exists between the community immediately adjacent to the manufacturing operation and that located across the N2 freeway and known as the Malengeni. The former is predominantly Indian and has developed a symbiotic relationship with the company over many years. The latter which is exclusively Black has grown over the years largely as a result of population growth but with little direct link with the company. The present situation, and one likely to prevail into the future, is one of competing for resources, including jobs, financial support and infrastructure development.

A further power dynamic that is becoming increasingly apparent is that within the grower structures. Traditionally, these have been dominated by large-scale White farmers, a situation reflective of the demographics of the cane-farming population. However, with the national commitment to land distribution and Illovo's policy of selling its land and setting-up and supporting Black farmers, the demographics are rapidly changing. With this change has come a challenge to the traditional grower structures and the resultant tension between them and the emerging growers.

This has ramifications for Illovo as it needs to reconsider its relationships with the players and to play a facilitation role in keeping the peace and thereby ensuring its cane supply.

Allied to the above are the changes in local government structures and the emergence of new role-players. The success of these structures is vital if the local environment, and specifically the Umdoni Municipality, is to emerge from its historic underdevelopment. Playing a critical role in this arena are structures such as the Umdoni Local Economic

Development Forum which has set itself the task of accessing and managing donor funding from institutions such as the European Union and the Department of Agriculture.

The above analysis highlights the important role that Illovo has to play in bringing together the different role-players. Not only is this a function of the company's role as a key stakeholder but further, it is necessary for the sustainability of the business. It is becoming increasingly apparent that long-term viability is as much a product of environmental and social responsibility as it is of profitability. The challenge is to convince principals of the need for Illovo Sezela to be deemed a meaningful corporate citizen by a range of stakeholders.

6.1.4 Stakeholder Analysis

"A stakeholder is any group or individual who can affect or is affected by an organisation's impact or behaviour" (McIntosh, et al, 1998, 198).

In their book, *Corporate Citizenship – Successful Strategies for Responsible Companies*, the authors categorise stakeholders as either primary or secondary. Of relevance to the intervention were several of those in the former category, listed as follows:

- *Social*
 - shareholders and investors
 - employees and managers
 - customers
 - suppliers and other business partners
 - local communities
- *Non-social*
 - the natural environment
 - future generations
 - non-human species

The authors contend that primary social stakeholders can be communicated with directly, and generally, primary non-social stakeholders cannot be (McIntosh, et al, 1998).

To further determine the identification of stakeholder representation, reference was made to Sir Anthony Cleaver's contention that whilst almost everything about a company can change over a period of time, the one thing constant is the company's relationships with:

- i. Those people who invest in it, the shareholders;
- ii. Those who work for it, the employees;
- iii. Those who buy its goods and services, its customers;
- iv. The people who supply it with goods and services it does not produce itself, its suppliers;
- v. The community at large.

(McIntosh, et al, 1998)

To gain an insight into the perceptions and perspectives of a wide range of stakeholders, several activities took place. These were:

- Interviews with groups.
- A Scenario Planning Exercise.
- A stakeholder conference.
- A Stakeholder Workshop.

In addition, my experience within the organisation has made me aware of the sentiments of other stakeholders.

Interviews with groups

"If you want to know how people understand their world, why not talk to them?" (Kvale, 1996, 1). It is with these words in mind that I gathered together groups of people to express their views and opinions in their own words. In line with Kvale's advice with regard to conducting qualitative research interviews, the interviews were *focused* in that they were focused on particular themes, it being neither strictly structured with standardised questions, nor entirely non-directive (Kvale, 1996, 31).

The groups were selected according to their roles and, or positions within the organisation. In conducting these conversations in groups, individuals were able to record not only their individual opinions but also benefited from the interaction with others. Two of these sessions were held, one with the management team of the Sezela business and the other with shop stewards.

The aims of each of the above discussions were:

- a) To determine the level of pride in and commitment to the organisation.
- b) To introduce the concept of sustainable development.
- c) To ascertain whether the principles of sustainability are relevant to the business and whether they could help improve levels of employee ownership.

To initiate the discussions, the following definition of *ownership* was mooted: “People striving to contribute towards the achievement of company goals because they are proud to work for the organisation, because they are appreciated and recognised for their efforts, and because they see the difference that their contributions make.”

To further stimulate discussion amongst members of the management team and, in particular, to assess morale, Rehm’s ‘Six Psychological Criteria for Productivity’ was used. The criteria are:

1. *Adequate Elbow Room*
2. *Opportunity to learn on the job and keep on learning.*
3. *Optimal variety.*
4. *Mutual support and respect.*
5. *Meaningfulness of work.*
6. *Desirable future.*

(Rehm, 1999)

From the discussion it was apparent that morale both within the team and the broader organisation was in something of a downward spiral. Whilst the blame was, in the main,

laid on the incessant focus on cost-cutting and downsizing, there was also evidence to suggest that the narrowly defined 'purpose' of the business was to blame. In the words of one manager: "If you focus entirely on profits, is it any wonder that problems are created when profitability begins to falter." Another suggested that by reducing the core of the business to money-making, all debates, discussions, debates and issues revolve around money matters. This includes an increasing amount of focus on energy sapping and non value-adding arguments around wages, benefits and conditions of service.

The criterion, *Meaningfulness of Work*, elicited particular debate. The overriding consensus amongst team members was that for enhanced productivity, people need to relate what they do at work to the broader society; that is, work done must be socially useful. The feeling was that by focusing almost entirely on profitability via efficient means of production, not enough importance was attached to the broader value creating aspects of the business. This feeling is resonant with the opinion of Ghoshal and Bartlett who are critical of organisations that concentrate only on cost saving, waste reduction and improvements in quality and efficiency. Instead, they say, the focus should be on creating value for society. This entails viewing a company not only as an economic entity but also as a social institution (in Chowdhury, et al, 2000, 127/8).

The discussion with the shop stewards was less structured than that with the management team and the issues raised were more immediate and 'bread-and-butter' in nature. Issues of particular relevance were the ongoing reduction in complement and, whilst an appreciation for the economic situation facing the company was exhibited, they were scathing of what they saw as the only response by management – job loss.

This job loss and the inability of the company to create jobs have a significant impact on the community as many families are dependent on the breadwinner being employed by Illovo. Indeed, these worker representatives were particularly critical of the company's contributions to the community. This was best described by one of them who, when asked to comment on the company's reputation in the community, responded by saying, "What reputation?"

Scenario Planning

To further explore the problem situation, reference was made to a scenario planning exercise conducted with the management team responsible for Agriculture/Cane Supply.

The team members had, as part of the exercise, identified a number of key uncertainties facing their part of the business. These were land transformation, changes within the regulations governing the country's sugar industry, threats to cane supply and quality, and job security. Reducing these to the critical ones of land transformation and the need to ensure quality raw material, a number of scenarios were elaborated upon. Of these, the preferred option was entitled, 'Fly United'. This was characterised by partnerships and cooperative relationships amongst stakeholders, namely: Illovo Sugar, its agricultural operation, the established and emerging farmers, and the local communities.

The team went so far as to say that in order to remain relevant, the role and focus of their operation would have to change. They envisaged themselves as a 'Technical Consultancy', providing the following services to the Sezela cane-growing community:

- Facilitating the transfer of company farms to private ownership.
- Transferring of technical knowledge and skills.
- Accessing funds and support from donor bodies, government and non-governmental organisations.
- Re-establishing rural cane-growing areas.
- Facilitating the development of integrated grower liaison structures.

From the above, it is clear that there are pockets within the organisation who see the need to add value on a broader front, and to do this the purpose of the business needs to be expanded beyond the profit motive. Indeed, as the protagonists in this exercise argued and illustrated, short-term profitability sometimes needs to be sacrificed in the interests of long-term sustainability. As part of the sustainability equation, the focus of their team and, indeed, that of the company needs to be expanded to include broader community involvement.

Stakeholder Conference

This conference takes place annually at Sezela and provides an opportunity for 50 -60 representatives of various internal stakeholder groups to review company performance, identify forces in the business environment, and determine priorities for the forthcoming year. The 2004 conference provided me with an opportunity to introduce the delegates to the concept of sustainable development, discuss its relevance to the business, and conduct a 'sustainability audit'.

To facilitate the audit, delegates were randomly allocated to groups and asked to analyse the company's performance with regard to each of the components of sustainable development. The Community dimension was divided into two elements – within the organisation and applicable to employees, and neighbouring communities that have (or should have) a relationship with the organisation. After discussion, it was agreed to limit the audit to the Environmental and Community/Social dimensions.

In reviewing Environmental performance, it was felt that although the Company had in the recent past begun to improve its reputation in this regard, there remained much to be done to overcome the 'sins of the past'. Traditionally, scant regard had been paid to environmental integrity and this was apparent in both manufacturing and agricultural practices.

With regard to Factory operations, evidence cited was:

- The discharge of effluent into the ocean via a pipeline.
- The polluting of the Sezela lagoon that led to fish-kills.
- The unilateral opening of the lagoon without consideration of detrimental impact.
- Air pollution caused by stack emissions.
- Smells emitted from the ash dam.
- Dust particles in the atmosphere – residue from the Downstream plant.
- Irresponsible use of water, a particularly valuable commodity.

On the Agricultural front:

- Air pollution caused by cane burning.
- Damage done to soil nutrients by burning.
- The negative impact of fertilizers and pesticides.
- Soil erosion.
- Silting up of waterways and rivers.

It was, however, noted that there was a growing emphasis on environmental responsibility and this was indicated in a variety of ways. Reasons cited for this change in approach were two-fold: in response to legislation, and due to community pressure.

With regard to legislation, the Company was mindful of developments and the growing influence of the Departments of Water Affairs and Forestry and Environmental Affairs and Tourism. Given the nature of the products made (especially those ‘chemical’ in nature) and our locality, we have been under close surveillance. For example, we have been alerted to the fact that we cannot continue indefinitely to pump effluent into the sea and can only do so whilst an alternative effluent-treatment process is being developed.

The local communities, in particular those in close proximity to the factory, have also become more vocal in recent years. An example of this is the Pennington Environmental Group which, backed by legislation, was able to mobilize support of other stakeholders to force the organization to review its effluent disposal process. A feature in this arena is the fact that the last ten years have seen the sale of previously company-owned houses and the entry of non-company employees into the ‘fence-line’ community. Not being beholden to the Company, they are more vociferous in their objection to environmental degradation.

An interesting outcome of the audit was the strongly felt opinion of the participants that the Company’s approach to environmental management should not be driven by legislation but, rather, by a willingness to do the right thing.

As far as the 'Internal Community' was concerned, participants in this review focused mainly on issues that have been very prominent over the past few years. These included:

- Skills Development.
- Employment Equity.
- Workplace Safety.
- Black Economic Empowerment.
- HIV/AIDS.

Once again it was felt that, whilst progress had been made to abide with the relevant legislation, there was still a long way to go before all parties would be satisfied (if ever). Of particular concern was the lack of Africans in management positions.

There was agreement that the organization was meeting the base-line requirements laid down by legislation such as the Employment Equity, Skills Development and Occupational Health and Safety Acts. There was, however, a call for more widespread participation in the structures set up to facilitate progress; for example, the Skills Development Committee.

An area that certainly needs closer examination is that to do with Black Economic Empowerment. It was felt that the organization should be doing more to support black-owned businesses, particularly regarding the supply of services to the factories. In this regard, it was noted that the company had sold 53% of its agricultural lands to previously-disadvantaged communities (including former employees) over the last ten years.

Regarding HIV/AIDS it was acknowledged that efforts had been made to educate the workforce on the matter and the company was commended on its policy in this regard. What was of concern, however, was the lack of support for the Voluntary Counselling and Testing (VCT) and Wellness Programme.

The review of performance in the 'External Community' focused on the Company's contribution to communities in close proximity to the operations, both industrial and agricultural.

It was revealed that initiatives here had been either by way of transferring company assets, or by financial donations.

Evidence of the former was:

- Sale of farmland to previously-disadvantaged people.
- Sale of houses to employees.
- Setting-up of employees in businesses (SMME's) e.g. mechanical workshops.
- Building of classrooms and other amenities at local schools.
- Financial support for the EQUIP Programme.
- Sponsorship of science competition and awards at schools.
- In-service training given to students.
- Donations to local bodies – churches, schools, clubs, societies.

The general feeling was that whilst the Company needed to be commended for these initiatives, more should be done. It was pointed out that the Company was the biggest business in the area and has a huge impact – directly and indirectly – on people living in the region. There was a sentiment that social investment had favoured the Indian community who live close to the mill and had tended to ignore the bigger but more dispersed African communities located away from the coast.

A further interesting observation was the perception that the company had failed the community by having washed its hands of them once ownership of assets, either land or houses, had been transferred. This criticism was especially valid in the case of the small-scale growers whose productivity levels had declined in the face of adverse growing conditions. The sustainability of these farmers is now under threat. It was felt the company should have done more to transfer knowledge to these emerging farmers.

Having conducted a review of past performance – what have we done and how have we performed? – the delegates were asked to identify what we should be doing.

Critical ecological issues identified were:

- Continued expansion of the Effluent Plant so as to eliminate dispersal to sea.
- An analysis of the Air Quality Management Act and Coastal Zone Management Bill in order to identify problem areas and determine responses.
- Water conservation.
Water is a valuable commodity in the factory as it is an essential process ingredient. Not only is supply not always reliable due to weather conditions, it is also becoming increasingly expensive.

As far as the internal community was concerned, the following were seen as worthy of further attention:

- Fast-tracking of black Africans into management positions. Cognisance must be taken of organizational structures and affordability.
- A representative team to review skills development initiatives and to facilitate the development of plans, taking heed of the need to meet Employment Equity requirements.

To boost the company's reputation in the surrounding communities, it was deemed appropriate to:

- Align company HIV/AIDS initiatives and resources with the Umdoni/Vulamehlo HIV/AIDS Association.
- Develop a holistic and integrated approach to community involvement/investment. A point of departure would be to align this with the relevant applications of Local Agenda 21 as it applies to the Ugu District Municipality.

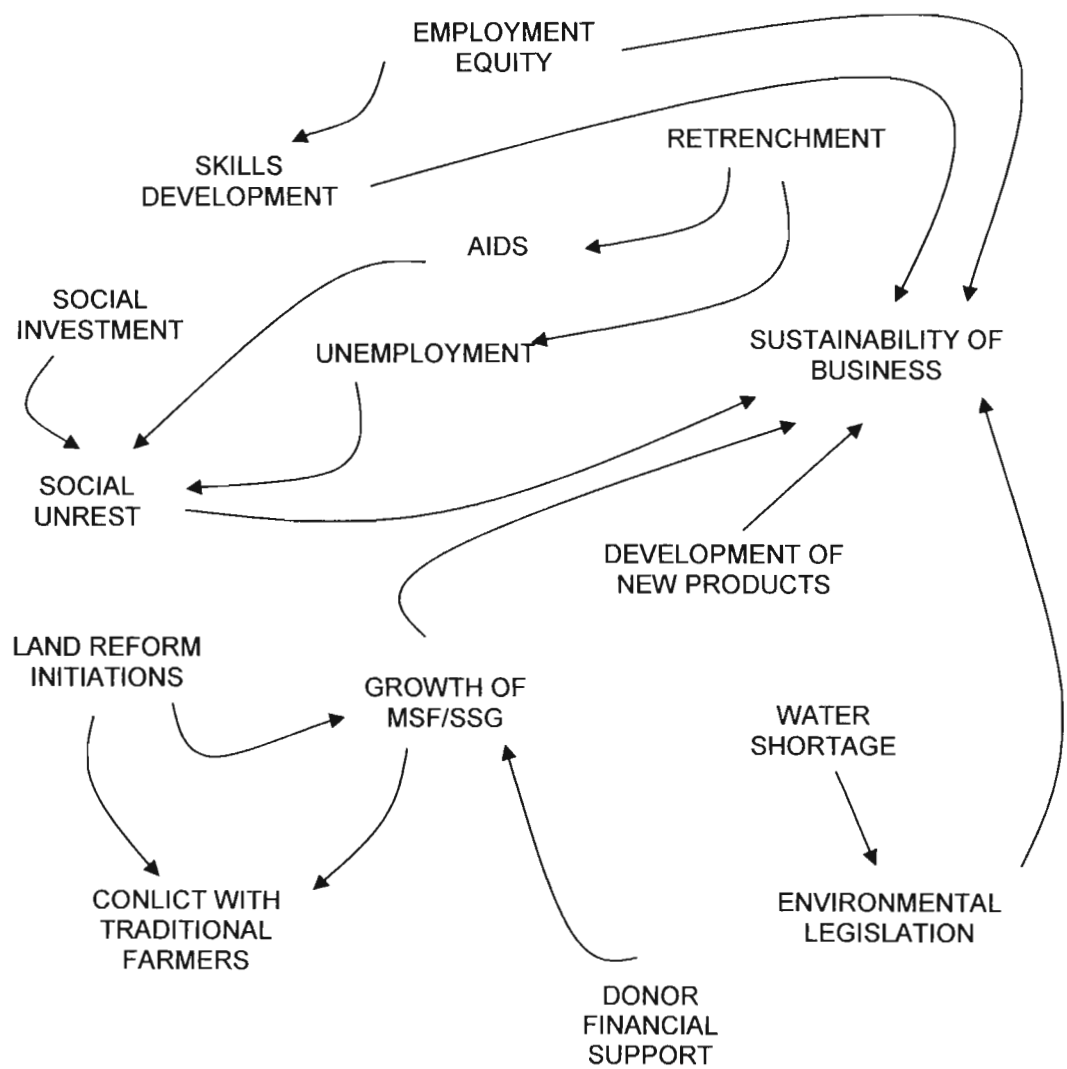
- The redevelopment of the Sezela Small-scale Grower community to ensure their sustainability as sugar cane farmers.
- Support for the land reform initiative.

Stakeholder Workshop

At the conclusion of the conference an invitation was extended to parties who would be interested in pursuing further exploration of the sustainability concept. The theme for the workshop was, “Sustainable Development – A Catalyst for Organisational Effectiveness?”

In an attempt to illustrate and share the beliefs that the participants had about the situation, and to help them see the interconnectedness of the issues, a cognitive mapping exercise was facilitated. The outcome is reflected in Figure 9.

Figure 9 : Summary Cognitive Map Of Sustainability Issues Facing Illovo, Sezela



Emerging from the exercise were the following ideas.

Environmental

- Secure environmental accreditation for the Agricultural and Industrial operations.
- Extend the existing effluent treatment plant to full capacity.
- Solve the ash dam smell problem.

External Community

- Facilitate the development of small and medium scale farmers through helping to access donor funds.
- Establish stronger links with SASA-led social responsibility initiatives.
- Initiate an in-house social responsibility programme using company time, talents and resources.
- Initiate a community skills-development initiative.
- Formalise links with community structures.

Internal Community

- Promote deeper understanding of ‘purpose and meaning’ amongst leaders within the organisation.
- Identify and develop skills to pursue the future business direction.
- Develop employees to ensure employment equity.

Economic

- Formalise a new product development programme based on ‘products from a renewable resource’.

Delegates also questioned the validity of the organisation’s current strategic intent, as well as the appropriateness of the organisation structures in light of the new challenges.

As part of the exercise, delegates to the workshop reviewed the 2004/05 Company Report in an effort to ascertain the commitment and contribution to sustainability. A reading of the salient features revealed a good deal of corporate citizenship activity across the company. However, it was generally felt that these were ad hoc and reactive in nature, and not the result of a coherent, integrated and well-communicated strategy. Several of the delegates commented on the fact that although the company reported performance against dimensions of a triple bottom line at a macro level, this was not done at an operating centre level. The sentiment was that lip-service was being paid to non-financial matters and that only when focus on all three elements of the sustainability equation is demanded at all levels can the company be seen as a true corporate citizen.

Indeed the comments of the more cynical reminded me of the advice of Freemantle and Rocky: “Beware of the organisation thinking that it can climb aboard the citizenship bandwagon merely by repackaging itself in sustainability language and reporting, whilst in reality carrying on as before” (Freemantle and Rocky, 2004, 5).

6.1.5 Structural Analysis

The analysis and discussions involving stakeholders revealed questions pertaining to the structural dimension of the system under review. Given that sustainability was a strong theme in these discussions it was perhaps not surprising that the sustainability, or viability, of the system was questioned.

Taking a cue from Senge’s definition of a system, that is, “..... a perceived whole whose elements hang together because they continually affect each other over time and operate towards a common purpose” (Senge, 1999, 90), it was deemed appropriate to use the Viable Systems Model (VSM) to evaluate the structure. In particular, it was used to assess whether there was appropriate autonomy within an integrated framework, together with the necessary supporting links between the separate components.

Whilst acknowledging that the VSM is primarily a diagnostic tool to assess the existing structure with the aim of discovering potentially dysfunctional relationships, and to absorb the complexity of the problem situation, in this instance it was used to facilitate discussion around a desired structure.

The following is a model structure developed by stakeholders in an attempt to ensure the necessary levels of integration, cohesion, control and communication.

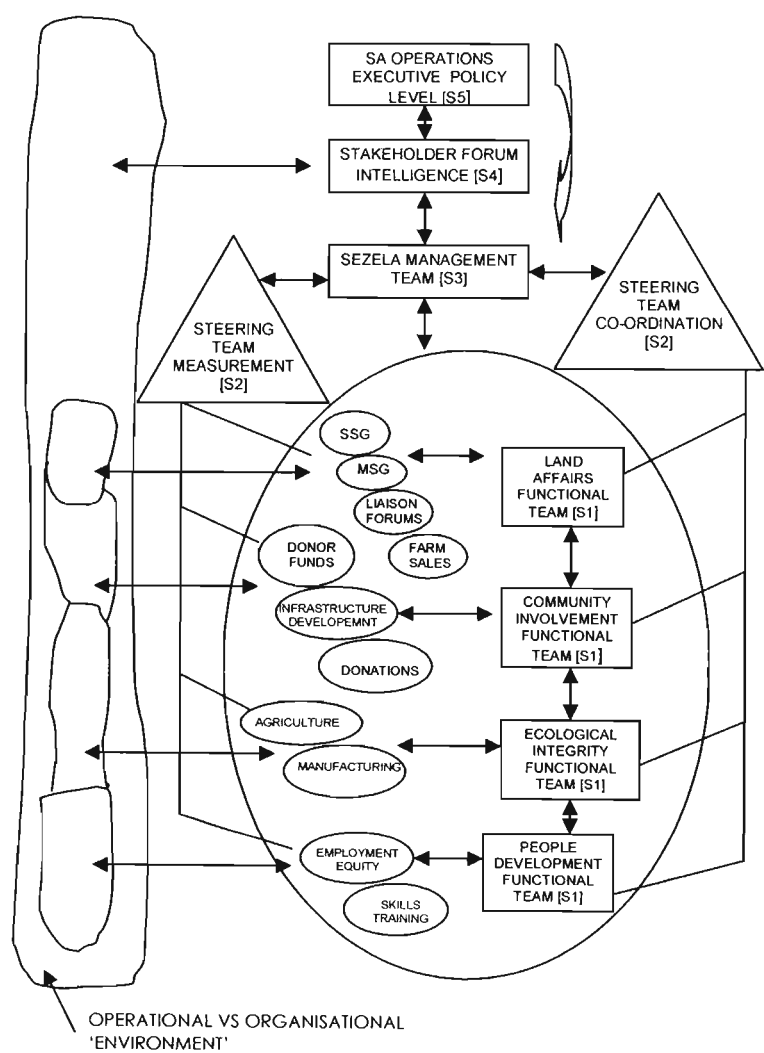


Figure 10 : Illovo Sugar, Sezela As A 'System In Focus'

System 5 (S5): Policy

The role of the 'policy function' is to respond to signals transmitted by the 'intelligence function'. Based on this information, policies, strategies and goals are formulated and communicated downward for interpretation by the 'control function' and for implementation by the 'operations function'. The 'policy function' needs to ensure balance between the sometimes conflicting internal and external demands, and to ensure that the system-in-focus adapts to the external environment whilst remaining internally stable.

It was proposed that the policy responsibility sits with the Executive Team responsible for Illovo's South African Operations. The role at this level would be to:

- Review the strategic intent of Illovo, South Africa and cultivate a culture of responsible corporate citizenship.
- Determine key performance areas and appropriate performance indicators.
- Assess implementation performance

System 4 (S4): Intelligence

The Intelligence function is the two-way link between the primary activity and its external environment. Intelligence is critical to the organisation's ability to adapt. In the first instance, it provides primary activity with feedback on environmental conditions and factors likely to be relevant in the future; secondly, it projects the image and message of the organisation into the environment. It is the primary function of senior managers within the organisation to identify potential future scenarios and issues that the business has to address, in addition to managing programmes to address these issues. At this level, proposals would be considered in order to define the relationships that the business has with the broader environment and stakeholders. It is suggested that the delegates to the Annual Stakeholder Forum perform this function. In time, this role could be performed by a more permanent structure.

System 3(S3): Control and Audit

The responsibilities of the 'control function' are to interpret policies in light of data transmitted via the various information and reporting channels, to oversee the implementation of the policies and to allocate resources, and to monitor performance. It is here that accountability for the performance of the system-in-focus lies.

It was suggested that the Sezela Management Team (Heads of Department) be responsible for this function as they have the authority to issue direct line instructions and the obligation to report upward any information needed to support the policy making process.

System 2(S2): Co-ordination

The 'coordination function' deals with the interfaces of different processes and operations. In performing this role it is responsible for the stabilising of oscillating situations and for exploring synergies between the operational functions so that a balanced response is produced.

This support function provides relevant data to measure against set targets, thus rendering it critical to the feedback and learning potential of the organisation. At this level, targets and objectives for non-financial aspects of sustainability reporting would be researched and formulated.

It was recommended that a co-ordinating steering team be established to perform this function.

System 1(S1): Implementation

This is the operational level representing a number of specialist functions, each with autonomy. It is these that are responsible for carrying out the primary processes and thereby effectively drive the business' sustainable development agenda.

6.2 INTERPRETING AND STRUCTURING THE PROBLEM SITUATION

6.2.1 Selecting Relevant Human Activity Systems

During this phase an attempt was made to find possible intervention points, that is, to find out where in the system changes could be made. A number of dynamics were identified, each of which was believed would have an influence over the transformation process and in the addressing of the problem situation. These dynamics were assessed with a view to selecting relevant Human Activity Systems.

A description of each dynamic and the respective system is given below.

- **Dynamic One:** The existing Strategic Intent of the business was formulated in 1999 and has essentially remained unchanged since then. Whilst mention is made of a responsibility to the environment and involvement in community and social upliftment, these are not seen as critical success factors. The focus is primarily on operational efficiencies as these are seen as the vehicle for financial profitability. The result is a narrow view of what the business stands for and a lack of real ownership of the espoused company goals by the majority of employees. It was felt that by broadening the 'Purpose' of the business beyond customer satisfaction and profitability, a greater sense of ownership and pride amongst employees could result. Furthermore, the reputation of the business and its standing in the community would be enhanced.

System One: The relevant system would have to review the current strategic intent of the Sezela business, including a redefinition of its 'Purpose'. This would have the aim of developing and implementing a sustainable development agenda as an integral part of the business and as a potential catalyst for enhanced employee ownership and commitment.

- ***Dynamic Two:*** As illustrated in the structural analysis of the situation, the existing organisation structure does not promote the necessary levels of integration, control, cohesion and control within the system. The establishment and alignment of management and organisational processes and systems are necessary to support the process of transformation and to ensure that sustainability-related activities are supported. The importance of such lies in the ability to explore local conditions and to generate and implement policies relevant to such contexts. This will enhance the credibility of such activities and sustain the transformation to a more sustainable organisation.

System Two: The relevant system would have to ensure the translation of strategy into specific management processes, supported by an appropriate structure with roles and levels of authority aligned with the objectives supportive of the sustainable development agenda.

- ***Dynamic Three:*** As indicated in Agenda 21 of the UN Earth Summit, indicators of sustainable development need to be developed to provide solid bases for decision making at all levels. With the above in mind, together with Donella Meadows' advice that indicators arise from what we care about and that we care about what we measure (Meadows, 1998), it was determined that appropriate goals and measures need to be put in place. In addition, the organisation needs to be made aware of what is happening in the arena of sustainable development and that it does not become the private domain of those directly involved.

System Three: The relevant system would have to identify indicators of sustainability and develop communication processes to report on activities and progress in respect of the organisation's sustainable development agenda.

- ***Dynamic Four:*** It is important that action is demonstrated and in this regard it was important to identify priority areas in which progress can be made. Given that both

elements within the community can benefit and there will be a direct economic spin-off for the business, the area of Small-scale Farmer development was selected

System Four: The relevant system would have to improve the viability of the Sezela Small-scale Growers by accessing donor funding from the Department of Agriculture.

- **Dynamic Five:** With the spotlight on environmental responsibility growing ever-more intense, organisations are having to prove to a range of stakeholders their integrity in this regard. Customers are becoming more critical of their suppliers' environmental practices and all parts of the value-chain are being scrutinised. Historically, the company's manufacturing operations have had to indicate a degree of environmental responsibility and this is increasingly becoming the case with its agricultural operations. As a significant land-owner on the South Coast of Kwa-Zulu Natal it was deemed appropriate that an example be set to other cane farmers on the region and that Illovo set the tone for environmental integrity by seeking accreditation from a reputable agency.

System Five: The relevant system would have to achieve environmental accreditation for the Sezela cane supply operations.

6.2.2 Naming the Systems

The above systems were subjected to the CATWOE 'process' in order to develop a root definition for each.

System One

A System to Develop a Sustainable Development Agenda

Root Definition:

A system which redefines the existing shared strategic intent of the business and which integrates sustainable development dimensions into the company's values, operations and business decisions.

Customers:

- Employees.
- Community.
- Emerging cane farmers.

Actors:

- Company management.
- Stakeholder representatives.

Transformation:

- From there being exclusive focus on and measurement of non-economic indicators, to a recognition of the importance of the ecological and community dimensions of the business.

Weltanschauung:

- The belief that for businesses to be seen as adding value to society they need to make a contribution to the environment and community.
- The above will be countered by those who see economic performance as the most important aspect of the business.
- The expectation that local communities have that the company will improve their quality of life.

- For employees to have pride in the organisation for which they work they need to see the positive impact that the organisation has on society.

Owner:

- Illovo Executive (Head Office) management.

Environmental Constraints:

- The uncertainty facing the future of the sugar industry in South Africa.
- The current economic crisis within Illovo’s South African operations.
- The tensions and feuds between the leaders within the local communities.

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System Two

A system to develop structures, processes and systems.

Root Definition:

A system which develops and implements a structure, processes and systems that are aligned with the sustainable development agenda and which serve to ensure an integrated approach via the devolution of responsibility and accountability to the appropriate levels.

Customers:

- The Sezela business.
- Community.

Actors:

- Company management.
- Involved employees.

Transformation:

- From a hierarchical top-down and fragmented approach to one of integration in which accountability resides at the operational level and there is support from the other support systems in terms of cohesion, control and communication.

Weltanschauung:

- The belief that for a system to be effective the components need to work together in pursuit of a common purpose.
- For optimum performance, people need to be given responsibility and be made accountable for their performance.

Owner:

- Sezela management.

Environmental Constraints:

- The traditional focus and measurement of managers on operational performance.
- The dominant paradigm of hierarchy and centralisation that exists in the business.

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System Three

A system for measuring, reporting and communicating sustainable development activities.

Root Definition:

A system that clearly indicates, within each dimension of sustainable development, what needs to be measured in order to evaluate commitment and progress within different operational areas and at different levels within the organisation.

Customers:

- Company management.
- Employees.
- Community representatives.

Actor:

- Sezela management.

Transformation:

- From a system in which there are very few non-financial or non-operations measures, to one in which each function within the business measures and reports performance against sustainability indicators.

Weltanschauung:

- That a business needs to be evaluated from a holistic perspective in order to gauge its true value.
- To ensure focus and delivery people need to know what they are being measured against.

Owner:

- Sezela management.

Environmental Constraints:

- The traditional company measurement systems and reporting requirements.
- The short-term horizon in respect of company performance.

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System Four

A system to improve the viability of the Sezela Small-scale Growers.

Root Definition:

A system which clarifies what is required if the Sezela Small-scale growers are to remain viable and to identify and provide access to the resources necessary for this to be achieved.

Customers:

- The Small-scale cane growers providing cane to the Sezela mill.
- The Sezela mill.
- The communities dependent on the farms.

Actors:

- The Sezela Small-scale Grower Department.
- The Small-scale growers.

Transformation:

- From the current situation in which the majority of small-scale growers do not have the funds to re-establish their fields, to a situation in which they have managed their finances and agronomic practices in a sustainable fashion.

Weltanschauung:

- That established organisations have a role to play in mentoring the previously-disadvantaged.
- The willingness of the farmers to be involved in cane-farming.
- The understanding that a successful small-scale farming operation has a positive impact on dependents.

Owners:

- The rival forces amongst the representatives of the small-scale growers.

- Illovo Executive management.

Environmental Constraints:

- Limited company financial resources.
- Competition for government funding.
- Rivalry and competition amongst grower bodies.
- The reluctance for lending institutions to invest in cane-growing.

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System Five

A system to achieve environmental accreditation for the Sezela cane supply operations.

Root Definition:

A system owned by the Sezela cane-growing community that measures and evaluates the implementation of environmentally-responsible agronomic practices in order to promote the sustainable utilisation, protection and preservation of natural resources.

Customers:

- The Sezela farmers.
- The Sezela mill.
- The community.

Actor:

- Management of a support structure.

Transformation:

- From a situation in which environmentally-responsible farming practices are dependent on the individual farmer and done in an ad hoc fashion, to one in which a single environmental management system sets guidelines and regulates practices within the region.

Weltanschauung:

- Responsible environmental management has the potential to save costs.
- Sugar customers will in the future demand evidence of environmental accreditation at every stage in the supply chain as a prerequisite for sales.
- Regulations and audits focus activity.
- Business has a responsibility to the environment.

Owners:

- Illovo Executive.
- Sezela Cane-growers.

Environmental Constraints:

- A lack of acknowledgement and commitment to environmentalism by the growers and millers.
- The resistance to spend money on ‘long-term’ projects.
- The parlous economic situation facing many cane farmers.

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6.3 DECIDING ON POSSIBILITIES

6.3.1 Modelling Relevant Human Activity Systems

Following the selection and naming of the Human Activity Systems, the next step in the inquiry process was the development of conceptual models. These can at a later stage be used as basis for discussion about what possible changes could be made to improve the situation. The modelling led to the identification of core activities necessary to achieve the transformations described by the CATWOE analysis. It also revealed the interdependencies and overlaps that exist between the five systems. These are illustrated in Figure 11.

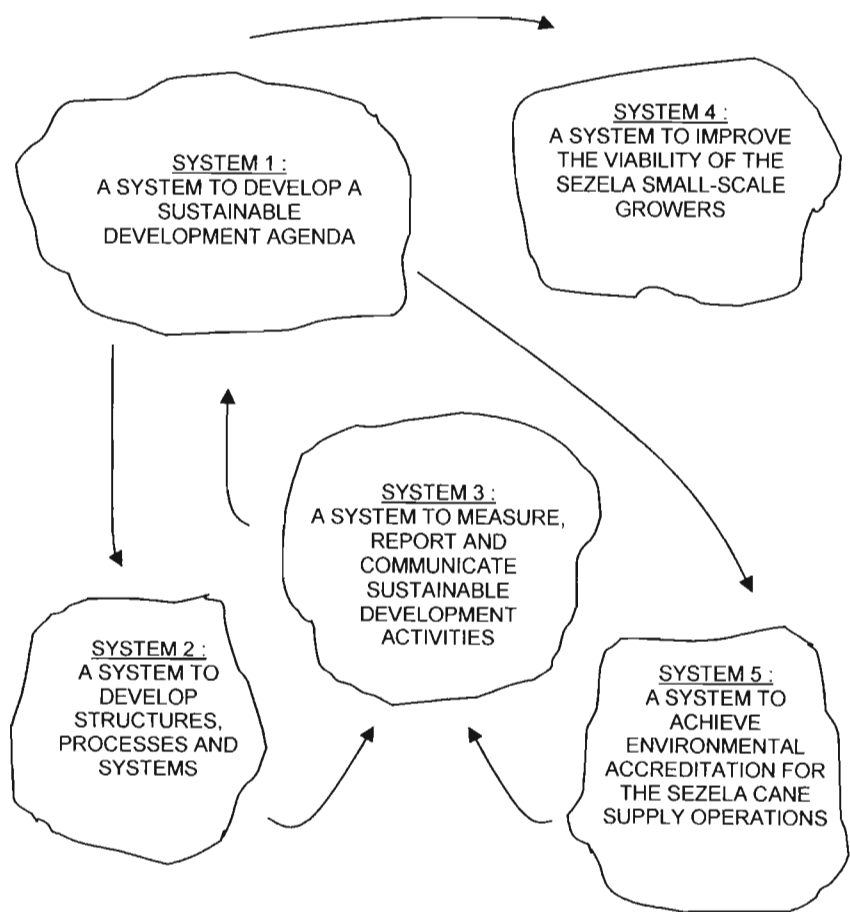


Figure 11 : The Five Human Activity Systems

Systems 2 - 5 are all dependent on System 1, the development of a sustainable development agenda as part of the overall business strategy. The capacity built in Systems 2 and 3 is important in converting the strategic agenda into a reality, the former developing the capacity for action and enduring the necessary support systems, and the latter measuring progress towards strategic goals. In effect, Systems 1, 2 and 3 can be described as enabling systems, whilst systems 4 and 5 are critical to policy and operations ‘on the ground’. It is here that System 1 is converted to action.

6.3.2 The Conceptual Models

System One: A system to develop a sustainable development agenda.

- 1. Review the current strategic intent of the organisation and develop draft for discussion.
- 2. Design a process of stakeholder involvement in a critique of the above draft and in the articulation of a revised strategic intent.
- 3. Facilitate workshop with stakeholder representatives in which the dimensions of the sustainability drivers – economy, environment, community – are explained and explored for relevance to the business.
- 4. Review the ‘purpose’ of the business in light of the above.
- 5. Within each of the above drivers, identify areas specific issues to be addressed and, or projects to be implemented.
- 6. Recommend a process whereby the sustainability agenda, and contribution towards the achievement thereof, is cascaded into functional areas within the business.
- 7. Integrate functional area and manager performance with regard to each of the above with established performance parameters.

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System Two: A system to develop structures, processes and systems.

1. Identify the critical processes at Implementation, Co-ordination, Control, Intelligence and Policy levels necessary for delivery of sustainable development objectives.
2. Review the current management practices and processes and redesign where necessary.
3. Redefine the roles and functions in the different job categories taking into account the new processes and the autonomy allocated to the different structural levels.
4. Develop and document the support systems and operating procedures that will be used in future.
5. Develop job descriptions for all job categories on the basis of the new structure, processes and systems.
6. Train the incumbents in the new processes and systems.

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System Three: A system to measure, report and communicate sustainable development activities.

1. Task key managers to access information regarding critical elements of sustainable development.
2. Research international reporting guidelines e.g. Global Reporting Initiative, for guidance regarding determining appropriate performance indicators.
3. Link local reporting techniques with the Illovo Company's triple bottom line obligations in terms of the King Report and the JSE Social Responsibility Index.
4. Identify measures for both functional area and key managers and review performance via the established performance management process.

- 5. Provide training for managers to illustrate the value of contribution towards environmental and community issues.

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System Four: A system to improve the viability of the Sezela Small-scale Growers.

- 1. Arrange a workshop involving representatives of the SSG community and establish concerns, problem areas, and critical success factors.
- 2. Review and evaluate current support service available to SSG's.
- 3. Develop a pool of resources available to assist farmers in areas such as harvesting and haulage.
- 4. Identify a pilot area in which to initiate the project.
- 5. Develop a business plan for the pilot area, including agreed performance criteria.
- 6. Approach potential sources of finance e.g. Department of Agriculture and Environmental Affairs (DAEA).
- 7. Implement the project in the pilot area.
- 8. Provide ongoing training to farmers in pilot area. This would include agronomic practices and financial and management skills.
- 9. Review progress against set of agreed performance criteria.

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System Five: A system to achieve environmental accreditation for the Sezela cane supply operations.

- 1. Arrange workshop with grower representatives and deepen understanding of the importance and benefits of environmental responsibility.
- 2. Identify champion and steering team to drive process.
- 3. Develop a clear policy and directive.

4. Conduct analysis of best-practices e.g. Noodsberg Canegrowers, SASA Environmental Guidelines.
5. Establish links with international environmental agencies e.g. WWF and Living Waters Programme.
6. Commission environmental lawyer to review relevant legislation.
7. Establish standards and measures to determine level of environmental performance.
8. Develop system for communicating such to individual farmers.
9. Identify pilot area for trial implementation, possibly Illovo's MCP farms.
10. Conduct audit against standards to establish base-line performance.

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CHAPTER SEVEN

OBSERVATIONS AND CONCLUSIONS

The aim of the study was essentially two-fold. In the first instance, the possibility of utilising an inclusive and participatory approach to the development of a sustainable development strategy and agenda for Illovo Sugar's Sezela business was to be investigated. Secondly, the study needed to illustrate an understanding of systems thinking and the application of relevant systems methodologies.

The study further explored the possibility of repositioning the organisation as a meaningful social partner with the communities within which it operated. In essence, an attempt was made to integrate the principles of sustainable development with the existing strategic intent and to use sustainability as a platform for enhanced stakeholder commitment and contribution to the organisation.

At the outset of the process the problem situation being investigated was identified as a 'mess'. Such a situation involves human activity in which there is a significant level of ambiguity about what the problem is, what a solution should look like, and about the scale, in both time and people, of the issue.

Particularly useful was the holistic approach embodied in Systems as it emphasises the connections between issues and components in the mess and helps one think at a higher level of abstraction. Furthermore, a multiple perspective approach to complexity is encouraged, thus helping stakeholders and participants to change their established way of thinking about the mess, and to generate ideas for improvement.

The use of a systems approach was helpful in that it enabled the shift from the dominant reductionist, command and control approach to one in which the priority was to improve overall system performance rather than specifying targets to be met. Furthermore, there was a realisation that the policy making process should focus on the process of improvement, rather than on the control of involved stakeholders. In addition, the study

illustrated the merits of engaging with stakeholders via listening and co-researching rather than by telling and instructing. This served to widen the responsibility for innovation and improvement.

Having reviewed a selection of the literature pertaining to systems, given the level of complexity inherent in the problem situation, and guided by the *System of Systems Methodologies* and *Total Systems Intervention* frameworks, I chose to use two different systems approaches. Soft Systems Methodology was used as the primary vehicle to facilitate stakeholder communication, sharing of perspectives and ideas for improvement, and the Viable Systems Model was used as a secondary methodology. These methodologies were used to address both the substantive issues and concerns relevant to the problem situation, as well as the structural context in which these arose and needed to be dealt with.

Having introduced the study in chapter one, elaborated its context and location and the systemic nature of ‘the place’ in chapter two, and presented literature research reviews in chapter three and four, the framework and implementation of the intervention was detailed in chapters five and six.

Chapter five mapped the theoretical and methodological approach for the study, the problem situation being interpreted in three phases. These focused on ‘observing and understanding’, interpreting and structuring’, and ‘deciding new possibilities’. This chapter included a boundary critique which served to help identify the stakeholders to be included in the inquiry.

The penultimate chapter covered the application of the above approach. The first phase of the inquiry surfaced a range of opinions and a deep understanding of the business environment against which relevant human activity systems could be assessed. This enabled the surfacing of dynamics that needed to be understood prior to relevant possibilities being modelled and designed towards supporting a sustainable development agenda for the business.

This chapter included the application of VSM as a method to determine an appropriate structure to support the emergent sustainable development agenda and, in particular, the levels of control and communication necessary.

Throughout the inquiry process, and particular when writing this review, I was (and am) acutely aware of my personal role. Far from being a neutral and impartial observer, I have probably played too active a role in the process. In fact, I have probably been guilty of leading the participants in making their recommendations, as opposed to letting them come to their own conclusions. Some comfort is provided by Chapman who acknowledges that the emphasis on the perception and purpose of the analyst is a characteristic of systems thinking. He goes further to say that it is formally acknowledged that the perception of a system is a subjective process and depends upon the purpose of the Systems practitioner (Chapman, 2003).

In light of the above, it is perhaps fair to say that the study did not apply SSM or VSM in their purest forms. In mitigation I will say that the methodologies were applied in the context of an organisational reality and that they did help in promoting dialogue between the various stakeholders. Fortunately, a feature of the methodology is that it can be used in a variety of ways (Open University, 2002).

In real terms, the study indeed served to heighten awareness of a fundamental flaw in the organisation's strategic intent but, more importantly, enabled participants to identify key areas for improvement. Further, the process served to raise awareness of sustainability-related issues and to promote the realisation that a sustainable development agenda goes beyond political correctness. Instead, by managing the risks and embracing the opportunities presented in the environmental and societal, as well as in the economic domains, long-term value will be created for the business and its stakeholders

In conducting the study it became apparent that the concept of sustainable development is ever-increasingly coming to the fore. From being primarily the domain of governments and NGO's it has now become a feature of the corporate landscape. The issue has

become a subject of lively debate in South Africa and this is perhaps not surprising given where this country is in terms of its evolution.

Whilst the issues are to some extent common across all countries, there is no doubt that there are those that are peculiar to Africa and, indeed, South Africa. The South African reality was, for me, well-articulated by the economist Jac Loubscher who was a participant in a series of discussions on what South Africa should and probably will look like in 2014. The Sol Plaatje Discourse led to several conclusions, all of which resonate with the principles of sustainability and which need to be included in debate at industry, corporate and enterprise levels.

These included the following: that there is a general distrust of big business which is seen as trying to manipulate the government to adopt policies favourable to its own interests while paying lip service to the social good; that the western notion of self-serving individualism forming the bedrock of economic behaviour is often alien to African culture with its greater emphasis on social cohesion and altruism; that an economic growth path that results in increasing inequality is regarded as undesirable and not enhancing the social good; and that economic growth should not be regarded as an end in itself, but rather as a means to an end, a way of life that is fulfilling in all its facets, including its cultural and social dimensions (Laubscher, 2005).

Finally, I believe Nelson Mandela worthy of concluding this study:

“Development can no longer be responsibility of government alone.

It requires ... partnership ... with the private sector, labour, and non-governmental organisations ... There are many ways in which the special skills and know-how of the business community can help achieve development objectives”

(Mandela in Grayson and Hodges, 2001, 70).

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