ENVIRONMENT STRUCTURE AND PERFORMANCE IN SWAZILAND’S
SMALLHOLDER CANE GROWER ORGANISATIONS

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A research report submitted to the Faculty of Commerce, Law and Management,
University of Witwatersrand, Johannesburg,
in partial fulfilment of the requirements for the degree:
Masters of Management in Public Policy

September
2011
ABSTRACT

The purpose of this study was to assess the operations of smallholder sugar cane grower organisations based in the Komati River Basin of Swaziland. These organisations were formed at the beginning of this millennium. Some ten years later some have performed very well while others are struggling, and yet others are on the verge of collapse. The situation for some of these became so bad that their sustainability in the business was challenged. This did not augur well for the Government of Swaziland that established the project to address the issues of food security and poverty alleviation. This study was conducted as a case study with five organisations forming the cases. Data were collected from three levels within each organisation using primary and secondary data sources. Findings revealed that organisations were alike in many aspects including history, governance, strategic and human resource management. This was not surprising because for all of them capacity building is provided by Swaziland Water and Agriculture Development Enterprise (SWADE), Swaziland Sugar Association (SSA), and Mhlume Sugar Mill. Organisational structures were bureaucratic with limited participation in decision-making by employees and strict adherence to procedures and specialisation. This led to the conclusion that a mechanistic organisation management system was in place. Environmental resources were favourable according to chairpersons and their views were that they have the self-confidence and commitment for entrepreneurial development. The study concluded that a new series of studies need to be undertaken to explore the many unique research areas that are unearthed. Studies could narrow the focus but as far as possible consider the whole population of organisations in the K1DDP (19). Organisations also need to consider improving management and networking to reduce transaction costs.

Key words: Swaziland, SWADE, smallholder cane grower, mechanistic organisation, performance and resources
DECLARATION

I declare that this research report is my own, unaided work. It is submitted in partial fulfilment of the requirements of the degree of Masters of Management in Public Policy in the University of Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination in any other University

______________________________________

John Pali-Shikhulu.

Student No.: 0708833N

27th September 2011
DEDICATION

I dedicate this work to my late parents, Gertrude Nasiira and Mark Shikhulu and my brother Zack Khaweka and daughter Stella.

and

To my wife Enid and our children Keith, Sakhile, Pamela, Steven, Manu, Nasiira and Wanyenya.

With all my love
Acknowledgements

I acknowledge the following people for their contribution in the preparation and implementation of this study. Without their dedicated effort and support, the study would have been compromised.

Michael Muller, my supervisor, for his dedicated support and guidance, encouragement and advice.

Moses Vilakati, Project Director of SWADE-KDDP, for taking interest in the study and making useful contributions to the proposal and for the encouragement, and valuable contribution during the research process.

Humphrey Nxumalo, Agricultural Manager at SWADE-KDDP, for participation in the research process from beginning till conclusion.

Research Assistants: Lindiwe, Mndeni, Mbandla, Mandla, Manqoba, Steven, Manu and Sakhile for the role they played in conducting field operations and attending to the many aspects that this research required.

Last but not least, the author acknowledges the role played by the organisation chairpersons, committees and the employees for participating and providing very useful data. These efforts have been invaluable to the study and, no doubt, without their consent and participation, this research would have never been done.

Finally I recognise the input from all the SWADE – KDDP staff.
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<tr>
<td>CSB:</td>
<td>Central Bank of Swaziland</td>
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<tr>
<td>FINCORP</td>
<td>Swaziland Development Finance Corporation</td>
</tr>
<tr>
<td>GDP:</td>
<td>Gross Domestic Product</td>
</tr>
<tr>
<td>GOS:</td>
<td>Government of Swaziland</td>
</tr>
<tr>
<td>IMF:</td>
<td>International Monetary Fund</td>
</tr>
<tr>
<td>KOBWA:</td>
<td>Komati Basin Water Authority</td>
</tr>
<tr>
<td>KBDP:</td>
<td>Komati Basin Development Project</td>
</tr>
<tr>
<td>KDDP:</td>
<td>Komati Downstream Development Project</td>
</tr>
<tr>
<td>MOA:</td>
<td>Ministry of Agriculture</td>
</tr>
<tr>
<td>PDA</td>
<td>Project Development Area</td>
</tr>
<tr>
<td>PRSP:</td>
<td>Poverty Reduction Strategic Plan</td>
</tr>
<tr>
<td>RDMU:</td>
<td>Reconstruction and Diversification Management Unit</td>
</tr>
<tr>
<td>RSSC:</td>
<td>Royal Swaziland Sugar Corporation</td>
</tr>
<tr>
<td>SASRI:</td>
<td>South African Sugar Research Institute</td>
</tr>
<tr>
<td>SKPE:</td>
<td>Swaziland Komati Project Enterprise</td>
</tr>
<tr>
<td>SNL:</td>
<td>Swazi Nation Land</td>
</tr>
<tr>
<td>SSA:</td>
<td>Swaziland Sugar Association</td>
</tr>
<tr>
<td>SWADE:</td>
<td>Swaziland Water and Agricultural Development Enterprise</td>
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<tr>
<td>TCH:</td>
<td>Tonnes of Cane/Hectare</td>
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CHAPTER ONE
INTRODUCTION

1.1 Introduction

To grow sugar cane for commercial purposes, an organisation or company has to fulfil a set of stringent entry requirements and maintain strict production policies, rules and procedures. This, to a great extent, has contributed to the stability of the sugar industry, making it the cornerstone of the Swazi economy. The contributions of the sugar industry amounted to 59% of the agricultural output and up to 18% to the Gross Domestic Product (GDP) (SSA, 2009a).

With Swaziland becoming more and more engulfed in poverty, continuing and intensifying unemployment, the Government of Swaziland (GOS) saw the sugar industry as a suitable conduit for addressing the challenges of poverty and unemployment. GOS working with the South African Government agreed to invest in the construction of dams to harvest and store waters and thereafter allowing for controlled releases according to demand dictates downstream. Two such dams came into being- Driekoppies Dam on Lomati River in South Africa and Maguga Dam on the Komati River in Swaziland. The purpose for these investments was to provide sufficient water for populations in the Komati River Basin to conduct their businesses without drought stresses so endemic in the region (KOBWA, 2001).

In Swaziland, the additional waters amounting to over 87,000 million cubic metres were to be directed to the development of the smallholder farmers based on communal Swazi Nation Land (SNL). To this end, development activities started in 1999-2000 season following to completion and commissioning of Maguga Dam. For the smallholder farmers to participate, they formed organisations into which each household contributed land to buy shares. The first crop of sugar cane was planted commencing 2001-2002 season.
with funding accessed from local financial institutions. Repayment was assured through liens placed on processed sugar at the mill.

Sooner rather than later it became evident that the high capital investments and high operational financial demands for establishing and operating the sugar cane enterprises were making smallholder production unsustainable. According to Swaziland Sugar Association (2009b) production levels were unsustainable and this made it difficult for the smallholder farmers to survive. The Reconstruction and Diversification Management Unit (RDMU) revealed that the smallholder organisations were not at par with the needs of the industry; there was limited networking between and among organisations. This compromised possibilities of rationalising the work of the smallholder growers to improve production. One notable effect was the limited coordination and implementation of good management practices resulting in declining yields. Essentially, what this says is that though the smallholder sugar cane operations have been implemented as planned by GOS, achievements have not reached the state anticipated (RDMU, 2008a).

1.2 Background

Poverty reduction is a major Government of Swaziland (GOS) macro-economic policy aiming at addressing the needs of a large constituency of the population living on less than US$1 per day (GOS, 2004). Swaziland is perceived a lower middle income state. The position on the ground, unfortunately, reflects a skewed income distribution. Such a situation does not augur well for a government with an avowed mission:

"by 2022, the Kingdom of Swaziland will be in the top 10% of the medium human development group of countries founded on sustainable economic development, social justice and political stability" (GOS, 1999).

We track the performance of the economy for the period 1980 and 2010 in order to understand the Swazi situation. The first fifteen years of the period (1980 – 1995), Swaziland achieved a GDP per capita of US$ 1440, which led the World Bank to place
her in the lower – middle income state. For that period, the economy grew at rates of 6 - 9% per year with a peak of 13% being recorded in 1986-87. This strong growth was associated with favourable foreign direct investment (FDI), political stability, tax incentives, liberal regulations on remittances, and the presence of sanctions on South Africa (World Bank, 2000). This represented a period of economic growth and prosperity.

The subsequent years saw the advent of peace in Southern Africa. With peace returning to South Africa sanctions became irrelevant and many businesses relocated back to South Africa. FDI took the opportunity to directly access the SA markets. Its growth in Swaziland plummeted (lower than - 0.5%) by 1997 (World Bank, 2000). This period was, and continues to be marked by economic slowdown. The performance of the economy has never stabilised since then. The agricultural share of GDP at factor cost continued to decline from 11.6% in 2001 to 10.7 in 2007 reflecting that improvements in the agricultural sector contributions remained marginal for the period (IMF, 2008). The Central Bank of Swaziland (CBS) reported subdued economic activity that led to a mere real GDP growth of 1.8% in 2005. The Bank recognised that such growth in comparison with population growth rates of 2.9% heralded the deterioration in the quality of life (CBS, 2006).

The deterioration in Swaziland economic status during the last 15 years, suggests that gains of high growth achieved during the good years did not benefit the majority of the Swazi population. The World Bank shows that patterns of income distribution favoured the rich leaving the poor desperate. Only a small share of the national income reached the majority while the smaller portion of the population garnered the larger portion of the national wealth (World Bank, 2000). According to GOS, 56% of the nation’s wealth is held by the richest 20% of the population with the poorest 20% owning less than 5.0% (GOS, 2004).
The GOS nevertheless holds herself responsible for the plight of the citizens. To this end, the Poverty Reduction Strategy and Action Plan (PRSAP) were evolved. PRSAP acknowledged that the major challenge the country faced now and in the long term, was due to the inequalities existing in the country in terms of resource ownership and allocation. This situation needed intervention (GOS, 1996). The PRSAP was seen as the vehicle for operationalising the National Development Strategy (NDS) and facilitating the attainment of the vision and mission of the country. To address the challenge of poverty and unemployment across large sections of the population, GOS in collaboration with the Government of South Africa, decided to harness their joint water resources (GOS, 1996). Their decision can best be expressed in the following statement:

“upon seeing the waste of water from Komati River, which was shared by the three states freely flowing into the sea, agreed to impound the river through the construction of dams”, (SWADE, 2008).

1.2.1 KOBWA

The Komati River Basin is largely an agricultural economy where both large and small-scale farmers are involved in such enterprises as the production of sugar cane, citrus, maize and cotton as well as livestock. According to KOBWA (2001) the large volumes of water associated with the Komati River Basin were not being exploited to any great extent because of the limited capacity for harnessing the water. As a result, agricultural operations were continually affected by the lowveld conditions of high drought frequencies, water shortages and high temperatures.

To address the chronic problems of drought and water shortages, the Komati River Basin Development Project (KBDP) came into being as a joint venture project between Swaziland and South Africa. The KBDP was conceived in the 1980s to provide water for farm developments in South Africa and Swaziland. Developments in Swaziland encompassed three components which were the construction of Maguga Dam; expansion of Mhlume Sugar Mill; and development of some 7400 hectares of irrigated farming downstream (SWADE, 2008).
The precursor for the Komati River Basin developments must be seen as GOS quest to fight the common enemy of poverty and unemployment, which led to the treaty for the Development of the Water Resources of the Komati River Basin. The project was mandated to facilitate economic growth in the Komati river catchment areas through new and existing water users using water-based poverty reduction initiatives. Constructions were completed in 2002 with two dams being major outputs. These dams are Driekoppies in South Africa and Maguga Dam in Swaziland. KOBWA was assigned the responsibility for operating and maintaining the jointly-developed and owned infrastructure within the Komati River Basin (Figure 1) (KOBWA, 2001).

![Figure 1 Komati Downstream Development Area (Source: SWADE, 2003)]
1.2.2 Swaziland Water and Agriculture Development Enterprise

With KOBWA in place, the KDDP was launched to facilitate the planned socio-economic activities relating to agricultural developments in the Komati River Basin. Its purpose was to improve the quality of life of rural communities that reside in the area using water as a vehicle for the developments.

Figure 2 Maguga Dam on Komati River (June, 2010)

Recognising the enormity of the task, the GOS established a company, the Swaziland Komati Project Enterprise (SKPE) in 1999 to take responsibility of developments and to
fast track the utilisation of Swaziland's share of the Maguga Dam (SWADE, 2008). The mandate for SKPE was to facilitate the development of large water resource projects. Its underlying philosophy was that “water can be catalyst for development in rural areas and with adequate facilitation, availability of water can eradicate poverty, create wealth through enhanced economic activity of different kinds resulting in the emergence of new entrepreneurs which, in the long term, contribute to national GDP”.

The primary responsibility of SWADE (this company took over from SKPE) was to build capacity among farmers in the Project Development Area (PDA) (Figure 1) so that they can “plan, design, and implement viable and sustainable agricultural projects and enterprises”. With time and growth, SKPE evolved into SWADE whose mandate widened to cover all activities involving the country’s water resources. SWADE evolved a new vision in line with its new mandate “To be the leading facilitator of sustainable development in rural communities in Africa, using water as a catalyst”. (SWADE, 2008)

KDDP is implemented in collaboration with stakeholder farmers who constituted themselves into organisations whose membership was acquired through land to buy shares. With farmers’ organisations in place, the KDDP aimed at improving rural living standards; empowering local communities to establish viable projects including sugar cane production. The overriding purpose for these activities was to reduce poverty by increasing household incomes; enhancing food security; improving access to social infrastructure; and establishing environmentally-friendly practices that would lead to sustainable agricultural production (SWADE, 2008). The KDDP was viewed to have the potential to dramatically improve the living standards of farming communities within the Komati River basin where some 27,000-30,000 people lived on 24,000 hectares
1.3 Problem Statement

Commercial sugar cane production by smallholder farmer organisations using water from Maguga Dam (Figure 2) is a deliberate macroeconomic policy addressing poverty. Farmers located in the Komati River Basin (Project Development Area, PDA) have, and continue to be empowered by service providers such as SWADE, Swaziland Sugar Association (SSA) and Mhlume Sugar Mill, among many. These efforts aim at building capacity to enable farmers’ organisations to undertake productive commercial agriculture based on sugar cane for delivery to the sugar mill. In the long run this would create wealth within households and ultimately, communities.

Unfortunately, sugar cane production has not been wholly encouraging. Some organisations involved with sugar cane production are struggling. Productivity has not seen steady improvements; it improves only by small margins and in some cases it has even declined (SSA, 2009b). Production data for two seasons (2007/08-2008/09) indicated that the cane farmers operating between 50 and 1000 ha fields, achieved yields ranging between 90 and 92 Tonnes Cane per Hectare (TCH) which compared rather poorly with their counterpart large-scale estates that consistently record yields in excess of 110 tonnes/ha. The smallholder sector is not stable and at present some organisations are not sustainable (SSA). This is presenting challenges to GOS that has invested so heavily in the project.

Recent studies revealed several constraints and/or challenges pertaining to smallholder production operations. These included weaknesses in business planning and management, financial management, governance and human resources base (RDMU, 2008a). RDMU further observed that financial monitoring was weak and audits were hardly undertaken. Governance shortcomings were omnipresent including high rates of turn-over of committee members; high levels of literacy, lack management and leadership knowledge and skills were major shortcomings. Challenges of developing the human resource base were also highlighted. Other challenges were associated with
cane haulage to the mills. Land disputes flared quite often; and management team expertise was not apparent. These issues have implications for organisational context.

This study takes the position that the organisational context is critical for performance and that the match between organisational and environmental contexts among smallholder organisations is weak.

1.4 Purpose of study

The purpose of this study was to examine and explain the performance of KDDP farmers’ organisations in relation to their environment and organisational contexts.

1.5 Objectives

1. Assess and discuss smallholder cane growers’ organisations.
2. Assess the contribution of organisation structure and size dimensions to performance.
3. Examine the resource environment in the KDDP.

1.6 Major study research question

“Why have the smallholder cane growers’ organisations failed to attain the benchmark yield targets?”

To respond to this focal question, a series of specific questions were formulated to guide the research on for each objective. These were as follows:
Objective 1: Assess and discuss the smallholder farmers’ organisations.

Specific questions:

i). What are the major features of the selected smallholder farmers’ organisations?

ii). What similarities and differences are discernible between organisations?

iii). What factors contribute organisational differences?

Objective 2: Assess the role played by organisation structure and size dimensions on performance.

Specific questions:

i). What type of management system do organisations depict?

ii). What are the relationships between size dimensions, organisation structure and organisational performance?

iii). How can organisational performance be associated with structural and organisational size?

Objective 3: Examine the resource environment status in the KDDP.

Specific questions:

i). What are the perceptions of chairpersons regarding resource availability in the KDDP?

ii). What is the status of entrepreneurial self-confidence in organisation chairpersons?

iii). What is the extent to which chairpersons are committed to entrepreneurial development?
1.7 Relevance of the research

Smallholder sugar cane producer organisations were established purposely to alleviate poverty. In so doing the Government of Swaziland found a route for expanding her lucrative sugar production industry. Initially, thirty farmer organisations were planned. Of this number only 19 are operational. Established at the turn of the century, some of the organisations have established themselves and make significant contributions to the industry. However, productivity with some of the organisations has remained modest compared to the benchmark yields set about 100 TCH.

Concerns have been raised as to the sustainability of some of these organisations. Many constraints have been identified as impinging negatively on performance. However, documented evidence on the organisation performance remains scanty. This case study was undertaken to provide further insights into the performance of smallholder cane grower organisations and to explain the phenomenon. The information has relevance to the several stakeholders in the Komati Downstream Development Project including GOS, SWADE, SSA, the millers, financial institutions with investments in KDDP including African Development Bank and local financial institutions. It will inform these stakeholders as to the status of the smallholder cane grower organisations and so that they can better make-informed decisions.
CHAPTER TWO
Literature Review

2.1 Introduction

This section discusses two major aspects of the study. The first part sets the scene. It reflects the place of the sugar industry in the Swazi economy. It briefly shows the industry beginnings till the present time. The section also informs the rest of the study on matters relating to GOS developments that led to the establishment of KOBWA (a regional body) and SWADE a national body responsible for implementation of the GOS plans and strategies for addressing poverty and food insecurity using water as a catalyst.

The second aspect of the literature review sets out the subject matter. It discusses the different perspectives relating to organisations. The study is grounded in organisation theory. It traces developments beyond organisational theory. Weaknesses of this theory are identified; the advent of contingency theory emerges from the different perspectives. A typical contingency framework equating environment and organisation variables to performance is proposed. The place of environments and organisation reactions are presented using different theories or perspectives.

Contingency framework was viewed as a composite of several environmental components including organisation size, technology, owner/management and strategies among many others are discussed. In addition, though there are several aspects pertaining to organisation structure only three are viewed as irrelevant to the study. Subsequent evaluations in this study sought to identify size effects and organisation structural aspects of specialisation, centralisation and formalisation effects and their interactions on performance. The place of theoretical frameworks in dictating organisation structure beyond contingency theory is alluded to. The literature review
therefore, set out to provide insights into organisational theory and how the KDDP organisations relate to these theoretical frameworks.

2.2 Swaziland Sugar Industry

The place of the Sugar Industry to the Swazi economy is best captured as follows:

“On less than 50,000 ha of irrigated sugar fields, Swaziland produces over 650,000 tonnes of sugar, with a turnover of US$ 300 million pa. The sugar industry is of critical importance to Swaziland’s development, and plays multifaceted roles in the economy” (RDMU, 2008b). This sums up the story of ‘White Gold” to the Swazi Nation.

Swaziland sugar industry is about the most important and most stable agricultural sub-sector of the economy. The industry’s contribution reached the US$ 300 million recently. It contributed more than 70,000 direct and indirect jobs to the economy. Not only does the industry make such valuable contributions at national level, it also contributes to the social services sector in terms of schools, housing and clinics which contributions are particularly critical given that sugar production takes place in rural lowveld ecologies of Swaziland where development is so much less evident and yet urgent (Matsebula, 2009).

According to Matsebula, the contributions of the sugar industry are more glaring when the industry contributions are segregated. The sugar cane production accounts for up to 66% of the national agricultural production; employment in sugar cane production takes up to 37% of the total wage employment while sugar cane processing accounts for 18% of employment opportunities in wage employment. In effect the sugar industry employment is 17% of total private sector wage employments and 10% of the national formal sector. In addition, the sugar industry output contributes 12% of national output which given the inevitable multiplier effects raises the sugar industry contribution to
20%. Finally, the sugar industry is the highest single contributor to the treasury through taxation and social services as well as trade (exports and sugar industry related imports such as fuels, chemical for agriculture and processing, transport and finance).

The implication is obvious. The industry is a critical driver for the Swazi economy. Anything that destabilises it is bound to destabilise the economy as a whole. The European Union market reforms are an example in mind. It led to the loss of EU preferential trade and led to direct losses in terms of revenue. EU markets offered lucrative prices for Swazi sugar: The EU markets for example, consume a mere 25% of the total sugar output; however, the revenue accruing from these sales accounted for over 30% of the total revenue. Fortunately, EU reacted to Swaziland’s plea resulting in the provision of assistance to the industry (RDMU, 2008a).

2.2.1 Brief history of the Swazi sugar industry

The embryonic stages of the industry can be traced back to an irrigated project in the lowveld Big Bend area located on Usuthu River Basin in 1956. Early production activities yielded some 5,600 tonnes of sugar per year from a local mill. Sooner than later, this mill expanded. At about the same period, new developments sprung up in northern lowveld requiring a new mill. A second mill was subsequently constructed at Mhlume in 1960. By 1964/65 national production was reaching 100,000 tonnes. Further expansions continued and by 2004/05 some 600,000 tonnes were being produced at three mills (RDMU, 2008b).

Initially sugar cane production was the responsibility of a few large-scale operators. These producers included two milling companies (RSSC and Ubombo Illovo) who owned large estates of their own. Several other large estates including Tambankulu, Nisela, Crookes Plantation, Tambuti and Tibiyo Taka Ngwane were the other serious producers. Sugar cane production may be classified as follows: The miller-cum planters
and estates account for 77%; large growers 17%; medium sized, 5% and smallholder growers, 1%. The new entrants consist of small and medium-scale operators with the small operators being the smallholder farmer organisations with membership ranging between 50 and 200 and operating between 50 and 360 ha. This study focuses on this category of sugar cane producers.

2.2.2 Challenges and opportunities for smallholder sugar cane producers

According to RDMU the higher quota prices that Swaziland was receiving from EU concealed the real picture pertaining to production. The salient facts now are that the special prices compromised the competitiveness of local producers and hid differences in productivity and inefficiencies among sugar cane producers.

The major challenges that are endemic in smallholder cane production were discussed in Nkambule (2009). This report revealed that smallholder cane growers’ productivity was declining. He attributed this to factors within the control of growers including unsatisfactory agronomic practices; unsatisfactory irrigation management resulting in low irrigation efficiencies; poor management of plant and equipment and hence unsatisfactory maintenance. One inevitable consequence was that water pump frequent failures. Those factors beyond growers control included escalating prices for inputs and fluctuations in the price of their sugar. These factors collectively made it difficult for growers to adequately service their loans. RDMU (2008a) reported that smallholder growers experienced problems ranging from inefficient management (business and financial); their governance was not smooth giving rise to misunderstanding in membership and often leading to land disputes. Observations made by researchers showed that management levels differed with some organisations being ahead in adoption of and use of modern technologies such as herbicides while others continued to depend on manual labour.

Nicol, Ortman and Ferrier (2007) reported that the most important sources of risk in the South African sugar industry were the omnipresent land reforms, minimum wage
legislation, and sugar prices. This study conducted in Kwazulu –Natal assessed sources of risks in commercial sugar production. Their recommendations were that the government should reduce uncertainty by affording farmers information relating to future land and labour policies; farmers themselves have to be more proactive in accessing information that would reduce the uncertainty.

In their study assessing technical efficiency in small-scale sugar cane farming operations, Dlamini, Rugambisa, Masuku, and Belete (2010) reported that there were wide variability in technical efficiencies within organisations in the same production block and across locations. In Vuvulane Irrigated Scheme (This scheme is not within the KDDP but is a much older sugar production establishment.), technical variability ranged between 38 and 99%. In the Big Bend area, the efficiency ranged between 74 and 95% suggesting more stable production than for the Vuvulane sugar cane farmers’ block. The report suggested that Vuvulane farmers over-utilised their land. The report added that for both groups technical efficiencies declined with farm size, educational level and age of the individual farmers. Another factor identified was that the owner-employee (employed elsewhere e.g. sugar mills or the larger sugar estates) achieved better technical efficiencies than cases where the owners were not employment.

This study seeks to understand how the structural and contextual variables of organisations are associated with performance. The findings from this study will, hopefully inform stakeholders including smallholder organisations and their service providers shortcomings that can be associated with their organisations.

2.3 Organisations and Organisation Theory

2.3.1 Perspectives on organisations
Social organisations, according to Scott (1992), refer to ways in which humans conduct or become socially organised. The concept refers to the behaviour of people as
individuals under circumstances they find themselves. Most of these conditions are more often than not, social and arise from the structure of social relations and/or the shared beliefs and orientation that unite and guide their conduct.

Formal entities are deliberately created to address a need, an issue. They stem from the realisation that collective effort of men and women is desirable to achieve particular goals and that establishing an organisation facilitates this desire. It achieves the desired goals by putting in place rules that are to be followed and structures that establish relations between members (Scott, 1992).

Bernard and Selznick, according to Scott (2004), are credited with developing organisations as specific units of study and social systems. Both viewed organisations not merely as technical production systems but as adaptive social systems ‘that tried to survive the environment’. Bernard focused on the independence of formal and informal structures within organisations. Selznick, on the other hand, was more concerned with organisations as (i) formal structures that were liable to manipulation for the benefit of individuals and/or (ii) social structures that were embedded within an institutional setup.

Historically, organisations did not exist as social entities. It is only in the recent past, possibly after the Second World War that they were so viewed (Scott, 2004). Two academic institutions have been singled out for their leading roles. These are the Carnegie Institute of Technology and Columbia University. The work at the Carnegie Institute was rooted in the “bounded rationality model”, the essence of which is that institutional cultures develop boundaries that confine the range of solutions that can be accessed. Merton and associates at Columbia, on the other hand, looked at the “unintended consequences of purposive actions” grounded in the Weberian classic theory of bureaucracy. According to Pugh and Hickson (1989), the Weberian view of organisations was that of “well-designed machines established for purposes of performing particular functions and in which every component of the machinery contributed its part for the attainment of maximum output”.

2.3.2 Importance of organisations

Organisations are found everywhere. They are ubiquitous; they are omnipresent. Their prevalence in all forms of our lives no doubt indicates their importance to mankind (Scott, 1992). Organisations have been invoked to conduct business. They are adopted to address objectives. They are used to undertake goals that a single person cannot. Organisations provide context and mechanisms through which goals can be achieved. Organisations under study typify this. The smallholder organisations projects are capital intensive requiring millions of Rands to establish and operate. Individually, the rural household could not have even imagined being involved with such ventures. Through their groupings into organisations, this has been possible and their goals of improved quality of life and poverty reduction are gradually being addressed.

Organisations are actors in themselves. They are a corporate person and as such can undertake actions, use resources, enter into contracts and own property. This means our societies cannot accurately be described as consisting only of relationships among natural persons; much of our daily activities deal with the corporate world or some form of organisation (Scott, 1992).

Organisations facilitate the pooling of resources to achieve desired goals as typified by KDDP households that pooled their land to undertake sugar cane production. They facilitate the production of goods and services; the adoption of innovations and use of modern technology. They create owners, employers and employees and facilitate social services. The Swaziland Sugar Association is a body made up of individual sugar cane growers and large and small companies and sugar cane processors all working to produce sugar on a sustained basis. Clearly SSA as an organisation has stabilised sugar production regardless the source.

2.3.3 Types of organisations

According to Jex (2002) metaphors have been used to compare organisations as machines, biological organisms and social structures. The view of organisations as machines saw organisations as coordinators of parts (people and processes) to
transform inputs from the environment into outputs to the environment. On the other hand, organisations as biological organisms viewed organisations systems constantly reacting and interacting with and adapting to environments in which they are embedded. As social structures organisations are seen as composed of complex relationships among individuals and groups that interact with processes and structure of the organisation to address their mission.

Organisations are critical for undertaking collective goals to attain missions (Scott, 1992). They are accountable in that they set a framework of rationality that guides stakeholders as to the way of behaviour. Scott and Davis (2007) offered three distinct definitions from competing perspectives. These were ration systems, natural systems and open systems theories.

**Rational systems theory:** Rational systems perspective viewed organisations as collectivities oriented to achieve relatively specific goals and exhibiting relatively formal structures. In short the theory views organisations as formal collectives established to pursue and achieve particular goals. They are instruments designed to produce specific outcomes (Scott and Davis, 2007).

**Natural systems theory:** The definition here is that “organisations are collectivities wherein participants pursue multiple interests (disparate and common) but who also recognise the value of maintaining the organisation as an important resource. In short organisations are seen as social systems that desire to survive. The protagonists of this perspective therefore, focus on the behavioural structure and recognise the organisation as a major asset but not necessarily as the only means by which organisations attain ends (Scott and Davis, 2007).

**Organisations as open systems:** The open system perspective advances that organisations are collectivities of independent flows and activities that link shifting coalitions of participants embedded in the wider material-resource and institutional environments (Scott and Davis, 2007). Therefore organisations can be seen as
activities that involve groups of individuals or groups of people with different interests working together in their environment.

What transpires is that the rational and natural perspectives view organisations as closed systems separated from their environments. The open systems perspective recognises that organisations exist in an environment which continually shapes, supports and infiltrates the organisation. Hence organisations are open systems because they take resources from the environment and transform them into outputs that are returned to the environment (McShane and Von Glinow, 2005). One plausible definition of organisations as open systems may be stated thus:

“Organisations are systems of interdependent activities linking shifting allegiances; the systems are embodied in and dependent on continuing exchanges with and constituted by the environment in which they operate” (Scott, 1992).

2.3.4 Organisation theory and its history

The overall objective of this study is to associate the smallholder organisation performance with their contextual contexts. The study is grounded in organisation theory.

Organisation theory has been defined as.

“.. Set of related concepts and principles that is used to describe and explain organisation phenomena..... Organisation theory can help us to understand what organisations are, how they behave in given environments, and how they might behave in different set of circumstances..... It provides a way of thinking about organisations and a way of managing them” (Narayanan and Nath, 1993, cited in Millet, 1999).

Several decades past are awash with information pertaining to efforts to develop theories on organisations. The classical school of management, as commonly known,
was heavily involved in developing sets of theories that focused on improving management effectiveness in organisations. According to Hartman (2010), Max Weber focused on institutionalising power and authority. That model reflected the ideal bureaucracy and the belief in legal patterns of normative rules and the right of those in position of authority to administer their organisations without favour. Weber believed that bureaucracies were best characterised by well-defined hierarchies, division of labour and specialisation enforced by rules and regulations.

Scientific management approaches were propounded by Fredrick Taylor and his scholars. They emphasised empirical approaches to development of comprehensive management solutions which were to be used by managers. The premise for this approach was that by applying scientific management procedures, the manager would be able to increase productivity. Scientific management called for a system for supervising employees, improving their work methods, and providing incentives to employees to improve output. Gilbreth, a member of this school was interested in developing the one best way of doing work, precursors to the contingency theory (Hartman).

Fayol’s perspective was based on administrative principles which strongly advocated the development of management theories that could be taught to others. He subsequently proposed fourteen management principles. His position was that organisational activities were divisible into: technical, commercial, financial, security, accounting and management. His focus, however, was on managerial activities which included planning, organising, commanding, coordinating, and controlling as key components of the management process (Hartman, 2010).

Chester Bernard, another administrative management school, held the position that organisations were communication systems and as such managers need to develop sense of common purpose where willingness to collaborate was strongly encouraged. He is accredited to evolving the acceptance theory of management that emphasised the willingness of people to accept those having authority to act. His position that
communication should flow from bottom to the top was at variance with the position of Weber (Hartman)

### 2.3.5 Challenges and criticisms of the classical organisation theories

Reed (1996) position was that the disparate perspectives in organisational theory led to a field of study that was fragmented, discontinuous and begging for acceptance. But whether the theories were mutually exclusive or integrated, they did not lend themselves to empirical verification (Davis and Marquis, 2005). Hence there was a need to shift the organisation-driven focus to problem-driven focus on institutions.

According to Luthans and Stewart (1977), the classical theorists promoted their ascribed frameworks as conceptually valid and pragmatically applicable to all organisations in all environments. The classical theory assumed that organisations were mostly closed systems and as conceived of management, technology, personnel, equipment and materials as the only relevant components; it ignored or deliberately failed to recognise the equally important components residing outside of the organisation including markets, sources of raw material and service providers (financiers, transporters). The relevance of government policies, rules and regulations were also ignored. The position taken by classical scientists were viewed myopic (Scott, 1992). Clearly something was wanting.

### 2.3.6 The Contingency Approach

Contingency theory presented an alternative managerial theoretical paradigm. Contingency theory does not prescribe the application of particular management principles to any situation. It recognised the extreme importance of individual manager performance for any given situation and the extent of manager’s power and control over a situation and the degree of uncertainty in any given situation (Hartman, 2010). The role of management in the contingency approach is to develop an appropriate management solution for any given organisational environment. It is viewed as a heuristic management paradigm that depended on the experience and judgment of the manager in a given organisational environment. Hence it is principally directed at the management seeking to control a distinct organisational environment (Hartman).
Donaldson (1996) reported that the onset of the contingency perspectives revolutionised organisational research. The approach modified the classical theories by incorporating the environmental components. It recognised that there is “no one best, universal structure” and that there were a large number of variables or situational factors that influence organisational design and performance (Mullins, 2005). The contingency perspective was that while the bureaucratic approaches were legitimate, this legitimacy was situational depending on strategy, size, task environment, and task uncertainty and technology i.e. it was contingent on the environment. As a result organisations adapted to their environments: where there was fit, performance was superior; in cases of mismatched characteristics, organisations failed to achieve the desired harmony in the environment (Mitzberg, 1981). Galbraith (1973) concluded the discussion on contingency perspective with two principles:

i. *There is no one best way to organise;*

ii. *Any way to organising is not equally effective.*

Contingency scientists, in their effort to understand why some organisations performed better than others, observed that managers align the structures of their organisations with contingent factors. This enables the organisations to adapt to the environments in which they operate (Scott and Davis, 2007).

Subsequently, the concept of contingency theories was viewed as consisting of the following elements:

(i) *There is no universal or best way to manage;*

(ii) *The design of an organisation and its components must fit with the environment;*

(iii) *An effective organisation will not only have proper fit with its environment, but so will its components; and*

(iv) *The needs of an organisation are better satisfied when it is properly designed and managed using an appropriate style to tasks and nature of work group*

Fiendler (1967) cited in Luthans and Stewart (1977)
What is most critical about the contingency theory discourse is that there must be fit between the different organisational elements including structure, size, technology, information (task environment) and requirements of the environment. According Pfifer (1982) cited in Luthans and Stewart (1977)) structural contingency theory depicts relationships between organisational size, task environment (technology and information), various environmental variables including resource munificence, complexity and dynamism and strategy with organisational structural elements such as formalisation, differentiation, etc. One such theory was that the task environment provided a primary constraint to specialisation and ultimately, performance or organisation outcomes.

### 2.3.7 Application of contingency theory

One of the first applicants of the contingency theory were Burns and Stalker whose studies in industry led to the conclusion that appropriate management techniques depend on the target tasks being addressed (Burns and Stalker, 1961). Organisations adapted their structures to match their contexts. Hence according to Burns and Stalker, if the environment was predictable, stable and homogenous and resource munificent, the structural form would be mechanistic, bureaucratic and largely centralised. Hence the mechanistic structural form involved tasks that were routine and unchanging. On the other hand, with turbulent, uncertain, unstable and resource scarce or poor environment, the structural form would ideally be organic, informal and largely networked. The organic type structure would involve with tasks that are non-routine and continually changing.

Woodward (1965) pioneered work that advanced the structural contingency theory. Her observations were that variations in organisational structure were associated with differences in manufacturing techniques adopted. Different technologies imposed different contingency demands; that these demands were best met through appropriate structures. Differences in environments led to differences in organisation requirements.

The environment-organisation-performance relationships may be summarised according to the theoretical frame in Figure 3.
According to Lawrence and Lorsch (1967) organisations existed when they were adapted to their environment. Organisations as open systems take on different structures as they adapt to different environments leading to differentiation and integration. They concluded that successful organisations more likely exhibited greater differentiation and integration as the complexity of the environment increased. Hence “successful organisations adapted by effectively balancing integration and differentiation to fit their environment; those that are not so successful develop too extensive a differentiation without integration” (Lawrence and Lorsch). They recognised the importance of environments in the structuring of organisations. Such relationships can be reflected in a generalised contingency framework of environmental variables (context), organisational structure dimensions, and performance of organisations (Figure 3). This model advances that organisational structure transmits structural effects to performance; (ii) the environmental context influences performance but the influence is not necessarily direct. It is most likely moderated by organisation structure.

2.3.8. Organisation environment and uncertainty

Organizations do not exist in isolation but rather within some form of system. Hence we can view them from different perspectives (Scott, 1992). The internal perspective of environments views organisations as a collection of different kinds of resources within a
given environment. The external perspective, on the other hand, assesses the importance of external forces on the organisations (Barney, 1991).

Environments are all elements that exist outside the boundary of organisations that have the likelihood of affecting all or parts of organisations (Daft, et al., 2000). Environments consist of all those forces surrounding the organisation that have the potential to disrupt operations and constrain the organisation from accessing resources. Organisations, however, attempt to overcome these forces in one way or other to ensure access to resources necessary for delivering goods and services on sustained basis. To achieve this organisations invoke different strategic responses to address the issues of environmental uncertainty. Environmental uncertainty therefore becomes a critical contingency factor.

The presence of external forces on organisations leads to uncertainty. The external environment in which organisations are located have been characterised in terms of simple-complex (complexity) and static-dynamic dimensions (dynamism). Combining these two characteristics, theorists have been able to characterise what they termed “perceived environmental uncertainty” within organisations; in addition the theorists view this perceived uncertainty as affected by the quality and quantity of information available to the organisations to make decisions (Huber, O’Connell, and Cummings, 1975). A third characterisation of the external environment was termed munificence wherein a munificence environment was described as one where resources were available for growth and buffering (Dess and Beard, 1984). In essence environmental uncertainty consists of complexity, dynamism and munificence all of which represent important contingency factors. In environments that experience resource scarcity, competition is rife leading to great uncertainty and intense competition for those resources. According to Elenkov (1997) context will affect the perception of uncertainty of the environment and how to respond to it.

There are strategies that organisations adopt to address environmental challenges. These include the establishment of favorable linkages with other organisations in the
environment to facilitate exchanges and shaping the environmental domain. Some of these strategies are briefly discussed.

**Networks:** Networking between different organisations is one route organisations adopt to address environmental uncertainty. Inter-organisational networks may take the form of joint ventures or mere arrangements of convenience. The resulting alliances emerge as a means of coping with the ever-increasing uncertainty in the environment. In exogenous situations networks emerge to enable organisations to access resources that are necessary to cope with environmental instability. In the case of the endogenous situation alliances are needed e.g. partnerships.

**Resource-base perspective/theory:** The environment is the source of resources required by organisations. By resources is meant strengths or assets an organisation owns that are tangible including financial assets or technology and intangible including managerial skills (Eisenhardt & Schoonhoven, 1996). Resource dependence perspective reflects studies conducted with respect to resource acquisition by organisations. Resource dependence means that organisations depend on the environment but they also strive to achieve control over those resources to avoid or minimise dependence (Ulrich and Barney, 1984). Dependence makes them vulnerable to other organisations especially if the resource is critical.

When resources cannot be accessed internally at acceptable costs or within acceptable time, firms choose to develop these resources either through acquisition or alliances. The RBV recommends selecting the mode of organization that provides the best opportunity for sharing and transferring resources. In fact, both acquisitions and alliances offer attractive means for enhancing resource bundles when an organization’s current capabilities are not sufficient to achieve desired outcomes (Eisenhardt & Schoonhoven, 1996).

One argument that may be advanced is that organisations continuing existence depends on the resource dependence theory (RDT), which is defined as the organisation’s capacity to maximise its power to access or acquire resources. RDT in this instance
characterises links between the organisation and power relations based on the exchange of resources. RDT posits that organisations that lack particular essential resources seek to establish relationships and by so doing they become dependent on others to acquire the required resources. Organisations also attempt to alter this dependence by reducing as far as possible that dependence e.g. by increasing dependence of others on them. Organisations may also be seen as coalitions that change their structure and patterns with a view of acquiring and maintaining supplies and supply lines.

Hence the resource-based theory sees long term competitiveness of organisations as depending on resources the organisation can garner on a sustained basis (Hansen and Wernerfelt, 1989). In this study for example, the smallholder sugar cane farmer access to farming finance exemplifies the resource-based theory. The cane growers attempt to address the issue of RDT by ensuring repayments of their loans as fast as possible to limit the dependence.

Scholars also recognise that the human resource base was key to organisations’ prosperity for while organisations can recruit new employees, their training to competency levels takes time and energy. In any case the degree of availability of management staff is seen as the accelerator and brake for organisation growth process (Penrose, 1959 cited in De Kok and Uhlaner, 2001). Further views report that the source for continual growth and success of organisations lies with human resource itself and not the organisation’s practices to lure and retain them (Ferligoj et al. 1997). Organisational climate has considerable influence on performance and hence the need for organisations to, as far as possible, retains their employees. For example organisations with desirable organisational climate such as one that encourages employees to be involved and empowered in decision-making have reported better performance.

**Institutional theory:** Organisations are embedded in environments built-up as networks (Stanwick and Pleshko, 1995). Nodes of networks are interdependent. Institutional
theory deals with questions of how organisations are affected by forces that lie outside their realm (Hoffman, 1999). It facilitates the assessment of these forces using different perspectives. Institutional theory sees organisations as entities, units that have stakeholder acceptance and thus legitimacy because they conform to stakeholder expectations. It focuses on pressures and challenges of the institutional environment.

According to Hoffman, institutions are rules, norms and beliefs that describe the reality of organisations, assisting the organisations to determine what is and what is not and what to do and not to do. Institutions consist of regulative (laws and regulations), normative (social patterns) and cultural-cognitive (beliefs and symbolic systems) components (Scott, 2004). For the smallholder sugar cane grower organisations to remain legitimate, they must abide by Government of Swaziland policies, rules and regulations pertaining to e.g. labour management and taxation. In addition, they must follow Swaziland Sugar Association policies, rules and regulations and Swaziland Environment Authority demands. Accordingly organisations in their quest to conform to the different requirements or expectations end up achieving different levels of performance and organisational structures are established to address these different institutional regulatory, normative, and cultural-cognitive components to remain socially acceptable (Scott, 2004).

**Transaction cost theory:** Transaction cost theory refers to costs associated with organisation interactions/working together with other organisations. These costs arise as organisations attempt to acquire and control symbiotic and competitive interdependencies.

Transaction Cost Theory (TCT) is an important concept used in the analysis of strategic and organisational issues or options. It is employed to study different aspects of organisations including organisation boundaries, vertical integration of decisions or rationale for conducting acquisitions (Williamson, 2002). The TCT argument is that there are costs to conduct transactions through the market. These costs comprise: the cost of
searching and information; cost of drafting and negotiations; and costs of safeguarding the contract.

TCT is premised on various assumptions pertaining to human behaviour and environmental characteristics (Williamson, 1975 cited in Williamson, 2002).

(a) **Actors bounded rationality**: This results in incomplete contracts because actors cannot foresee all the future possibilities at the time of contracting. Bounded rationality reflects individuals’ inability to process large degrees of information and the difficulty associated with assigning probability values to future occurrences of events. They attempted to make rational decisions but are constrained by their limited perception of their cognitive abilities which is compromised further by conditions of imperfect information.

(b) **Opportunism**: Opportunism originates when one of the partners pursues personal short-term self-interest. In this case the individual puts forward self-interest at the expense of others. The individual engages in behaviors that are corrupt and overtly deceitful. This may be the very reason for the existence of some of the costs.

(c) **Assets specificity**: Transaction costs theory focus is on asset specificity and the role this plays in determining how to better organise exchanges. When assets are not specific to an exchange, the market may be the most efficient way to organize it. Asset specificity also refers to the extent to which an asset can be redeployed to alternative uses and/or by alternative users without substantially compromising its productive value.

The sugar belt in northern Swaziland where the KDDP growers are located hosts not only the smallholder growers but large-scale growers as well. In terms of resources, there are vast differences in access. The large-scale operators own the different plant and machinery (e.g. sugar cane combine harvesters, sugar cane field plant and equipment, ready access transport to haul sugar as well as finance). In the end, the large scale producers are more sophisticated and more favoured than the smallholder grower in all aspects. Most smallholder operations on the other hand are based on hired
equipment and labour. Harvesting plant and equipment are accessible but for limited periods of time as owners the resources may also be involved with harvesting during the same period. The same case goes for the haulage of the cane. Carriers are interested in tonne-kilometres and prefer working with organisations that are more remote from mills to maximise their income. The transaction cost theory is clearly applicable and key determinant of organisation’s structure and governance.

Nootenboom (1993) reported that small scale operators are more disadvantaged relative to the large ones with respect to costs partly due to differences in volumes of produce handled (scale of operation) and product range (scope of operation) and partly by differences in levels of experience and more limited capacity to attain higher levels of knowledge. Nootenboom further reports that whereas TCT involves make or buy decisions with the larger organisations, for the small-sized organisations neither choice is applicable because of resource limitations. Their conclusion is that small-sized operators lack the more sophisticated programmes because they may be lacking resources to implement them.

2.3.9 Criticisms concerning the contingency theory

Contingency theories largely proposed that the best organisational structure and management style depended upon a set of contingency factors associated with uncertainty, instability and resources in the environment. According to Tosi and Slocum (1984) these concepts were plausible at the time they were being propounded. The reasons for this is that their underlying logic was apt and compelling; in any case findings to support the theories were advanced by Burns and Stalker, Lawrence and Lorsch, and Woodstock and these provided the necessary converging results (Tosi and Slocum).

Contingency theories have nevertheless been criticised. Perrow (1980) cited in Tosi and Slocum (1984) found the theories weak in their deterministic assumptions and in their reference to the concept of effectiveness. Other scientists criticised the contingency theories for their lack of specificity in the relationships they advanced; and yet others
were critical because they ignored culture of organisations in their deliberations. One conclusion summarises the many criticisms as follows:

“contingency theories are not theories in the conventional sense of well-developed sets of interrelated propositions. They are more an orienting strategy suggesting ways in which a phenomenon can be conceptualised…”

2.4 Theoretical Study Framework
This study investigates two issues. These are organisational structural dimensions and contextual dimensions of the smallholder sugar cane grower organisations and how they impinge on performance.

Mureno-Luzón and Peris (1998) reported that the basis of organisational design variables of fit and contingency model were the level of decision-making (centralisation); level of formalisation-standardisation and level of shared values of the firm. According to Dalton, et al (1980), contextual dimensions such as size, technology and strategy define the physical environment, a milieu within which behaviour is expressed but do not dictate the behaviour of those in organisations. Structural dimensions prescribe behaviour of those within the organisation. The effects of some of the contextual and structural dimensions are briefly discussed.

2.4.1 Structural dimensions
Autry (2010) observed that organisation designing is a process that starts with the creation of a strategy (a set of decisions guiding members how they select appropriate actions). Strategies are derived from clear, concise and well-articulated statements of mission; vision; values, beliefs and purpose. They unify intentions of organisation focusing members towards actions that will achieve the desired outcomes. They encourage actions that support and uphold the purpose while discouraging those that inhibit (Autry).

Autry cautions that creating a strategy does not necessarily mean that the organisation has an organised membership. This is because while strategy is a planning output,
organising involves pooling people and connecting them with each other in a purposeful way. It means connecting people with information and technology that will facilitate their activities. Hence organisational structure defines the formal relationships among people and specifies their roles and responsibilities as well (Autry).

But in order for an organisation to do work and deliver goals, the organisation has to be segmented and its participants grouped. A structure provides the framework for the organisation to assign different tasks to different groups. It is the structure that facilitates implementation of tasks (Mullins, 2005). Structural dimensions describe the internal environment or characteristics. Structure is simply the arrangement of rules, roles and relationships which best facilitate effective coordination and control. A major premise often made is that a correct design of structure is critical for organisational performance: “a good organisation structure does not by itself produce good performance; but a poor organisation structure makes good performance impossible, no matter how good the individual managers may be. To improve organisation structure will most likely improve performance” (Mullins, 2005).

According to Mullins “....the allocation of responsibilities, the grouping of functions, decision-making, coordination, control and reward are all critical requirements for the continued effective operation of organisations. The quality of organisation structure will dictate how well these requirements are met” Mullins concludes that organisational structure affects not only productivity and economic efficiency but also morale and job satisfaction of the employees.

Thus the construct structure refers to the pattern of relationships among positions in the organisation and among members of that organisation. It makes it possible to effectively manage organisations. It creates a framework of order and command with which organisational operations can be conducted (Mullins, 2005). The most consistently used dimensions are specialisation, formalisation and centralisation. Studies investigating performance in relation to organisational structure are not common (Covin and Slevin,
1988); nor are there clear relationships between contingency factors, structural variables and performance (Meijaard, Brand and Mosselman, 2005).

Specialisation is a critical dimension of structure. It is concerned with division of labour and relates to the degree to which work units are grouped on the basis of functional similarity. Specialisation positively predicts performance and mediates the effects of production technology on performance (Germane and Spears, 1989).

Centralisation refers to the vertical boundaries between levels that may be clearly marked and assumed to be important to participants. This is the locus of power for decision-making. The hierarchies may be shallow (flat) with limited numbers of levels or strong when the levels become pronounced. Studies on centralisation have revealed limited evidence to support relationships between centralisation and performance (Dalton et al., 1980 and Stanwick and Pleshko, 1995), though decentralisation studies have positively predicted quality performance (Germane and Spears). Recent studies also revealed that specialisation and differentiation have similar impacts on organisations and that both contribute to complexity of the organisation structure (Geeraets, 1984). Stanwick and Pleshko (1995) reported that formalisation and organisation effectiveness were positively associated. Hence in production-oriented organisations (such as sugar production-based organisations with strict sets of standards and routine procedures to achieve uniformity of product), it was critical (Germain and Spears, 1989).

In addition to specialisation and centralisation, organisations have in place formal prescriptions that define employee behaviour i.e. rules and regulations and procedures. According to Mureno-Luzón and Peris (1998), standardisation should be used to relate to procedures that are always followed methodologically even when they are not written; formalisation indicates the degree to which instructions and procedures were written down by organisations. There are also the informal sets of prescriptions which include customs, practices and traditions that are manifested in actual, rather than, formally prescribed behaviour.
Burns and Stalker (1961) reported that when the external environment is stable, the internal organisation was characterised by rules, regulations, procedures and clear span of control. In organisations that are formalised with effective centralisation in place and decisions coming from the top echelons were described by Burns and Stalker as mechanistic organisation system. However, under rapidly deteriorating environmental conditions, the internal organisation collapses; it becomes loser, free-flowing and adaptive; rules, regulations, procedures are relaxed or not enforced or even not written down or else ignored; span of control weakens and decision-making authority decentralised. Burns and Stalker termed this set up organic organisation system.

2.4.2 Contingency factors and organisational performance
Organisation structure also reacts to the external environment. Under environmental uncertainty the formal structuring and the level of control imposed on employees may change. Muren-Luzón and Peris (1998) identified as most relevant contingency factors such as size, technical system, environment, values that members of organisations bring with them, and the existence of public and private institutional facilities of as being of value to organisations. Daft, et al. (2000) defined contextual factors as consisting of organisation size, organisation strategy, technology and the environment and viewed them as possible predictors of organisation performance.

2.4.2.1 Organisation size
Organisational size has been variously studied with or without reference to organisation structure. Different sizes mean different degrees of difficulty in management (planning, coordinating and controlling internal activities of organisations). Size refers to the number of people and volume of resources and their span in the organisation (Daft, et al.). Size relates to organisation capacity, number of people in employment, volume of output or product and market share as well as resources at hand (wealth). Size may be defined in relation to the number of full-time and part-time employees or used to refer to the ratio of administrators to employees or even number of stakeholder. Whatever perspective may represent size, this construct has been associated with organisation structural elements such as formalisation and specialisation. Literature reveals evidence
suggesting strong relationship between bureaucratic structures and size – larger organisations require greater bureaucratisation with more formal means of control and coordination. Larger organisations have larger number of rules and procedures and require more exhaustive planning and control to minimise uncertainty (Scot and Schoenerherr, 1971 cited in Mureno-Luzón and Peris, 1998). Aldrich and Pfeffer (1976) showed that increase in size leads to greater bureaucratisation and was weakened by ignoring environmental and technological factors that promote conditions for increased size. In essence size and bureaucratisation were correlated “not because of size per se but because changes in size have implications on control and coordination.

Small organisations have practically no need for formal structures. But as size increases problems in relation to implementation of work and management so that formalising relationships becomes necessary. Hence with size many features characterising organisations become necessary (Mullins, 2005). Size, however, is not a simple variable; it takes on different forms; its effects are often difficult to distinguish from those of other organisational variables. Complexity and formalisation (bureaucratisation) were reported to be positively related to size (Robbins, 1990 cited in Meijaard 2002). Other relationships between size of organisation and complexity, formalisation and decentralisation have been reported and show positive relationships (Geeraerts, 1984). Impact of size was also associated with technology though this cannot ignore the influence of uncertainty in the external environment (Beyer and Trice cited in Miller and Droge, 1986).

2.4.2.2 **Organisation strategies:**

Strategies are forwarding looking plans that anticipate changes and initiate actions to take advantage of opportunities that are integrated into the organisation vision, mission, and objectives (Newmond and Logan, 1971 cited in Covin and Slevin, 1989). This perspective of strategies is directional, purposeful and precedes planned actions. Strategy is deliberate and aims at achieving particular objectives using particular implementation plan. Major studies involving structure and strategy are due to Chandler (1962), and Miller and Friesian (1980) cited in Meijaard, (2002). The perspective
reflecting the best fit between structure and strategy was advanced by Miles and Snow (1978) in Meijaard, (2002). The role of the environment and technology were introduced in studies of structure and strategy. The evidence supported the contention that structure and strategy were interrelated though difficult to establish causality (Miller and Friesian, 1980).

2.4.2.3 **Owner-manager status**
The smallholder farmers’ organisations are formed by groups of farmers who agree to pool their resources such as land to achieve particular goals. Collectively they own the organisation. Studies have established relationships between organisation structure and managerial variables such as entrepreneurship, leadership style and type of control (Minztberg, 1979 cited in Meijaard, et al. 2002). Relationships between size of organisation and structure were moderated by the status of management of the organisation. Pondy (1969) cited in Geeraerts (1984) revealed that ownership affected administrative intensity of organisations suggesting that ownership was a critical determinant of structure. This was explained on the basis of owner-manager’s unwillingness to dilute personal power and control by the additions of professional and non-family personnel. Figure 4 presents a framework for the assessment of organisational and contingency factors on performance.

2.4.2.4 **Environment and uncertainty**
The internal perspective of organisations regards these as a collection of different kinds of resources. The external perspective assesses the importance of external forces on organisations (Barney, 1991). Environments are all elements that exist outside the boundary of organisations with the likelihood of affecting all or parts of organisations (Daft, et al., 2000). It consists of all those forces surrounding the organisation that have the potential to disrupt operations and constrain the organisation from accessing resources. The presence of external forces on organisations leads to uncertainty. The external environment in which organisations are located have been characterised in terms of simple-complex (complexity) and static-dynamic dimensions (dynamism) Combining these two characteristics, theorists have come up with what they have
termed “perceived environmental uncertainty” within organisations that was also affected by the quantity and quality of information available to the organisation (Huber, O’Connell, and Cummings. (1975). Dess and Beard (1982) added a third characterization of the external environment termed munificence wherein a munificence environment was described as one where resources were available for the growth and buffer. In essence environmental uncertainty consists of complexity, dynamism and munificence all of which represent important contingency factors. In environments that experience resources scarcity, competition is intense and this leads to greater uncertainty and intense competition for those resources.
Figure 4 Framework for organisational performance analysis
2.4.2.5 Environment munificence

Environmental munificence relates to resources that are available to the organisation to conduct its business. It is a focus of this study because resources are critical to the performance of the actors, the smallholder sugar cane producer. Resources include finance, knowledge/technology and information, human resources and supplies of production resources. No organisation is self-sufficient; all organisations have to source resources from their environment. According to Pfeiffer and Salancik (1978) cited in Hill, Withers and Collins (2009) because of these shortcomings, organisations are forced to access resources from their environments. Social and economic exchanges occur and lead organisations to seek the necessary resources while at the same avoiding dependence on the source organisations. Hence organisations have to have the right fit between external environment and its internal environment to be successful.

Environmental munificence or resource status refers to the economic environment in relation to government support, socio-cultural support and financial support that attracts people to venture and participate in entrepreneurial activities. Societal attitudes towards starting business and towards business in general, the economic climate of the market and availability or accessibility to finance are critical factors promoting decisions to participate in entrepreneurial activities (Shapero, 1984 cited in Tang, 2008). Sociological and economic environments of the entrepreneurial processes are critical and often signal the success or failure of business ventures (Bouchikhi, 1993). Environmental munificence influences the survival and prosperity of organisations that operate within the same environment. It dictates the entry of new or prospective actors. A munificence environment promotes the growth of businesses by taking advantage of the available resources (Dess and Beard, 1984).

Dubini (1988), reported that environmental munificence for entrepreneurs (entrepreneurial munificence) is typified by strong presence of family businesses and role models; a diversified economy in terms of size of enterprises and industries; a rich infrastructure and a pool of readily accessibility skilled resources; strong and supportive
financial systems and enabling government policies, laws and regulation that encouraging new business ventures.

In discussing entrepreneurship, entrepreneurial alertness, is critical. It dictates the entrepreneur’s commitment to the enterprise. Entrepreneurial commitment is the extent to which a person identifies with, and participates in new business creation activities and becomes more committed to the new undertakings because he or she is alert. This alertness enables them to readily identify potential opportunities for exploitation that others remain unawares of (Kirzner, 1979 in Tang, 2008).

Entrepreneurial munificence is positively associated with the survival, profitability and growth of new enterprises (Bouchikhi, 1993). In friendly environments entrepreneurs are alert to opportunities (Yu, 2001). They become committed; they become emotionally and intellectually attached to them. They expend their physical energies to attain their goals (Erickson, 2002). Entrepreneurial commitment is the quality of being observant and inquisitive about unnoticed features of the environment and of constantly searching new horizons for new ideas. Because of the individual’s entrepreneurial alertness, he/she is able search for new ventures that may prove profitable (Tang, 2008).

A major feature of resource availability equation is that the entrepreneurs must believe in themselves; they must believe that they have the capacity to deliver. This reflects the self-efficacy construct which is simply the self-perception an individual has about his capability to achieve tasks at hand Tang (2008) citing Bandura (1977).

In essence therefore, an entrepreneur who will most likely succeed will be one that is proficient; will have the ability to mobilise and utilise resources effectively; and one that will be able to evaluate emerging opportunities. These unique features according to Brown and Kirchhoff (1997) can only be mobilised not because of the resource base but because of the self-efficacy the entrepreneur exhibits with respect to marshalling the required resources. The major role of entrepreneurs would, therefore, be to recognise and exploit openings by taking advantage of economic needs or market demands.
Entrepreneurs with high self-efficacy achieve higher levels of alertness in a munificence environment than others with low levels of self-efficacy (Yu, 2001).

KDDP developments have been successful. Several organisations have repaid their loans. The quality of life is gradually improving; infrastructure has improved greatly such that little else needs to be done in this direction. Some organisations are now taking on such social services as building schools for communities. SWADE estimates that with the completion of loan repayments, the KDDP organisations will collectively earn some R100 million per year. The project area will earn sufficient finances to productively continue their sugar cane production projects. Members of organisations will earn dividends from their organisations. The volume of finances floating in the KDDP will create opportunities for investments. For example farming requirements are being brought in from afar. Homesteads demands for goods and services will escalate as the wealth of these communities improves.

The obvious implication this presents is that opportunities for new business will sooner than later abound within the KDDP. However, for farmers’ organisations to initiate and grow successful businesses pre-supposes that organisations and/or their members have sufficient entrepreneurial orientation. This study evaluates the state of entrepreneurial munificence and the different characteristics that manifest themselves in the organisations. According to Weick (1969) cited in Brown and Kirchhoff (2010), a manager can only know the environment in which he or she operates through his or her perception of that environment; this provides some evidence for this study to assess the four chairpersons’ perception of their entrepreneurial munificence.

2.5 Summary Chapter II

This study viewed organisations as a means by which humans conduct their business in groups; it is the behaviour of people as individuals given their circumstances. Scott
summarily saw organisations as systems of interdependent activities, embodied in and
dependent on continuing exchanges with their environment - clearly opting for the open
system perspective of organisations. This led to discussions pertaining to organisation
theory from the classical perceptive. Major actors during this era were Weber, Taylor,
Fayol, and Bernard. The classical theories were seriously challenged partly because
these theories were perceived as applicable to all situations; they assumed closed
organisational systems with little interactions with the environment, failing to recognise
the equally important roles of markets, resources for materials, etc. This led to the dawn
of the contingency perspective that essentially asserted that there was no one best way
to manage as there are many variables or factors that influence organisational
behaviour. Gilbraith (1973) strongly propounded the view that there is no one best way
to organise and that any way of organising is not equally effective. This suggested that
the best way to organising was contingent on environment.

Chapter II proceeded to propose a framework that was to guide the study. This
framework proposed that organisational structure imposed/transmitted structural effects
to performance; (ii) the environmental context influences performance but the influence
is not necessarily direct. It is most likely moderated by organisational structure.

Subsequently, the effects of organisational structural context was viewed as involving
organising people and connecting them in different ways to arrive at organisational
structure which according to Mullins facilitates the implementation of organisational
tasks, which ultimately affects productivity and economic efficiency. Three common
structural dimensions are identified as specialisation, centralisation and formalisation all
having different roles and ultimately impacts on performance.

The organisational context is seen as involving organisation size, strategy, technology
and environment. The effects of each of these on organisation structure and
performance are discussed to. The effects of the environment particularly the external
environment which are viewed to consist of all those forces surrounding the organisation
with the potential to disrupt operations and constrain the organisation from accessing resources is noted.

The issue of uncertainty and how organisations react to its three components of complexity, dynamisms and munificence (perceived environmental uncertainty) is discussed. The role of network theory, resource dependence theory, and transaction cost theory, and institutional theory is brought to the fore to explain organisational responses.

The chapter concluded by identifying the study focus which is to assess the interplay between organisation dimensions (centralisation, formalisation and specialisation), size and munificence as contextual factors and performance.
CHAPTER THREE
RESEARCH METHODOLOGY

3.1 Introduction

In the previous chapter, discussions were based on available literature as it relate to different aspects of organisations ranging from the classical theories of Max Weber, Taylor and Fayol through the contingency theory of Gilbraith and others. A conceptual model was evolved that essentially attempts to show the interplay between organisation structure, environment context and organisation performance. Three organisation structural components (specialisation, complexity and formalisation) and two environmental contextual factors (size and resources base) are discussed to show their interaction with each other and ultimately on performance. Evidence is suggested that organisational reactions to the external environment may be confounded in the light of such theories as transaction cost theory; resource based theory as well as institutional theory.

This study was undertaken to assess the progress that has been achieved by the Komati Downstream Development Project (KDDP) smallholder sugar cane growers' organisations. The aim of the study was to gain insights into the operations and performance of the smallholder cane grower organisations. The focus of the study was to explore and explain organisations, to understand and identify critical factors that can be associated with their performance.

This Chapter III presents information on the research paradigms that formed the basis for the research design and subsequently, the methodology or procedural framework within which this study was conducted.
3.2 **Research Traditions**

The process of designing the study commenced with the study of research paradigms to guide the research process. This was necessary because researchers confront differing worldviews from which they have to base their design. According to Amaratunga *et al.* (2002), the debate has centred on the relative value of two fundamentally distinct schools of thought or paradigms. These are positivism paradigm that uses quantitative and experimental methods to test hypothetical-deductive generalisations; and the other school, the phenomenological or interpretive science that uses qualitative approaches to inductively and holistically understand human beings in context-specific settings.

### 3.2.1 Interpretive/constructivist paradigm

The interpretive/constructivist tradition combines rationale and intuition in acquiring knowledge. It focuses on the unfolding processes as the research is conducted rather than on structure. It yields more opportune, broader and holistic findings than the quantitative approach and, as such, conclusions are impressionistic rather than definitive (Das, 1983). Qualitative researchers, operate under the assumption that to understand a phenomenon you have to view it in context. To segment it limits nature to the extent you look at only a small segment of reality, which, unfortunately, cannot be split without losing meaning of the whole phenomenon (Krauss, 2005). In this paradigm knowledge is established and meaning attached to phenomenon through inquiry. Researchers and subjects intimately interact in the process of data collection. More importantly, perhaps, knowledge is context and time dependent (Krauss). This approach seeks to understand and explain occurrences rather than ascribing them to some external forces. It recognises the importance of subjectivity or human input into meaning without reneging on objectivity. Hence the approach leads to close collaboration between the researcher and the respondent while letting the later relate his/her story uninterrupted (Krauss). Constructivists focus on specific peoples’ contexts:
where they live and conduct business, to comprehend the historical and cultural settings and knowledge that this background will influence or shape interpretation (Creswell, 2003). Subsequently they are forced to position themselves in such a way that they are part of the research process and, not independent of it, and hence become intimately involved in the entire research process. This path of research leads to the qualitative strategy to research (Creswell).

3.2.2 Positivist’s paradigm
The second paradigm is the positivist paradigm. This paradigm largely depends on a set of measures that generate numerical data and hence deals with measured and observed knowledge. The approach reflects the deterministic philosophy in which “causes are viewed as determining effects or outcomes and, as such, necessitating an examination of the causes that lead to these outcomes” (Creswell, 2003).

This paradigm challenges the idea of absolute truth and claims that researchers cannot be positive about the knowledge they obtain when studying the behaviour of human beings and that knowledge as such can never provide the full picture of reality (Creswell). The researcher invoking this tradition attempts to represent reality as best as he/she can by studying the behaviour of respondents and ascertaining causes of the outcomes. From their standpoint, they presume that the phenomenon of interest depends on suspected sets of factors and exploring those factors becomes paramount (Creswell). This paradigm is characterised by the isolation of the respondent from the researcher and the need to formulate hypothesis for verification in the study (Amaratunga, 2002). The approach seeks explanations and fundamental laws; it reduces whole environments into samples for ease of study. Knowledge emanating from such efforts is, therefore, a product of carefully crafted theory, observations, and measurements of objective social reality that exists (Creswell, 2003).

The two qualitative and quantitative approaches, however, are not polar opposites; choices regarding which paradigm to adopt are not dictated by “principles” but rather by
expediency. The choices made by researchers tend to be pragmatic (Silverman, 1998). The use of both methods, however, cannot be ruled out as they provide a different set of lens through which to collect and view data (Nau, 1997).

### 3.2.3 Mixed methods

The issue of mixing research paradigms has been contested. One school sees mixing as illogical because attributes of a particular paradigm often lead to synergistic effects and as such cannot meaningfully be segmented. These scholars further argue that different paradigms embody unique assumptions about the nature of reality and as such mixing was senseless (Guba and Lincoln, 1984). The second school, while recognising the integrity of paradigms and their unique assumptions, advances, nevertheless, that by using mixed paradigms, understanding is enhanced through the convergence of the data generated by the different paradigms (Mason, 2006).

This study adapted the mixed methods approach. The mixing was only reflected in the techniques that were combined i.e. the way the research was framed. Conducting this research using different paradigms involved collecting, analyzing, and interpreting quantitative and qualitative data in the same study (Onwuegbuzie and Leech, 2006). The logic for the mixing involved the use of induction, deduction, and abduction i.e. uncovering and relying on the best set of explanations for understanding the results (Johnson and Onwuegbuzie, 2004).

### 3.3 Research Design

This study adopted the mixed-methods design. Mixed-methods are formally defined as a class of research where the researcher combines qualitative and quantitative research techniques, methods, approaches, concepts or language into a single study (Johnson and Onwuegbuzie). The logic of inquiry as has been suggested involved the use of
induction to discern patterns; deductions to test hypotheses; and abduction to ascertain the best sets of explanations to understand results.

The study was conducted as a case study using current mixed-methods approach and as such no one paradigm was dominant. Secondly, it was based on multi-level sampling in that three case units were the focus of the study and from each case respondents were identified to represent the different levels. These units were chairpersons, executive committee members and employees.

The case study approach was adopted for the study for different reasons. Case study methods have the advantage that they allow the researcher to investigate a contemporary situation (smallholder cane grower organisations) within real life context (KDDP development area) because boundaries between phenomenon and context cannot be differentiated (Yin, 2009). They afford different ways of obtaining, organising and analysing data to derive comprehensive and in-depth information about each case. In addition it allows respondents the opportunity to discuss issues freely in their own language without hindrance (Yin). Finally, the case study was seen as most appropriate to this study as it is afforded the researcher the opportunity to invoke both qualitative and quantitative data drawn from a variety of sources ranging from interviews, documentation, artefacts, observations and farmers’ organisation diaries (Yin).

3.3.1 Data Collection
In this study, data were collected by asking, observing and by drawing on documentation and artefacts-historical data. The following sources were used.

3.3.1.1 Data Sources
This study used multiple sources of data. This was done partly to expand sources of evidence to facilitate convergence of evidence and partly to improve construct validity
and reliability through triangulation (Yin, 2009). To this end the following data sources were employed:

**Primary data:** Three sources were used:

1. In-depth key informant interviews with chairpersons of organisations as respondents;
2. In-depth key informant interviews conducted with farm managers and a sample of committee members.
3. Survey of organisation employees using an interview schedule;
4. Observations.

**Secondary data:** The data sources comprised:

1. **Documentation:** This unobtrusive source of information was invoked to provide credence to the information related by the members.
2. **Archival Records:** This source of information afforded the researcher the opportunity to access valuable information including surveys reports, historical reports, budgets, production, and finance data pertaining to organisations from SWADE, SSA Technical Services and the organisation themselves.
3. **Direct observations:** The researcher and the research assistants recorded contextual information during the interview expeditions. The data included information on infrastructure, plant and machinery, state of buildings and crops.
4. **Physical artefacts:** This source covered observations and discussions on technical operations undertaken for different during the season including harvesting, weed control and irrigation, to mention a few.
3.3.1.2 Unit of analysis

The unit analysis for the study was the smallholder sugar growers’ organisations. Data from different sources were aggregated for the particular organisation. Actual data collection units were as follows (Table 1):

<table>
<thead>
<tr>
<th>Component</th>
<th>Respondent</th>
<th>Instrument</th>
<th>Mode of selection</th>
<th>Sample size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qualitative</td>
<td>Chairperson</td>
<td>Key informants interviews: Interview guides</td>
<td>Purposive</td>
<td>Five chairpersons; 5 Farm supervisors</td>
</tr>
<tr>
<td></td>
<td>Farm Manager Committee members</td>
<td></td>
<td></td>
<td>Four or more Committee members</td>
</tr>
<tr>
<td>Quantitative</td>
<td>Employees</td>
<td>Interview schedule: Survey</td>
<td>Random sampling-based on the frame</td>
<td>Minimum of 25 employees in each Organisation</td>
</tr>
</tbody>
</table>

3.3.1.3 Sample selection of study cases

Multiple-case designs use replication logic. Replication logic is achieved by ensuring that selected cases reflect variables of interest in the study which in this case were organisational context and their impact on performance. The use of replication logic requires that cases are selected either for purposes of predicting similar results or producing divergent data. To this end a sample of seven organisations out of the population of 19 (N = 19) organisations, were nominated by the KDDP agricultural manager based on their age and size. This study sought to assess organisations that are best performing, fairly good performing, and struggling and generally not performing well. In the sampling process, the study also imposed further criteria to determine the
final entrants into the sample. The criteria were that the organisation should have been involved in sugar cane production for at least five seasons as at end of 2009/2010 season and that the area under sugar cane for at least five years must have exceeded 100 ha. The two criteria eliminated two organisations leaving five; worse still, one of the five organisations had an employee population, N < 25. Quantitative analysis for this organisation (Ingcayizivele) was not made.

3.3.1.4 Measurements

Dependent variables

Performance: Performance information data were based on four measures. These were:

1. **Tonnage:** Conventional measures of common sugar cane tonnage delivered to the mill and sucrose yields.

2. **Effectiveness:**

   Effectiveness \( = \) \( \frac{\text{Actual output}}{\text{Expected output}} \times 100 \) (%

   (This formula relates to process output and reflects what the organisation set out to do and assesses whether the desired outputs were met and hence the right activities were conducted.

3. **Efficiency:**

   Efficiency \( = \) \( \frac{\text{Resources actually used}}{\text{Resources planned to be used}} \times 100 \) (%

   (This formula reflects process inputs and measures performance of the process system management. It assesses management in terms of resource use efficiency).

4. **Productivity:**

   Productivity \( = \) \( \frac{\text{Outputs}}{\text{Inputs}} \times 100 \) (%

   Where data was available these performance ratios are presented.
Independent variables

Organisation contextual variables: Three organisational dimensions of structure: specialisation, centralisation and formalisation were measured based on Miller and Droge (1986) and Aiken and Hage (1966) instruments with some relevant modifications being made.

1. Items for specialisation were drawn from Swaziland Sugar Association Handbook (2001) and hence all items in this domain related to procedures and practices employed sugar production. To operationalise this variable, a 38-item-six-point Likert-type scale were used and anchored as follows: at the low end (1) represented that operations were carried strictly by same team all the time; the high end (6) on the other hand represented operations being carried out by different teams under different supervisors most, if not all the time (lack of division of labour).

2. Centralisation (locus of authority to make decisions), assessed two aspects of centralisation.
   a). The first assessment was based on Miller and Droge (1986) (instrument modified to fit this study) to assess levels of the organisation at which decision-making took place;
   b). The second assessment looked at the extent to which employees participated in decision-making and for this sub-domain items were based on Aiken and Hage (1966).

The assessments for the two sub-domains were based on 12-item and 9-item 6-point Likert-type scale anchored as follows with the end points being Tindvuna (team leaders) at lower end (1) and Chairperson at upper end (6) while for the second domain, the end points were “never” (1) for the lower end and “all the time” at the high end (6).
3. Formalisation, conceived as the degree to which organisation operations are based on rules, regulations, standards and procedures and the extent to which deviation from the standards was allowed. Its assessment was based on items derived from Miller and Droge (1986) modified to fit this study. A binary type of scale was used with 1 = yes (meaning organisation used the suggested means) and 2 = no (meaning the organisation did not use the suggested means); 3 = was used for those who did not know.

For the four assessments individual mean response scores were obtained as ordinal variable values. These were used to obtain mean of means which were then used to describe the organisation. These organisational means were considered interval level of measurement. For decision purposes regarding specialisation and centralisation domains, means of 3.5 and less were taken to reflect the low end specialisation and centralisation while those greater than 3.5 reflected limited or even lack of specialisation and centralisation. For formalisation, means of 1.5 and less implied the existence of rules, procedures, i.e. highlighted a formalised organisation and that outside this reflected lower levels of formalisation.

**Environmental contextual variables**

**Size:** Size was viewed to depict number of personnel, membership of organisation and size of farm. In this study these three size descriptions were used. The numerical data were converted into interval values and reflected as interval variables of number of employees, size of cane production area and members of association. Fulltime employees were allocated a full units while seasonal/semi-permanent staff 0.5 units.

**Environmental munificence:** Environment resource availability (munificence) or the scarcity or abundance of critical resources that organisations require was operationalised using a-29-item 6 point Likert-type scale anchored with the lowest end, 1 = very high level of disagreement and highest level, 6 = very high level of agreement.
and 3.5 being the rejection or acceptance level. Three constructs were evaluated (i) entrepreneurial resource availability; (ii) entrepreneurial self-confidence; and (iii) entrepreneurial commitment.

### 3.3.1.5 Instrument Development

Three instruments were used in the study. Information used to develop instruments was obtained from the review of literature and Swaziland Sugar Industry publications. The instruments were as follows:

1. **Interview schedule for employees:** The domains on this instrument were as follows:
   
   i). Demographic characteristics of respondents;
   
   ii). Extent to which specialisation had been institutionalised with respect to sugar production operations;
   
   iii). Extent to which centralisation was used in decision-making and participation of staff in decision making;
   
   iv). Extent to which formalisation was used in organisation.

   Items for the three domains (ii-iv) were developed after Aiken and Hage (1966) and Miller and Droge (1986).

2. **Organisation Committee Protocol:** This instrument consisted largely of open ended items and a short section of close-ended questions that were extracted from the employees’ instrument. It was based partly on RDMU (2008), SWADE-KDDP draft evaluation report and general literature. The following issues were covered:

   i. Information on demographic characteristics of respondents;

   ii. State of resource availability (human resources; water; finance; markets; and knowledge and information)
iii. Organisation structure.

3 Chairperson's Interview Protocol: This instrument consisted of both open-ended and close-ended items. It addressed the following issues in the different sections:

i. **Section A** related to the history or beginnings of the organisations their challenges, opportunities and problems.

ii. **Section B and C** sought information on governance and strategic planning aspects of the organisation and issues of organisation resources including water, finance and human resources;

iii. **Section D:** Assessed chairpersons regarding their views about the entrepreneurial environment. Items for this assessment were framed based on Tang (2008).

3.3.2. Procedures
The study employed four University of Swaziland students from the Department of Agricultural Education and Extension. The choice of the students was deliberate. The students had just completed their Bachelor of Science degrees. Prior to this study they had undergone a formal course in educational research processes and conducted supervised studies for research projects required as part of their programme. They were knowledgeable about processes of social surveys.

It was nevertheless essential to apprise then on this study. Hence the researcher discussed the study with the four research assistants covering, among other things, the instruments to be used. As part of their orientation, they undertook the pilot survey to ascertain reliability. This exercise assisted in familiarising the research assistants with the study instrument. The study took 36 days to complete. However, because of problems with recording devices, a new SANYO recorder MP3 recording device was purchased and used in conducting a second the interview with chairpersons. This took
nine days – it took longer because roads became impassable on designated days for these interviews.

On completion of interview with Chairs that lasted up to one and one and half hours, a Siswati teacher transcribed the data from SiSwati into English. The transcription were made ad verbatim.

The researcher was involved in collecting information from other sources: artefacts and documentation and making field observations. The researcher reviewed the research processes every morning with the research assistants to solve any issues and to receive an overview of the process.

Researcher received all instruments from the field every day to check for accuracy, legibility and completeness before coding. Instruments with shortcomings were returned to the interviewer to sort out the problems. Instruments were then cleared.

The commencement of data collection was delayed. The process could not start until clearance had been obtained from the Director of SWADE-KDDP. Even after this clearance, work did not commence because the SWADE agricultural manager had to make arrangements with the selected organisations to clear the study to proceed. It was only then that data collection commenced. Unfortunately, agreed upon dates and days were on several occasions changed; in two cases the work could not proceed because the farm supervisors had not received instructions from the chairpersons or else because the management had not been involved as the chairpersons were absent or committee meetings had been postponed.

3.4 Data Analysis
Some of the data collected in this study were analysed and interpreted inductively. The purpose for the case-wise qualitative data analyses was to draw out findings through analysis, interpretation and presentations. The challenge was to make sense of the
unstructured data, identify significant patterns, and present the findings in user friendly forms (Patton, 2002). In this study, the qualitative data sets were analysed following guidelines from Yin (2009) and Miles and Huberman (1994). The research question-answer approach was adopted to structure this section.

Qualitative data analysis: The analyses of the data involved conducting within case analyses to understand the dataset for each case and cross-case analyses to identify patterns, similarities and differences among cases. The within-case analyses involved the following activities:

a). During the initial stage of the analysis, data pertaining to each case were brought together into one basket for evaluation. These data included recordings of chairperson, their English transcription and committee member interviews responses as well as translated strategic plans, documentation, paper clippings observations reports, photographs, and physical artefacts including infrastructure and plant and equipment and mimeos prepared by research assistants were also assessed for their value.

b). During the second step of the analyses, the research reviewed the data to understand the contents and to draw out some broad summaries. This was done for each case basket. The summaries were recorded into separate case files using Microsoft word.

c). Following the review of research materials and using the general summaries compiled in MSWord files above, the researcher studied each set of data to commence data reduction for each case, distil meanings out of the summaries and compile meaning units. These meaning units were more precise than the summaries.

d). The meaning units were them organised and posted against the major study domains which were history, governance, strategic management, resources and human resources and challenges for each case. Meaningful units were saved as Microsoft Excel format for each case.
e). During the fifth stage, the researcher prepared data displays for further evaluation. The data were condensed and reduced to produce more precise categories that could be posted to selected/identified domains.

f). The consolidated individual case datasets were then amalgamated into one large matrix composed of the five cases. The data were further analysed and condensed into codes.

g). The expanded matrix was used to conduct cross case analyses to identify patterns and categories in the cases. This aspect of analysis was based on the research questions guiding the study. The aim was to respond to the questions studied. This required that the researcher focused on similarities and differences between cases and factors responsible for the observations.

h). As the process of data categorisation was concluded, they were compiled into summary data matrices which were scrutinised to get better understanding and hence to facilitate interpretation of the underlying meanings and patterns that best represent the case.

i). The matrices addressing particular categories across organisations were also done to the combined data to discriminate and identify similarities and differences as well as relationships.

j). This final step involved finalisation of the exercise to produce finished a research report.

Qualitative data: Quantitative data obtained from employees using an interview schedule (Appendix I) was coded and then analysed using SPSS for Windows version 17 to derive different aspects of organisations using descriptive statistics (Morgan, Leech, Gloeckner and Berret, 2004). In addition, the data for specialisation centralisation and formal domains were transformed to produce mean of means, which the researcher considered to approximate interval level of measurement. The sets of data (size and organisation dimensions mean of means) were analysed to determine significances (p < .05) using one-way analysis of variance.
3.5 Research Quality

Credibility was seen as critical issue for acceptance by an audience and more importantly, for generalisation. Hence it had to be achieved at all costs. In this study, research quality required a set of tests. According to Yin these tests are construct validity; internal validity; external validity; and reliability (Yin, 2009).

i). Internal validity: This test refers to tests seeking to establish causal relationships. This study did not purport to do that. The test was therefore not relevant in this study.

ii). Construct validity: This test refers to attempts made in ensuring the correct operationalisation of concepts. This was achieved through triangulation wherein different sources of evidence were used. The sources adopted were interviews of different organisation members, documentation, artefacts, and various other sources of secondary data as well as observations by the research team members. Multiple sources of data are valuable and key to ensuring and facilitating a chain of evidence in response to research questions (Yin, 2009). In addition to the two measures, respondent validation was sought with the chairpersons and selected members of SWADE having to review the final report to ascertain concurrence with the findings. This was expected to increase credibility in the study.

iii). External validity: This refers to the generalisability of findings. In this study external validity was ascertained by following as far as possible replication logic in the selection of study cases. According to Yin case studies rely on analytical generalisations and not statistical generalisation and hence the need for replication logic.
iv). **Reliability**: This refers to confirmation that operations adopted in the study can be replicated. This was achieved by pilot-testing the instruments using research assistants and assessing the reliability of the employee instrument using Cronbach Alpha. The overall Cronbach Alpha coefficient of 0.92 was achieved. The instrument was thus cleared for administration on the basis of validity strategies and reliability.

The instruments used in the study were reviewed by the student’s project supervisor at Witwatersrand University and validated. Others validating the instruments were (i) the agricultural manager at SWADE-KDDP; (ii) Project Director at SWADE-KDDP; (iii) an agricultural economist at Faculty of Agriculture and sociologist Faculty of Social Sciences, University of Swaziland components; and (iv) two sugar cane agronomists, one working directly with the smallholder cane growers. These experts provided the required insights and guidance into the validity of the instruments for measuring constructs. Their suggestions were duly incorporated.

### 3.6 Scope of study

This study addressed operations conducted by smallholder farmer organisations in the Komati Downstream Development Project (KDDP) area. The first smallholder went into operation (planting first crop in 2002/03). The study discussed variations in performance over time for organisations that were five years in operation as at the end of 2008/2009. A minimum of five harvests were required for the study. In addition, only farms that are large (> 100ha) were selected; smaller organisations were excluded.

### 3.7 Limitations

There are only 19 organisations out of 30 that are in operation by this time. A major limitation is that the sample size is small (n=4 or 5). The study imposed restrictions on sampling. This further compromised the number of organisations to select from. In
addition, the size of the labour force varied from <15 to more than 30 permanent workers. This also affected the ultimate number organisations as a minimum 25 employees were required for the study. The study was constrained by number of employees in the organisation and by the size of farming acreage. These no doubt probably compromised the credibility of the study.
CHAPTER IV
FINDINGS AND ANALYSES

4.1. Introduction.

Data were collected from five organisations located in the Komati Downstream Development Project (KDDP). The respondents in the study were chairpersons of organisations, samples of committee members from each organisation and employees of the selected organisations. The data were collected using three instruments (Appendix I-III). The analyses of the data were based on the following objectives:

Objectives

1. Assess and discuss smallholder cane growers’ organisations.
2. Assess the contribution of organisation structure and size dimensions to performance.
3. Examine the resource environment status in the KDDP.

The report on findings commences with a description of organisational features based largely on interviews conducted with the primary source, chairpersons; these data were supplemented by additional data collected from members of the executive committee. The analyses were based on themes used in the interview guides: history, governance, strategic management, resources and human resource base. These interviews were supplemented by secondary data.

4.2 Description of Selected Organisation

The report on findings commences with a description of organisations characteristics. This is based largely on discussions with the chairpersons and committee members. This section presents brief discussions of the individual cases following as far as
possible the domains in the instruments; it attempts to respond to research questions. *What are the major features of the selected smallholder farmers’ organisations?*

### 4.2.1 Characteristics of organisations

This section presents data characterising organisations. The findings are presented in Table 2 and Figures 3 & 4. The following can be observed.

Most of the organisations commenced cane production in 2003/04 with Ingcayizivele as the exception. Total area under production differs. It varies between 120 and 340 hectares with Vuka Shidwashini and Bambanani Mangweni holding the largest acreage and Ingcayizivele the lowest. Per capita member cane-land ownership, shows that the most reasonable and perhaps best ratio is presented by Bambanani (2.8 ha) and Ingcayizivele the lowest (0.58 ha).

Another feature is productivity of both cane and sucrose. Table 2 reveals that Nhlanguyavuka exceeded the benchmark yield of 100 TCH with a commendable yield of 115 TCH. Bambanani and Vukani performed poorly. Sucrose yields were highest at Mangweni Tingonini (15%) with other organisations achieving yields of between 14 and 14.9%. Over the last five –seven years the following production patterns were evident (Figures 4 & 5). As expected the highest producers (in terms of volumes) have been Vukani and Bambanani on account of their acreages. Mangweni and Nhlanguyavuka presented the next best set of producers. Essentially the greatest volumes of sucrose follow similar patterns and so should the income earned from production. Unfortunately it has not been possible to obtain information on income and expenditure both predicted and actual.
<table>
<thead>
<tr>
<th>Organisations</th>
<th>Bambanani Maliba</th>
<th>Ingcayizivele Tingonini</th>
<th>Mangweni</th>
<th>Nhlanguyavuka</th>
<th>Vuka Shidwashini</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farm size (ha)</td>
<td>300</td>
<td>120</td>
<td>184</td>
<td>144</td>
<td>334</td>
</tr>
<tr>
<td>Membership</td>
<td>107</td>
<td>206</td>
<td>103</td>
<td>76</td>
<td>170</td>
</tr>
<tr>
<td>Ratio (ha/person)</td>
<td>2.8</td>
<td>0.58</td>
<td>1.78</td>
<td>1.89</td>
<td>1.96</td>
</tr>
<tr>
<td>TCH</td>
<td>90.93</td>
<td>101.99</td>
<td>102.4</td>
<td>111.5</td>
<td>90.43</td>
</tr>
<tr>
<td>Sucrose levels (%)</td>
<td>14.89</td>
<td>14.2</td>
<td>15.0</td>
<td>14.86</td>
<td>14.72</td>
</tr>
<tr>
<td>Average Annual Tonnage-cane (tonnes)</td>
<td>21090</td>
<td>8140</td>
<td>17400</td>
<td>15230</td>
<td>30150</td>
</tr>
<tr>
<td>Average Annual Tonnage sucrose (tonnes)</td>
<td>3010</td>
<td>1170</td>
<td>2500</td>
<td>2190</td>
<td>4350</td>
</tr>
<tr>
<td>Types of irrigation</td>
<td>Centre pivot</td>
<td>Centre pivot</td>
<td>Sprinkler</td>
<td>Sprinkler</td>
<td>Sprinkler</td>
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<tr>
<td></td>
<td>Sprinkler</td>
<td>Sprinkler</td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>
Figure 5: Annual cane production data in tonnes

Figure 6: Total cane harvested per ha (TCH)
(Source: Swaziland Sugar Association)
4.2.2. Description of operations

This section presents analysed and distilled data obtained through interviews with chairpersons and committee members. They are summarised in Table 3. The major highlights are as follows.

4.2.2.1 Bambanani Maliba

*Purpose of forming organisation:* Undertake commercial farming; create employment within the community; and improve quality of life of membership. Membership is 107.

Governance is the responsibility of the executive committee. Issues for discussions are suggested by members, the committee, farm management team and by employees through their supervisors. At committee level issues are discussed and resolutions taken. Issues on which there is agreement are discussed at the organisation plenary meeting and adopted or rejected. The chairperson, however, may take independent decisions in the event of an urgent issue; but this is subsequently reported to the committee for approval.

Elections are held every three years and are supervised by SWADE. The major responsibilities of the committee are to monitor organisations operations; plan developments and prepare reports for general meetings. The organisation is registered as farmers association but recently it evolved into a company.

The focus of this organisation according to strategic plans is increased production and productivity, diversification into pig and poultry production to reduce fluctuation of the organisation revenues.

Farm management operations are handled by farm supervisor who had adequately been trained to handle the technical aspects of cane production. The incumbent was trained at the South African Sugar Research Institute (SASRI) in Natal. His responsibilities, among others, are farm operations conducted with the support of team leaders. He liaises between employees and committee. Organisation’s finances are handled by another officer who, again, may not be adequately trained for the job. Other
features are that employees specialise; they have a contract and are trained for each assignment they undertake. They do not take part in decision-making and are represented by Farm Supervisor. They are employed under GOS employment regulations and receive uniforms as well as rations. Their employment climate appears adequate and in accordance with the law.

Water is a key resource. Water is obtained from Maguga Dam. It is free. The organisation, however, has to pump the water over long distances to reservoirs. This has serious implications with large from heads and has proved costly according to the respondents. This organisation has advanced state of the art irrigation systems: the centre pivot system (3 systems are in use) and sprinkler irrigation systems. Finances were sourced from Swazi Bank which provided the initial capital for development and then seasonal loans for operations.

The EU market reforms have had negative effects on earnings. One committee member observed:

“Input costs have risen and continue to rise. Income does not compensate for increased production costs. Hence we are making losses” retorted one committee member adding “and we even delay purchasing our inputs or fail to pay for the required inputs” he concluded.

SWADE is the major source of all knowledge and information. It has and continues to conduct capacity-building activities in all technical and social areas including training in business and finance management; strategic planning and budgeting as well as governance. It assists in financial issues-SWADE is a signatory in financial transactions and thus ensuring transparency. Other important sources of information and knowledge are Swaziland Sugar Association (SSA) that is also involved in capacity building in sugar cane production, diseases and pest monitoring and management and generally ensuring good yields and quality. The Mhlume sugar mill processes the sugar cane.
“Yes we cooperate with other organisations” was a popular response from committee members. The type of networking was modest and involved sharing machinery, sharing information and assistance with inputs in case of shortages.

4.2.2.2 IngcaiZivele

For this organisation beginnings are associated with the community’s desire to form an organisation as a means of pooling resources to address their particularly that of plight crop failure. The objective for the formation of the organisation was to improve their quality of life in the community.

The organisation committee has responsibility for the administration of organisation and implementation of resolutions passed by the organisation. The committee consists of 7 members (2 females and 4 males and the chair). The committee holds office for a three-year period at the end of which elections supervised by SWADE are held out.

For one to become a member, one has to be a bona fide member of the community and have land to donate to pay for shares. There are currently 206 members in this organisation.

The organisation focus is increased crop production and better organisational management. The organisation expects to achieve this through better planning, management and execution of strategies. The committee’s responsibilities are to regularly monitor and supervise farm activities.

This organisation experiences serious land disputes. One case is pending with the law courts. This study revealed that during the first two seasons of its existence the situation deteriorated to such an extent that farm operations were frozen by a court order and during that time no one was allowed entry into the fields to irrigate, weed or apply fertilisers. All activities were frozen. The fight for land went up to the King’s office for intervention. Luckily enough the organisation was directed by the King’s office to farm the land as a block and to grow sugar cane. At the close of this first dispute,
considerable yield depression had occurred with the result that the TCH of about 50 was harvested in 2004/05. As this report is being written a similar land dispute has arisen and is in the law courts!

Progress in this organisation has been limited by endemic land disputes with demands for the return of “my land” being a common “slogan”. The organisation is still operating the original 120 ha. Fortunately, expansions are afoot to raise the acreage to 350; this has been possible through government intervention. According to an MOA report published in local daily, "About 233 hectares of land have been cultivated for sugar cane by the Ingcayizivele Farmers’ Association…….. this is with the assistance of European Union (EU) funding under the National Adaptation Strategy (NAS),” (Times of Swaziland, 29th July 2010).

The organisation’s operations are handled by a SASRI trained supervisor with responsibility to manage the farm including resources, finance, labour, plant and machinery, etc. He is also the link between employees and management. The finance officer is also not qualified but takes responsibility for all financial matters of the organisation.

Employees in the organisation specialise yearly. They have contracts and are trained for each assignment particularly when the practice is new or the worker is new. Employees do not take part in decision-making but are represented by the farm supervisor. The employment of organisation members presents problems as the chairperson reveals:

"Initially members were the target for employment. Unfortunately, this did not work out and the organisation dropped the idea. The major reason for the decision was that member employees did not want to be supervised; they wanted to work when they so wished and carry out a volume of work that they wished to do for the day. This same attitude is still held by the few members who are still in employment. Disciplining members is difficult. Hence the decision made was to
take advantage of non-members and use their experience/skills/qualifications” (Chairperson, Ingcayizivele).

Water is drawn from Komati River again using electrically driven pumps to deliver water to reservoirs. This organisation uses three pivot systems on the present 120 ha. Funding has not been smooth with Ingcayizivele. This has been another factor contributing to its instability. Financial instability is most probably related to their land disputes!

Since the EU market reforms, the committee observed decline in the price of their sugar and this had in turn affected their income. The net effect has been limited farm income and disruption of cashflow projections. The organisation is forced to borrow more to address production requirements. This has caused disruptions in loan repayments; purchases of inputs have also been affected especially with rising costs for the inputs.

Committee members associate their success to the capacity building provided by SWADE. This has afforded the organisation the opportunity to acquire knowledge and skills in a variety of areas including finance and business management, monitoring transactions, budgeting processes; and in several other subject matter areas. Swaziland Sugar Association and Mhlume Sugar Mill have also provided also assisted in monitoring fields for sugar content and monitoring pests and disease; Mhlume Sugar Mill have also assisted in maintaining the irrigation systems and providing seed cane and training in cane production.

Networking appears to take place but it is modest and confined to the exchange of resources with neighbouring organisations and collectively contracting aerial spraying operations.

4.2.2.3 Mangweni Tingonini

The purpose for the formation of the organisation was to develop the community and improve the standard of living.
The findings are that governance is the responsibility of the committee: its roles are to monitor progress; ensure smooth operations and comply with Swaziland Sugar Association and Swaziland Environment Authority rules and regulations. The committee is also responsible for monitoring financial transactions. It was established that to become a member, one must belong to the community and be able to attend to the other requirements such as releasing land for shares.

The organisation strategic plans focus on diversification into products that are in demand according to their market survey. The committee believes this would lead to better enterprise mix reducing dependence on sugar cane production especially with the fluctuating prices for sugar.

As with other organisation, farm management is the responsibility of the farm supervisor. The incumbent is well-trained in agriculture and has participated in the sugar cane courses conducted at SASRI. He has been running the farm for 4 yrs. The supervisor provides communicates to the committee and membership on all farm operations. In this organisation, the financial officer is qualified and well-experienced to manage finances. The committee works closely with farm supervisor and employees in farm operations. The committee monitors the use of inputs and provides inputs as and when required. Delays, however, are often experienced lasting up to two weeks.

Employees specialise; they have a contract. They are trained for each assignment. They do not take part in decision-making. Employment of members is problematic. The chairperson’s response on this issue was thus:

“Commonly we do not employ members because it is difficult to supervise them to carry out field operations. Members want to conduct operations at their own pace e.g. eat at any time during operations; carry out limited volumes of operations and leave when they so feel; laziness is a common problem due to attitude that they own the business and hence can do what they wish to do!”
Water is drawn from Komati River using electrical pumps to deliver the water to reservoirs. Mangweni Tingonini was financed by FINCOR. This capital loan had been fully been repaid in 2007. That moment can best be captured as follows:

“The size of the sugar cane project is 183 ha and is underpinned by an annual seasonal budget of R 1.5 million which mainly entails farm inputs. This effectively means that at the end of the harvest season, beginning year, the association will have an estimated R 2 million at its disposal to undertake projects of their own choice or else distribute among the 103 members…” (Times of Swaziland …..)

The use of seasonal loans has also ceased. Operational financial requirements are drawn from resources within organisations.

Since the EU market reforms, income had somewhat declined and this was affecting operations. The changes in income have affected developments. New plant and equipment cannot be purchased to replace ageing machinery, for example.

4.2.2.4 Nhlanguyavuka

The beginnings of the organisation are associated with three members of the community who expressed an interest in harvesting water from the Komati River for purposes of growing their vegetables for sale. This ingenious idea was a response to continual drought that frequently affected their crops. A Ministry of Agriculture agent informed the community that they were not allowed to draw water; they needed a permit. They were advised instead to constitute themselves into a legal entity, an organisation that would then apply for a permit on behalf of the community.

According to the chairperson of this organisation, the objectives are best described as follows:

“In the beginning we agreed to grow sugar cane and get an income with which we would improve our members; we also aimed at improving the community and others
within community but whose land was across the river and could not readily be farmed as part of the block. These fields were to be accepted for shares and used for diversification programmes away from sugar cane production.

The third objective was that with access to more money, we aimed at improving members homesteads by building houses for members; thereafter we aim to build a primary school. In general we wish to improve our community. Another objective has been to pay dividends. We started doing this in 2009 following the completion of loan repayments.”

This organisation was originally registered as farmers association. It has since become accompany. According to the chairperson:

‘Issues of governance are handled by the committee. The responsibilities of the committee are, among other things, to monitor progress; attend meetings organised by SWADE and other service providers” adding

“All of us have fields. People joined with their fields. The size of fields varied between one and four acres. Some farmers had four acres and others three or two or one acre. We agreed that for us to move fast, we forget about sizes of fields we commit to the organisation. We committed the fields so that we know how many we are. Then we would determine problems relating to number of fields later. A few challenged the rationale of ignoring number of fields committed. But through SWADE’s training in 1999, this problem was averted. SWADE convinced members of the greater benefits accruing through the association than any individual field would yield”.

The organisation strategic plan focuses on sustaining the organisation into the future and generating income for members on sustained basis. It also looks to improving the community in general and members’ quality of life in particular. Plans were also afoot to generate money outside sugar cane production. In particular plans were to buy sugar
cane harvesting machinery, which would be used on the farm and also hired out to other farmers. Currently harvesting equipment is hired from other organisations under very restrictive conditions.

The committee is heavily involved with farm management. The organisation did not hire a qualified farm manager. According to the Chairperson, “farm managers are very costly and the organisation cannot afford one now. We depend on the services of farm supervisor, who has been trained in South African Institute, SASRI. This in one of the reasons the committee is heavily involved in farm operations and financial management”.

Management is well-aware of the need to have inputs available on time all the time. It is the responsibility of the supervisor to ensure sufficient stocks. The incumbent farm supervisor has been handling farm operations since the farming operations commenced.

Employees specialise: Irrigation and weeding operations have separate teams to avoid problems and to empower the employees with necessary skills and hence confidence in their work. All employees have contract and are trained by the supervisor. They do not participate in decision-making. In so far as the employment of members of the organisation to work on the farm, the chairperson had this to say:

“We do not employ members of our organisation because our members are elderly. However, there have been a few cases where the head of household is a young person; if he/she seeks employment he/she will be given work but under the organisation regulations.

The second reason is that it is easy to manage foreign employees than members of organisation. The later cannot be disciplined and in general will do as he/she wishes. This has been discouraged-those wishing to be employed have to follow instructions.
The bottom-line is outsiders are preferred for employment. This helps to create employment for community. This resolution benefits the communities first and then those beyond the community after”.

4.2.2.5  Vuka Shidwashini

Vukani is the last organisation reviewed here. It was noted that the need to form this organisation was probably fuelled by the success of a neighbouring pilot project, Nyakatfo Irrigation Scheme within KDDP. The organisation came into being aiming to:

i) Improve the standard of living in the community;
ii) Develop community infrastructure (schools, bridges);
iii) Create employment in community;
iv) Establish sugar cane production farm.

Vuka committee is responsible for planning and monitoring programmes to ensure timeliness and compliance with sugar industry production procedures and practices. It attends to tender issues and identifies suitable contractors. It is also responsible for disciplinary issues among members and employees.

To become a member of Vuka Shidwashini one has to be a bona fide resident; one has to have fields for cropping and be prepared to commit some of those fields to the organisation. Vuka Shidwashini strategic plan focuses on the establishment of the farm by completing the remaining construction activities. The organisation aims to ensure that farm production remains viable, productive and sustainable to enable the organisation to repay its loans. Figure 7 reflects some of works that were being implemented at the time of this study.
The committee of Vuka Shidwashini has responsibility for monitoring all transactions (technical and financial). Hence the committee participates in all farm operations. Despite this, input supplies have often been disrupted; inputs arrive late and according to management the suppliers are to blame. This has had serious repercussions on crop management. Figure 8 reflects a dirty field with well-established weed (water grass) that is difficult to eradicate compared to well-managed weed-free crop at the same age in Figure 9.

Operations commenced in 2000 with the normal farm development activities commencing with the irrigation infrastructure being completed in 2001. Finances were sourced from FICORP. On this farm, nobody specialises except night guards. No one has a contract except the supervisor and finance officer. Training, however, is given to all employees as and when required. Employees do not participate in decision-making.
Water is a critical resource. It is sourced from Komati River and as with other organisations, pumping costs are high. Vuka Shidwashini depends on seasonal finance from FINCOR. The organisation, however, was experiencing financial hardships to the extent it fails to access seasonal loans. We could not establish the reasons for the hardships. The concern is illustrated by the following account:

“Seasonal loans carry high interest rates and have to be paid at the end of the harvest season even when no profits have been made” adding that “the seasonal loan received by the organisation was limited and the bank has refused to advance more”.

Figure 8 Sugar cane crop infested with water grass at Vuka
Clearly this organisation was experiencing financial constraints but we could not establish why! This year, it was reported the organisation had made a loss of “R 0.8 million. The crop itself was not particularly well-cared for; it was heavily infested with water grass (compare Figure 8 and Figure 9 at same growth stage).

The changes in the EU market structure have affected the Vuka Shidwashini budgets according to committee members. This had led to the organisation failing to pay its wages let alone purchasing inputs in time for vital for a good crop. Income from sugar cane production had declined and this was attributed to the declining price of sugar.
Table 3 Cross-case qualitative data analyses display of codes for different domains/themes

<table>
<thead>
<tr>
<th>F-ORG</th>
<th>Purpose</th>
<th>Governance</th>
<th>Strategic plan focus</th>
<th>Farm management operation</th>
<th>Resources</th>
<th>Knowledge and information and interactions</th>
<th>Challenges</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bambanani</strong></td>
<td>Undertake commercial farming;</td>
<td>Membership: <em>Donating land for shares</em>; Employment creation; Improved quality of life</td>
<td>Increased production and productivity; Diversify production base</td>
<td>Manager trained at SASRI; Responsible for field operations; Reports to committee &amp; employees. Employees specialise; contracted; trained.</td>
<td>Water from Maguga dam; Financed by Swazi Bank; No loan burden; EU negative impact on</td>
<td>SWADE major source; SSA; Mhlume Sugar Mill.</td>
<td>Committee has Limited decision-making capacity; Lack of focus on goals; Committee members in employment--merely pay lip service to organisation</td>
</tr>
<tr>
<td><strong>Ingcayizivele</strong></td>
<td>Improved quality of life</td>
<td>Committee administers organisation; Implements</td>
<td>Increase crop production; Better manage organisation</td>
<td>Supervisor manages farm SASRI trained; Responsible for</td>
<td>Water from Maguga Dam; Finance problematic / Networks</td>
<td>SWADE main source of knowledge and skills in Networks</td>
<td>Land disputes; Funding; Lack of trust in</td>
</tr>
<tr>
<td>resolution; all farm operations; permeates all activities; confined to exchange of materials; committee;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elected every 3 yrs</td>
<td>Employees specialise; contracted; trained.</td>
<td>Inputs accessible irregular</td>
<td>Labour disputes; High cost of electricity &amp; Haulage</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Farm-Organisation</td>
<td>Purpose</td>
<td>Governance</td>
<td>Strategic plan focus</td>
<td>Farm management operations</td>
<td>Resources</td>
<td>Knowledge and information and interactions</td>
<td>Challenges</td>
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<tr>
<td>Mangweni Tingonini</td>
<td>Develop community; Improve standard of living</td>
<td>Governance responsibility of committee; Committee; Monitor farm operations &amp; financials</td>
<td>Focus is diversify</td>
<td>SASRI-trained; supervisor Employees specialise; contracted; trained. Members not commonly employed</td>
<td>Financed by FINCOR; Loan repayment complete;</td>
<td>SWADE main service provider; Interaction exists but associated with service providers.</td>
<td>Labour disputes; Disagreements within committee</td>
</tr>
<tr>
<td>Nhlanguyavu ka</td>
<td>Income generation; Quality of life improve; Increase productivity; Improve community.</td>
<td>Governance issue for committee; Membership based land and community membership;</td>
<td>Sustaining organisation; Improve community; Improve member quality of life; Purchase harvest equipment</td>
<td>Uses SASRI trained supervisor; Committee supervises all operations; Employees specialise; contracted; trained.</td>
<td>Financed by Swazi Bank; Loan repayment complete;</td>
<td>SWADE again main service provider; SSA assists in disease and pest management;</td>
<td></td>
</tr>
<tr>
<td>Vukani</td>
<td>Quality of life Improve; Improve Infrastructure;</td>
<td>Committee plans &amp; monitors operations; Ensure</td>
<td>Complete operations; Stabilise production;</td>
<td>SASRI trained farm supervisors manage; Finance</td>
<td>Maguga dam water source Finance from FINCOR;</td>
<td>SWADE is most important service provider; Trains members</td>
<td>Organisation making losses; Organisation experiencing</td>
</tr>
<tr>
<td>Improve services compliance; Membership based on community residency and land</td>
<td>Improve services to community Employees not specialised; no contract; trained on operations.</td>
<td>Access to finance difficult; Losses of R0.9 m Impact on inputs; of organisation; Supervises financial transactions.</td>
<td>Financial hardships.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
According one committee member:

“This has affected our operations. We experience difficulties in procuring inputs such as diesel, chemicals; we also fail to honour our financial obligations; our yields have declined as inputs are not applied or applied late”

SWADE is an important service provider and has trained the organisation in financial management and other areas of interest such as sources and types of inputs to purchase; farm management staff training; financial subject matter such as accounts, strategic planning, business management and leadership.

Committee members also reported on on-going collaboration with other organisations covering issues such as exchange of equipment and machinery; information exchange; and exchange of labour during harvesting. Mhlume Sugar Mill assisted in monitoring pests and disease up.

**Summary:** The sections above described organisations based discussions held with chairperson and committee members and from secondary data which included reports, paper clippings, documentation and artefacts and research team observations. These are depicted in Tables 2 and 3. Based on the discussions above the major characteristics of organisations under study may be summarised as follows:

1. All organisations came into being at about the same time-at the beginning of the new millennium.
2. The total cropped area in the current season (2009/2010) varied between 120 ha for the smallest organisation and 334 ha for the biggest.
3. Membership also varied between 76 and 206 members. This gave ratios of between 0.5ha/ member rising to 2.8 ha/member.
4. Productivity and, therefore, intensity of management varied greatly particularly for cane production. The highest cane yields were achieved at Nhlanguyavuka farm with a TCH of 115; it was lowest at Vuka Shidwashini farm with a TCH of 90.
5. Sucrose yields are not so well-correlated with sugar cane yields. The best sucrose yields were achieved at Mangweni Tingonini (15%) while relatively lower sucrose content was recorded by Ingcayizivele (14.2%).

6. Production was related to size. Vuka Shidwashini achieved the highest volume of cane averaged over seven years at 30,150 tonnes; Bambanani Maliba followed with 21,090 tonnes; and thereafter Mangweni Tingonini, Nhlanguyavuka and Ingcayizivele with production of 17,400; 13,230 and 8,135 tonnes year, respectively. This has been consistent over the years (Figure 5).

7. Sucrose production followed a similar pattern with Vuka Shidwashini and Bambanani Maliba returning highest average volumes of 4360 and 3070 tonnes sucrose, respectively. The rest of the organisation recorded the following: Mangweni Tingonini (2500); Nhlanguyavuka (2200) and Ingcayizivele (1170) (Figure 6).

8. Bambanani and Ingcayizivele employed advanced irrigation technology; they were using at least three centre pivots each and these were supplemented by the conventional sprinkler systems. The other organisations were dependent on sprinkler irrigation systems only (Figure 10).
4.2.3 Similarities and Differences within and Among Organisations
This section responds to the research question seeking to ascertain similarities and
differences among organisations i.e. what similarities and differences are discernible
between organisations.

4.2.3.1 Similarities in organisation characteristics
The five organisations are located in the NE quadrant of Swaziland. The Project
Development Area is characterised by hot and dry environments with debilitating high
temperature in excess of $30^0C$ during the summer. Rainfall is low and unpredictable. It
hardly exceeds 600 mm in most of the years. Drought frequency is estimated at 60 –
80% of the years (Murdoch, 1970). It is therefore not surprising that organisations identified the following as drivers for their initiation.

1. Achievement of food security;
2. Employment creation;
3. Improvement in community standard of living;
4. Improvement in quality of life for members;
5. Poverty alleviation.

The study identified the following similarities among organisations

**Governance:** All organisations were formed under the tutelage of SWADE, which was and continues to be, responsible for shaping governance, business management, finance management, and a whole series of other forms of capacity building activities. It is, therefore, not unexpected that all organisations have similar governance structures with membership forming the apex of governance followed by the executive committee, supervisor, team leaders/tindvuna and then employees. Elections are held every three years again under the supervision of SWADE.

The governance framework employed in each organisation is similar. The responsibilities of the committee are clear and appear to be in line with governance principles of providing strategic direction, ensuring that objectives are achieved, verifying effective and efficient use of resources. Committee members are heavily involved in the daily operations of their farming operations, which according to one chairperson is deliberate in that they take the place or functions of the farm manager.

**Strategic planning:** Strategic planning is carried out. Organisation goals are well-articulated. Visions are clear as indeed are the missions. These statements of intent tended to be quite similar in that they all focus on improved quality of life. Analyses of SWOT reveal divergences. A major weakness of the strategic plans is that none came out with a definite distinctive competency. There was nothing distinct and unique to any one organisation. All organisations reported wanting to do something about a petrol
station; workshop. The obvious implication for this is that organisations failed to understand their strengths and subsequently could not translate these into beneficial or productive outputs. There is no evidence for any intention to capitalise on those strengths.

**Farm management:** This is handled uniformly with all farm supervisors being trained at SASRI. Qualified farm managers are not hired at all organisations and may be unnecessary given the readily accessible support from SWADE, SSA and Mhlume Sugar Mill. With the exception of one organisation, the labour force is contracted and trained for every new operation. Employees are not afforded decision-making opportunities. Employees are accorded official conditions of service as per GOS regulations including protective gear.

All organisations depend on water for irrigation from Maguga Dam. Water is free but has to be pumped from the Komati. Financial resources are obtained from different financial institutions within Swaziland. Problems of access are evident. Some organisations find it difficult for one reason or other to access financial resources.

**Sources of knowledge and Information:** SWADE is responsible for all capacity building. It is also responsible for, among other things, monitoring financial transactions of organisations. Others service providers are SSA and the Mhlume Sugar Mill.

### 4.2.3.2 Differences of organisation characteristics

The analysis of the findings from discussions and the review of strategic plans revealed the following differences among the organisations:

1. **Lack of cooperation between membership and committee:** It was evident that membership did not have much trust in their committees. Some committee members informed researchers that some in the committee were probably using their money to achieve their ends. Another hinted that members had secretly
gone to the organisation bank to seek information on transactions. Some said some committee members did not know much about sugar cane production and did not care. Their interest was to use the organisation for their benefit. Levels of distrust differed between organisations.

2. Knowledge and skills: Members’ level of knowledge and understanding of organisation operations were limited. This probably means that organisations have not been adequately empowered in matters pertaining to issues of organisation governance, leadership, etc. The attitude of employed members reflects this for as owners they wish to as they want; they do not know how much damage this can do to operations and hence success of their organisation. The extent to which members behaved while in employment differed among organisations.

3. Lack of respect among members: Unity within members in some organisations was lacking. Meetings were poorly attended; there was lack of transparency at work; jealousy among members was evident; there was lack of care for farm assets; failure to follow budgets agreed upon by membership was reported; professionalism in technical issues was probably mediocre. This is despite organisations were handling huge financial operations.

The above observations are not unique to any one organisation. Nor do they apply to all organisations. What it means is that capacity building needs to continue. Infighting is omnipresent. Members have to be educated so that organisations are seen as entities, money-generating projects and not as properties belonging to any one individual.

Other differences included the following:

1. Land disputes: quarrels about land are omnipresent. This makes farming difficult. It increases doubts about stability in organisations particularly to financiers. This does not augur well for financial search efforts. A case in mind is Ingcayizivele.
2. **Financial management and access.** For while some organisations have completed paying-off their loans, there are others that are failing to service loans and crying out to government to assist. One wonders why financial mismanagement should not be suspected. If one were to consider the tonnage of cane delivered, the organisations should not be in such precarious position as to seek bail-outs from the government. A case in mind is Vukani Shidwashini. This organisation came into being at the beginning of the KDDP developments and, for all intents and purposes should be in the same (or superior) category with Mangweni Tingonini, Nhlanguyavuka and Bambanani. And yet it is struggling and failing to access funding for seasonal operations.

3. **Property:** There were differences in the extent to which organisations owned different plant and machinery. Some organisations had a full complement of sugar cane farming equipment while others relied on borrowing or hiring. Unfortunately, the management of plant and equipment was not proper. Cases of mismanagement of these very expensive utilities were worrying.

4. **Uncertainty among members:** Membership in some organisations is still transient. Some members do not regard organisations as entities, firms established to generate money for them. This is not surprising. Households made investments using their land to pay for shares that would generate money at some future date. In some organisations, households have become agitated because their organisations have failed to honour promises to the members in terms of dividends. This is against the backdrop of members in some organisations receiving dividends.

According to Scott (1992) organisations arise out of the need to address an issue that no individual or two can undertake. They follow the maxim that people come together to form organisations to achieve particular objectives that individuals would otherwise fail to do. Organisations provide context and mechanisms through which goals can be
achieved. The smallholder cane production projects are capital intensive requiring millions of Rands to establish and operate. Individually, the rural household could not have even imagined being involved in such ventures. But by grouping themselves, communities have formed organisations making it possible for them to achieve their needs such as improved quality of life and poverty reduction. This reflects clear evidence of how organisations originate and what they can do. Their influences may not be so much at the individual level. However, at the general membership level organisations embody and exemplify purposeful actions, where actors use resources and account for their use following particular instruments (Scott, 1992).

Governance, though not a subject of study, has also been exemplified as a set of responsibilities and practices that the committee has to undertake to provide strategic direction and ensure that goals are achieved. In the KDDP, the committees concern themselves with, among other things, ensuring that the organisations are achieving their goals effectively by managing and controlling operations. Hence organisation committees are in place and monitor operations and supervise both the agricultural and financial transactions.

Organisations have strategic management plans, which are sets of strategic decisions and actions that are used to formulate and implement strategies that lead to competitively or superior fit between organisation and environment. We noted that organisations with the support of SWADE and other stakeholders have three-yearly strategic plans that guide their operations.

Though organisation sizes differ in terms of area, number of employees, or organisation membership, and are comparatively small and young, they nevertheless provide evidence of centralised management with the committee at the helm and the labour force at the bottom rung and without decision making powers. These organisations are also formalised because of the nature of their enterprise; and division of labour is also evident though overlaps are common.
Finally, in all organisations, the element of social responsibility is omnipresent. Strategic plans aim to improve communities through construction of schools, improving roads that permeate their communities; ensuring supply of clean drinking water; and ensuring that electricity is at the door steps of households. In fact many of these services are already being implemented in some communities such as Nhlanguyavuka and Mangweni Tingonini.

From the findings it may be concluded organisations are structured; they are well-placed to achieve their goals of economic empowerment and thence improved quality of life, and food security.

4.2.4 Factors Associated with Differences between organisations
This section responds to the research question: What factors contribute to organisational differences?

The findings from the chairpersons and their committees and secondary sources revealed possible factors that contribute to differences in the performance of organisations.

1 Land disputes: Land disputes are a common phenomenon in communities where land is communally held. Land is a scarce commodity that in many communities has been inherited from one generation to the next. Parting with it is often painful and sacrifices the descendants’ social inheritance.

During the formation of organisations, land was used as the means for membership. Organisations promised future gains and better quality of life. Several years later these opportunities are not forthcoming and the inevitable result is that some members see better opportunities elsewhere for their land. Ingcayizivele is one such
case where the organisation has experienced bouts of land disputes which are still raging till today. One obvious impact is that financing becomes difficult and financiers will not willingly invest in such unstable situations. These situations present opportunities for crop destruction before it is ripe. The case of setting fire on unripe sugar cane has happened before.

Land disputes are undesirable factor that has destabilized several organisations some of which cannot start operating because of disputes.

2 **Financial management**: Financial transactions are another factor that may contribute to the dismal performance of some organisations. Some of the organisations commenced right at the beginning of the developments in the Project development Area. Some of these have already paid up their loans. Others are still struggling to pay. Vukani should not be a position it finds itself. It is the largest of the five organisations being studied. It has been consistently delivering large volumes of cane and one would expect that it has been remunerated adequately. But the organisation fails to purchase the critical inputs for production. It fails to service its loans getting itself into a situation that banks refuse operational loans that are recovery at the end of the season.

3 **Leadership**: Though not adequately discussed in this study, it cannot altogether be overlooked. Leadership in some of the organisations may be wanting. Organisations handle millions of Rands yearly; they are destined to handle much more once they complete their loans. For their sustainable growth, leadership becomes very critical partly to identify new venues for investments or to just maximize profits through increased productivity. Some organisations are being led by members with no vision.

4 **Management**: Accessibility to professional management can contribute to increased productivity and ultimately income. Nkambule (2009) reported that
professional management can contribute to business strategic direction and control and ultimately ensure better returns to investment. Most smallholder growers including those studied find it difficult to hire professional managers citing lack of sufficient funds or that professional managers are expensive and they cannot afford them. They turn to the next best available managers, which act, according to Nkambule, compromises volume and quality of their output. No effort is made to assess different scenarios and what the effects would be.

Irrigation management: All sugar cane production is carried out under irrigated farming conditions. Some of the organisations employ centre pivots while others rely on sprinkler irrigation. What happens and quite frequently too is the breakdown of irrigation systems. An irrigation systems report for one of the smallholder cane growers revealed that the organisations faced serious constraints in their irrigation management: there were frequent faults in the main river pumps; many equipment was either too old or mismatched; theft and or vandalism of various component was rife; no irrigation scheduling was followed and specific water holding capacities were never considered in designing (RDMU, 2009).

According to Nkambule at the time of budgeting, organisations make allocations for maintenance and repairs organisations or for servicing irrigation line items. This line item is, unfortunately prone to abuse, reduction or elimination during budgeting so that when the need to carry out repairs or even merely service the machinery there is no money. This makes the issue of irrigation management to achieve better efficiencies is of great concern. What commonly happens is that operators over-irrigate or under-irrigate and this compromises production. These operators most likely cannot read and write and do not understand the concept of irrigation scheduling.
4.3 Assessments of Organisation Structure

A second objective of the study was to describe the organisational structure and discuss possible organisation management types. In particular it addressed the following research questions:

i). What type of organisation management system do organisations depict?

ii). What are the relationship between size dimensions, organisation structure and organisation performance?

The data for this objectives were obtained from interviews conducted with random samples of employees in the study organisations using an interview schedule previously pilot tested in Big bend for reliability evaluation. The findings are presented as descriptive statistics and one-way analysis of variance in an attempt to assess significances among organisations. The analyses excluded Ingcayizivele owing to limited number of employees. The findings are case-based and shown in Tables 4 reflecting demographic characteristics and Table 5 organisational dimensions.

4.3.1 Bambanani Maliba

Respondents were mostly women (75%), aged between 19 and 45 years (60%) with half of the respondents lacking an education (50%) or attaining mostly primary education (36%). In addition the findings revealed that 36% of the respondents were members of the organisation.

According to employees specialisation was practiced. The majority of the respondents indicated that their tasks were specialised and were mostly carried out by the same teams most of the time. These responses recorded a mean of 1.7 (± 0.43), which is below the decision mean of 3.5 suggesting that that individuals carried out tasks in teams and more frequently supervised by same team leaders. This typifies specialisation.
Responses relating to decision-making revealed that the organisation exhibited some form of centralisation. Responses reflected that there was limited decentralisation of power between the lowest echelon (employee) and the highest (chairperson). These responses averaged 3.3 (±0.72) suggesting that the locus of decision-making was placed somewhere between the farm supervisor and committee level. The two units are directly responsible for managing farm operations. On the issue of employee participation in decision-making, respondents indicated that their role was limited; they were hardly involved even on issues that directly affected them. The responses averaged 1.16 (±0.67), which again suggested centralisation of decision-making in organisation.

The assessment of the use of rules and regulation in administering the organisation, again revealed that the organisation used procedures and standards which employees were expected to follow and this is reflected in their low response value of 1.15 (± 0.17). This implied that formalisation was strong in the organisation.

### 4.3.2 Mangweni Tingonini

Employees in Mangweni Tingonini were mostly males (64%). They were drawn from the age groups of 19-30 years (36%) and 31-45 years (24%). Thus collectively about 60% of the respondents were young-middle aged. Their educational levels varied somewhat. The majority of the employees were either non schooled (32%) or had only attained primary education status (36%). There were also proportions of employees with secondary, high and tertiary schooling.

Of the employees studied, 32% were also members of the organisation and the rest bon members. From the perspectives of organisation structure, employees reported that specialisation was an entrenched practice. The organisation rated 2.36 (± 0.57) suggesting yet again that task teams were deployed on specific assignments regularly. The locus of decision-making recorded a value of 2.99 (±0.65) reflecting that decision-making was again confined to management levels and above. The findings reflect that
decision-making was occurring below the level of the chairperson but certainly above the workers. In addition, employee participation in the process of decision-making was also minimal with findings revealing mean response of 1.8 (± 1.2). Formalisation was reported with findings showing that formal use of rules, regulations and procedures were enforced. The responses recorded a mean of 1.24 (±0.11)

Finally findings on the extent to which employees were satisfied with their employment, revealed that 84% were satisfied. However, in the event of better opportunities in the community, 44% of the respondents indicated they would leave.

### 4.3.3 Nhlanguyavuka

This organisation afforded the study 25 employees of whom some 70% were males and the small minority made of females. Schooling was minimal with the majority (88%) having at most primary level education. Information on age groups revealed that the most common age group was 19 – 30 years (56%) with some 20% being in the 31-45 year age group. Of the 25 employees studied, 60% were married. The rest were singles and/or widows. It was also determined that employees consisted of non-members of the organisation (76%) living a small proportion of member-employees in the force at 24%

The organisation structure was highly specialised. Task allocation was taking place. Respondents returned a mean response of 2.67 (±0.88). As with the other organisations specialisation was practiced routinely.

Decision-making in this organisation was largely practiced by the management and committee members. The following is the chairperson’s account:

“we do not have a qualified farm manager. The organisation cannot afford the salary for a well-qualified manager to run the farm. This assignment is given to the committee which works closely with farm supervisor to conduct the day-to-day operations”.

Nhlanguyavuka responses averaged 3.5 (±0.47), which placed decision-making responsibility with the farm supervisor and committee members. In the same breath,
respondents revealed that their participation in decision-making was minimal (1.35±0.48).

The existence of formal practice within the organisation was reported by employees and yielded a mean of 1.16 (±0.15). This suggested that the organisation depends of procedures, rules and regulations in their operations.

Employees of this organisation were happy with their employer (56%). Surprisingly on whether they would stay or go in the event of job openings, 84% revealed they would leave and join the new venture.

4.3.4 Vuka Shidwashini
Vuka Shidwashini assessments revealed that employees were dominated by females (60%); the labour force was young, 19-30 years, and contributed 46%; those older 31-45 contributed another 35%. The educational attainment was no different from other organisations with the bulk of employees (80%) not being educated beyond primary level schooling.

Vuka Shidwashini employees viewed their organisation as not so well-structured. Task allocation was conducted but was limited to farm security teams. Other farm operations were pooled and carried out by different units and as such no particular specialisation was evident. Responses averaging 2.5 (±0.9) were recorded.

Responses on the centralisation in terms of locus of decision-making revealed the organisation had soft centralised structure with response of 3.15 (±1.1). This response suggested that decision-making was not at the highest level of management (chairperson) but rather between supervisor and the committee. The issue of participation in decision making was again denied by respondents who returned a very low response of 1.36 (±0.74).
Table 4 Demographic characteristics of employees according to their organisations

<table>
<thead>
<tr>
<th>Organisation Name</th>
<th>Samples size</th>
<th>Sex (%)</th>
<th>Age group (%)</th>
<th>Education group (%)</th>
<th>Membership (%)</th>
<th>Happy with job (%)</th>
<th>Will depart (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bambanani Maliba</td>
<td>28</td>
<td>F (75%)</td>
<td>19-45</td>
<td>None (50)</td>
<td>35</td>
<td>79</td>
<td>54</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(60%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mangweni Tingonini</td>
<td>25</td>
<td>M (64)</td>
<td>19-30 (36)</td>
<td>None (32)</td>
<td>32</td>
<td>84</td>
<td>44</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nhlanguyavuka</td>
<td>25</td>
<td>M (68)</td>
<td>19-30 (56)</td>
<td>None (44)</td>
<td>24</td>
<td>56</td>
<td>84</td>
</tr>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Vuka Shidwashini</td>
<td>26</td>
<td>F (60)</td>
<td>19-45 (80)</td>
<td>None (35)</td>
<td>35</td>
<td>100</td>
<td>62</td>
</tr>
<tr>
<td></td>
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<td></td>
</tr>
</tbody>
</table>
## Table 5 Organisation structural characteristics

<table>
<thead>
<tr>
<th>Organisation Name</th>
<th>Task division</th>
<th>Locus of authority</th>
<th>Participation in Decision-making</th>
<th>Formalisation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bambanani Maliba</td>
<td>1.76 ±0.43</td>
<td>3.14 ± 0.72</td>
<td>1.59 ±0.61</td>
<td>1.16 ±0.16</td>
</tr>
<tr>
<td>Mangweni Tingonini</td>
<td>2.36 ± 0.57</td>
<td>2.99 ± 0.65</td>
<td>1.80 ±1.16</td>
<td>1.24 ± 0.11</td>
</tr>
<tr>
<td>Nhlanguyavuka</td>
<td>2.67 ±0.88</td>
<td>3.50 ± 0.47</td>
<td>1.35±0.48</td>
<td>1.16±0.15</td>
</tr>
<tr>
<td>Vuka Shidwashini</td>
<td>2.47 ± 0.93</td>
<td>3.15 ± 1.09</td>
<td>1.36 ± 0.74</td>
<td>1.3 ±0.19</td>
</tr>
</tbody>
</table>
On the issue of formalisation, the response averaged 1.3 (±0.19) which shows that their organisation depended on rules and procedures in running the affairs of the organisation.

In this organisation, employee members accounted for 35% of the labour force with no employee being on the committee. All employees stated that they were satisfied with their preoccupation at Vuka. Ironically when asked if they would stay with Vuka in the event of better opportunities, over 60% were ready to abandon the organisation.

The data presented in this section pertain to organisational dimensions from the employee positions. From the data it is evident that the four groups of employees depicted the same demographic characteristics. They were largely from the same population group considering their age groups and educational backgrounds. In all organisations there was no single employee on organisation committee; employed members of the organisations formed about one-third of the labour force which was otherwise dominated by non-members. In their organisation, specialisation, centralisation and formalisation were in practice.

The sugar industry in Swaziland is very-well structured. Rules and regulations pertaining to field practices must be adhered to or else the crop is condemned and ploughed out or time-barred from processing in the event it is delivered outside the processing window. The responses pertaining to their organisation can be seen as realistic and reflecting the situation in the organisations. This is not surprising for according to Burns and Stalker (1961) organisations adapt their structures to match their contexts. Therefore if the environment is predictable, stable and homogenous and resource munificent, the structural form that emerges is the mechanistic, bureaucratic and largely centralised form. The mechanistic structural form involved tasks that are routine and unchanging. Essentially then, the organisation structuring employed in organisations is the mechanistic type.
4.4 Effects of Organisation Size on Organisational Dimensions

An exploratory analysis was undertaken to assess relationships between size dimensions (membership size; areal size and employee size) as independent variables with the “means of means” for employee responses on specialisation, formalisation and centralisation as dependent variables. The one-way analysis of variance assessed significances of the three size dimensions on organisation context variables. The analyses revealed that though employee-size did not predict organisation structure per se, farm size was significantly associated with specialisation and formalisation (P < .00). Centralisation was not associated with size in this study. The significances are not surprising because size is commonly associated with formalisation especially with respect to aspects of training and performance appraisal. Farmers’ organisations are heavily supported by large organisations including the SWADE, SSA and Mhlume Sugar Mill. These conduct much of the necessary capacity building and back-stopping. Farm size increases impose increased demands for more labour, more training and more supervision on organisations, which the service providers readily provide (de Kok and Uhlaner, 1999).

In this study formalisation, centralisation and specialisation have adequately described the organisations. Formalisation is one contextual variable that has been widely defined. Formalisation is the extent to which rules and/or procedures are regularly applied. According to Aiken and Hage (1966), formalisation has its own shortcomings. A high level of formalisation involving rules to define tasks and/or specifying what is to be done and to police compliance has led to worker dissatisfaction with conditions of employment and thence to reduced worker solidarity. Thereafter, employees start feeling that work was meaningless and sequentially worker morale declines. Alienation from work follows.
Table 6 One-way Analyses of Variance for Farm Size Effects on Organisational Variables

<table>
<thead>
<tr>
<th>Sources of Variation</th>
<th>Sum of Squares</th>
<th>DF</th>
<th>Mean Square</th>
<th>F-values</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Specialisation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>12.864</td>
<td>3</td>
<td>4.288</td>
<td>7.942</td>
<td>.000**</td>
</tr>
<tr>
<td>Within Groups</td>
<td>53.987</td>
<td>100</td>
<td>.540</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>66.850</td>
<td>103</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Locus of Authority</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>3.505</td>
<td>3</td>
<td>1.168</td>
<td>1.976</td>
<td>.122ns</td>
</tr>
<tr>
<td>Within Groups</td>
<td>59.140</td>
<td>100</td>
<td>.591</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>62.645</td>
<td>103</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Participation</strong></td>
<td></td>
<td></td>
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<td>Between Groups</td>
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<td>1.183</td>
<td>1.914</td>
<td>.132ns</td>
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<td></td>
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<td><strong>Formalisation</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>.384</td>
<td>3</td>
<td>.128</td>
<td>5.271</td>
<td>.002**</td>
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<tr>
<td>Within Groups</td>
<td>2.431</td>
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<td>.024</td>
<td></td>
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<tr>
<td>Total</td>
<td>2.815</td>
<td>103</td>
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</tr>
</tbody>
</table>

Note: Dependent variables were mean responses from respondents. **p<.01 (highly significant differences); ns non significant
Centralisation, on the other hand, is defined as the degree to which members participate in decision making. It is the locus of authority to make decisions affecting the organisation. This has its own side effects too. Where centralisation is rigidly practiced, it leaves the employee with no room to have a say in organisation matters. This again leads to high rates of work alienation as well; workers feel powerless and the cohesion among employees declines. Under such organisational formats, the employee becomes dissatisfied with whatever he/she does because of the conditions of employment. The end result is a work force with low morale, alienated from work and from expressive relationships (Aiken and Hage, 1966).

Finally, specialisation is the degree to which an organisation parcels out work into separate tasks. This is a well-embedded practice in the organisations. It is necessary to ensure compliance with the Swaziland Sugar Act.

In this study, workers were asked about their stand with respect to work climate (see question 8-10 Appendix I). Their responses were generally that they were satisfied with their employment. Ironically large proportions reported they would leave if better opportunities emerged. This probably related to the young employees and not so much to the more elderly who would not leave due to family commitments and the cost of commuting between work and home. The dissatisfaction expressed by sections of employees probably reflects the strict formal procedures that employees have to adhere to.

To further discuss organisational structuring of the smallholder cane growers’ organisations, it is necessary to provide theoretical perspectives that provide environments within which organisations operate for them to be and remain legitimate and successful. This is necessary because environmental influences make it impossible for one organisational structure to be adequate for all situations because of contingencies (Galbraith, 1973).

Organisation structure is the set of formal tasks assigned to individuals and departments; formal reporting relationships including lines of authority, decision-making
locus, and number of hierarchies; and designing systems to ensure that there is effective coordination of employees in the organisation (Daft, 2000). This was deemed necessary for the successful participation in the industry.

Sugar cane is an industrial crop. It is produced under very strict regimes. An organisation or individual interested in producing sugar cane must first procure a quota from Swaziland Sugar Association. To get this quota the organisation must show proof of right to use the land and permit to access a prescribe volume of water (the volume of water allocated dictates the acreage to be allocated) and a permit from millers indicating that they would take in the sugar cane; then and only then can one proceed with cropping. This dictates that organisations establish and structure themselves in accordance with their industry institutional requirements if they are to be and remain legitimate. They cannot discount any of the regulations be they GOS, Swaziland Sugar Association or Swaziland Environment Authority or the sugar mills if they are to succeed and remain legitimate.

Secondly, establishing a sugar cane enterprise is capital intensive. It involves an initial investment of between R50,000 and R60,000 per ha and operational costs of nearly R20,000 per hectare per year. For an investment of this magnitude no one would surely want to leave operations under soft management. Mismanagement in any one field activity e.g. allowing pests and/or diseases to exceed the established threshold condemns the whole operation-for by law such fields would have to be ploughed-out. This represents great income loss to the organisation! Producers in the industry religiously monitor crops for compliance with the prescribed procedures and standards to grow a high sucrose content crop that attains the highest standards. To achieve the requirements of the industry requires that the organisations adhere to the Swaziland Sugar Association and other regulations. This again confirms the need to base the organisation structures on the demands of institutions.

An institution is a governance structure based on rules, norms, values, and systems of cultural meaning. Institutions are “the set of working rules that are used to determine
who is eligible to make decisions in some arena, what actions are allowed or
constrained, what aggregation rules would be used, what procedures to be followed,
what information must or must not be provided, and what payoffs would be assigned to
individuals depending on their actions: (Scott, 1992). Hence to remain legitimate
smallholder cane growers must structure following the demands of their institutions.

These grower organisations depend on a variety of resources including finance, water,
electricity, labour, knowledge and skills, technology and management. According to
resource-based theory, the long term and sustainable competitiveness of organisations
depend on access to those resources that make them distinct from others, that are
durable and difficult to substitute (Rangone, 1999). This study identifies land and water
as very critical for the continued existence of these organisations. Literature suggests
that a major source of sustained competitive advantage is the human resources and not
the practice of being able to attract, utilise or retain (Ferligoj, et al. 1997 cited in de Kok
and Uhlaner, 1999). The selection, training and rewarding contribute to stocks of
knowledge or institutional memory of an organisation and this in the long term
contributes to their sustainability.

In this study, organisations have raised the issue of high electricity costs. They have
raised the issue of delays in the haulage of their cane to the mills. These and several
others represent transaction costs. The transaction economics theory becomes another
transaction cost theory refers to costs incurred in searching for the best supplier, the
cost of establishing a contract, and the costs of monitoring and enforcing the
implementation of the contract. The small organisations such as the smallholder cane
grower organisations are disadvantaged relative to large organisations with respect to
costs. Small organisations have small volumes of product from their businesses and
besides, they have limited experience to draw on. The organisations rely on SWADE
and other service providers for their knowledge and skills. In operations that involve
hiring or purchasing e.g. transport facilities, small organisation cannot afford the buy
option partly because of the high initial costs but perhaps more importantly because they lack the capacity to economically fully utilise the resource.

The second major concern of these organisations is the high transactions costs incurred in dealing with financial institutions. Again because they are small, their expertise in sugar cane production is questionable. But perhaps more importantly they lack the experience in handling massive investments that sugar cane productions entails-R 50,000 – 60 000 per ha in investment capital. Clearly the interest rates to be associated with the large amounts of money in the hands of high risk novice sugar cane growers have certainly to be high.

According to Nooteboom, transaction costs can be lowered through such initiatives as collective cooperation among the organisation. They can afford them transport facilities of their own; they can buy sufficient machinery capacity for sugar routine operations e.g. harvesting processes. Nooteboom concludes that by absorbing the search and contracts, and monitoring and enforcement of contracts, organisations can reduce transaction costs.

This study revealed that organisations are not independent of their environments. They reflect considerable levels of interactions with their environment. According Dawson (1992), these interactions fall into three categories which are interactions to secure resources; interactions to secure disbursements of outputs or products; and interactions to ensure compliance with regulations pertaining to operations and transactions. Resource acquisition relates to accessing goods (raw materials fertilisers and other chemicals, components, and even finished products e.g. machinery) and services (finances, knowledge and information, haulage services, labour, management). In the case of the sugar industry, this also includes water, finances, land, labour, plant and machinery all of which are sourced from the environment by organisations. The inputs are transformed into sugar cane, an output that is readily accepted by sugar millers. The third form of interactions refers to the less evident tangible form of environment and
relates to formal regulations i.e. formal rules, regulation and policies and the informal ones such as culture, altitudes and values.

The theory on organisational structure and design developed initially from organisation theory stipulated that the best structural form fitted them all. This position was challenged and soon the contingency theory or the best organisation structural form given a specific set of circumstances and hence there is no one best way to organise came into being. Contingency theory is based on the principle that organisations whose internal features best match the demands of their environments will achieve the best adaptation. According Burns and Stalker (1961) in predictable and stable environments structures are those that use functional departmentalisation. They are more effective because they promote efficiency. This happens because redundancies are minimal and high levels of proficiency are achievable.

With the above interactions always omnipresent, organisations tend to be chary about the environment. The reason for this is that organisations studied here are open systems and as such are not always assured of supplies even for the free water from Maguga Dam. Environmental uncertainty comes into play because organisations find difficulties in acquiring proper information and predicting changes in the supply of the resources especially when environments deteriorate rapidly and unpredictably (Daft, 2000). In general, the effects of uncertainty call for information about the environment, and the need for resources from the environment. These relationships lead to contingency relationships between environment uncertainty and organisational structure. The commonly described relationships according to Burns and Stalker are the mechanistic and organic systems. The mechanistic systems are associated environments that are favourable while the organic for those environments that are uncertain.
Therefore to respond to the “What type of organisation management system do organisations depict?” it is concluded that because the structure depicted by the sugar cane grower organisations is that of high levels of specialisation, centralised decision-making near the top and strict use of rules and regulation, the mechanistic organisation system is in play.

4.5 Assessment of Entrepreneurial Munificence

4.5.1 Introduction

The third objective of the study was to assess chairpersons’ perceptions regarding different aspects of entrepreneurship. The following questions were used to address the objective.

i). What are the perceptions of chairpersons regarding resource availability in the KDDP?

ii). What is the status of entrepreneurial self-confidence among organisation chairpersons?

iii). What is the extent to which chairpersons are committed to entrepreneurial development?

The data used to address these questions were obtained from chairpersons (Appendix III Section C). This set of items were selected from Tang (2008) and modified as found necessary. This aspect of the study was necessary because organisations are expected to diversify their income-base away from sugar cane and therefore grow their organisations through other enterprises using income earned. Secondly it was decided to assess this aspect of organisational behaviour because new ventures and growth of organisations can only be brought about by owners/managers. The available evidence reveals that small owner entrepreneurial orientation positively influences growth (Brown and Kirchhoff, 2010). In any case the creation of new enterprises is a major objective of SWADE. The study operationalised the objective by assessing chairpersons’ perspectives regarding the entrepreneurial environment. To this end, assessments were
made on entrepreneurial munificence, self-confidence, and commitment. Findings are shown in (Table 7)

4.5.2 Entrepreneurial munificence.
This section provides on chairpersons’ perspectives of the state of resource in the KDDP. Resources in this study were defined as anything of quality that has value to organisations; they inevitably included water, land, finance, labour (both skilled and unskilled), management as well as technology.

Findings revealed above mean values for chairpersons’ perspectives regarding entrepreneurial munificence. This suggests that chairpersons were in agreement with the view that the resources availability in the KDDP was favourable. The response from the chairperson of Bambanani Maliba was lowest (3.1) compared to the others suggesting perhaps that he was not totally convinced or could not make out the extent to resources were abundance. The chair for Mangweni Tingonini, on the other hand, provided good a mean response value of 5.6. The other two organisation chairpersons, Nhlanguyavuka and Vuka Shidwashini achieved response means of 4.2 and 4.7 which for all also reflected good agreement with the status of resource availability in KDDP.
### Table 7 Organisation entrepreneurial characteristics

<table>
<thead>
<tr>
<th>Organisation Name</th>
<th>Entrepreneurial munificence</th>
<th>Entrepreneurial self-efficacy</th>
<th>Entrepreneurial Commitment (Continuance)</th>
<th>Entrepreneurial Commitment (Behavioural)</th>
<th>Entrepreneurial Commitment (affective)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bambanani Maliba</td>
<td>3.1</td>
<td>2.2</td>
<td>3.5</td>
<td>4.7</td>
<td>5.5</td>
</tr>
<tr>
<td>Mangweni Tingonini</td>
<td>5.6</td>
<td>5.3</td>
<td>1.0</td>
<td>6.0</td>
<td>5.8</td>
</tr>
<tr>
<td>Nhlanguyavuka</td>
<td>4.2</td>
<td>4.2</td>
<td>3.5</td>
<td>5.7</td>
<td>5.8</td>
</tr>
<tr>
<td>Vuka Shidwashini</td>
<td>4.7</td>
<td>4.4</td>
<td>5.5</td>
<td>6.0</td>
<td>5.5</td>
</tr>
</tbody>
</table>
4.5.3 Self-efficacy

Self-efficacy is defined as self-perception of an individual that he/she can successfully undertake a task/enterprise from inception till completion or maturity. This assessment centred on resource acquisition self-efficacy. According to Tang (2008) self-efficacy is the strength of an individual’s belief that he/she has the capacity to successfully perform roles and duties of an entrepreneur which naturally demand resource acquisition. Findings on this characteristic revealed that:

i. Bambanani Maliba self-efficacy was below average (2.2);
ii. Nhlanguyavuka and Vuka Shidwashini mean responses were well-above average (4.2 and 4.4 respectively) reflecting high levels of self-efficacy;
iii. Mangweni Tingonini showed most confidence for this characteristic with a mean response of 5.3.

These mean scores reveal that Bambanani Maliba was not so confident of his ability to readily acquire resources and successfully plough them into the enterprise, monitor the enterprise till fruition. The other three chairpersons revealed high levels of self-efficacy.

4.5.4 Entrepreneurial commitment

Entrepreneurial commitment was used to assess the extent to which chairpersons saw themselves as capable of nurturing enterprises from initiation through to maturation. It is the extent to which an entrepreneur identified himself/herself with and was deeply engrossed in new business creation activities (Tang). Three forms of commitment were assessed with the following findings:

Continuance of commitment: Continuance of commitment is the entrepreneur’s desire to continue with the new business venture regardless of uncertainties, risks and other unfavourable factors that may initially manifest themselves. Mangweni Tingonini respondent was in total disagreement with suggested statements; the mean response was at the low end of the scale (1.0). The stand taken by this chairperson was, therefore, that regardless of the conditions and challenges the enterprise may face, his position was to continue working with the enterprise until success was achieved and that even when it failed he would not seek employment.
Bambanani Maliba and Nhlanguyavuka responses were alike (3.5) reflecting middle-of-the-road situation; they were not sure as to their commitment either way. Vuka Shidwashini responses were most timid with a recorded a mean value of 5.5 indicating that the chair would abandon the enterprise and seek employment. This perspective is that in the event of business failure, he was unlikely to continue but instead seek employment opportunities.

**Behavioural commitment:** The second assessment of commitment refers to entrepreneur’s position to continued willingness to support an enterprise. The chairpersons’ responses did not differ much as the previous response means, which ranged between 4.0 and 6.0. This suggests that there was a measure of commitment to working on new enterprises until success is achieved or until other ventures are undertaken.

**Affective commitment:** This involves the entrepreneur’s emotional attachment to and identification with new ventures. All organisations were in agreement that running their own businesses was an overwhelming desire. They were willing to invest their knowledge, skills and energies into such ventures. All respondents returned means of over 5.0.

The findings revealed that chairpersons of organisations were aware and in agreement that resources were available and adequate. These resources concerned the overall economic, government and, socio-cultural support environments that have influenced and continues to influence organisations’ participation. The positive responses regarding resource availability was not surprising.

KDDP is a major GOS instrument for addressing poverty in rural Swaziland. This project has seen a massive R1 billion of investment in expanding sugar milling capacity, infrastructure development and dam construction (SWADE). Obviously GOS support is unlikely to wane anytime soon. Secondly, socio-cultural support is inevitable. That support is endemic. The reason is not far to find. Farmers’ organisations were formed following lengthy consultative processes within the affected chiefdoms. They had to get the support of the traditional authority (chiefs and councils) and then the rest of their communities. It is only following such
channels to ensure blessings, could organisations access land rights to use Swazi Nation Land for commercial farming. Before then it was practically impossible for any organisation to access such large chunks of land (RDMU, 2008a). Organisations, therefore, belong to communities in which they are located.

Once land had been obtained, the next critical enabling environment was access to financial resources. GOS guaranteed such funding. Since sugar cane can only be grown as an industrial crop, financial institutions found it adequately attractive for after they were free to put liens of deliveries (RDMU, 2008a).

Another enabling factor for success was the development of infrastructure within the KDDP. Movement into and out of KDDP was readily improved by GOS to facilitate operations. Electricity and telecommunication networks were also suddenly improved. Finally information and technology service providers were readily accessible to the communities. Essentially the resource position in the KDDP was adequate or improved. The environment munificence facilitated organisation affinity for acquiring those resources. Hence with such high levels of resources, entrepreneurial orientation was sharpened (Tang).

Self-efficacy or the self-perception an individual has about being able to acquire and successfully deploy resources to good productive use (confidence in one self to succeed) was well-supported by chairpersons. According to Boyd and Vozikis (1994) cited in Tang (2008) this is the strength of the individual’s belief that he/she is able to successfully perform the roles and responsibilities of an entrepreneur. It is this task-level self-efficacy that is critical in identifying the different types of entrepreneurs (Chen, et al. 1998). The chairperson for Mangweni Tingonini response showed real determination and hence reflecting real self-efficacy. Indeed this was very evident even during discussions of his organisation. His perceptions on entrepreneurship can be exemplified by the following:

“I started by being a member. And now I am the vice chairman of the committee. I have also my private businesses and I also have my own structures for car wash. There are two structures just next to the road. These are my own businesses.
Mangweni Tingonini is where sugar cane is planted” (Mr. George Masiya, Mangweni Tingonini).

Mr. Maziya went on to inform the researcher of attempts to study business management and administration besides attending various workshops in business management. The impression Maziya left very positive impressions about entrepreneurial self-efficacy and orientation. It was thus not surprising that his self-efficacy was high.

Responses from Nhlanguyavuka and Vuka Shidwashini also reflected high levels of self-efficacy. Nhlanguyavuka chairperson is an employee in the private sector where maximisation of profit is the maxim. Such exposure can no doubt galvanize one in believing in himself/herself in undertaking enterprises on the strength of the exposure. Employment status has been associated with more determination and better performance (Dlamini, et al. 2010). Perceptions about resource availability are related to the extent to which business owners believe they can access or acquire the resources. Self-efficacy reflecting a persons’ ability to complete an assignment is an important entrepreneurial activity in organisations. Having chairpersons with such high levels of self-confidence can only be seen as an advantage for organisations growth.

The case with Bambanani Maliba was more sobering as the chairperson reflected a very low level of self-efficacy. This may be attributed to the leadership style of the incumbent. Entrepreneurial leaders play a critical role in the success of new business venture (Yang, 2008). The researcher attributes such a response to the incumbent being new to the position of the chairperson; another reason is probably because of the limited education. Responses obtained on the organisation’s history best captures the extent of preparedness and knowledge of Maziya:

“Royal Swaziland Sugar Corporation advised us that there is a lot of money in sugar cane and we wanted that money. Our future plans are make storeroom where all inputs will be sold, hire a manager to take care of the farm”.

Clearly there are aspirations in this statement but they are not stated as a matter of fact with the confidence of head of organisation. It is unlikely that such a chairperson
can advance the organisation because of the lack of self-efficacy. However, scientists suggest that self-efficacy is a process with which people assess, integrate and evaluate the available information before making a choice. For small entrepreneurs such information originates from within and as such the chairpersons in this study should have better knowledge about the state of their local resource (Bandura, Adams, Hardy and Howell, 1980 cited in Brown and Kirchhoff, 2010).

Erikson (2002) perceived entrepreneurial commitment as the capacity to supervise or manage an enterprise till its maturity. This is achieved through environmental alertness which serves to bind entrepreneurs to be emotionally, intellectually and physically committed. Mangweni Tingonini commitment to entrepreneurial development exemplifies this:

“The incredible achievement by sugar cane farmers, Mangweni Farmers Association of paying off a E (R) 18.9 million loan has undoubtedly emerged to be the success story of the century. Made up of 103 members of households, the farmers association has with effect from 2008 attained financial independence on a project that has the capacity to generate an annual turnover of E3.5 million a year.....” (Times of Swaziland, 25/02/2008)

Since then Nhlanguyavuka and Bambanani have followed suit.
CHAPTER FIVE
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The sugar industry is critical to the Swazi economy. It accounts for 66% of the total agricultural output and 37% of total agricultural employment force. Its contribution to GDP accounts for 12% or else it is 20% if the multiplier and accelerator factor contributions are included (Matsebula, 2009).

Prior to 2000, sugarcane production was in the hands of large scale operators who farmed some 40,000 ha and accounted for up to 94% of production. Since then, GOS developments focus changed to address poverty issues. Decisions were made to provide water from Maguga through Komati River to farmers in the NE of Swaziland, the study area. Access to water was conditional on farmers forming organisations. After lengthy community discussions, communities agreed to pool their land as contributions to their organisations, a no mean feat given the value attached to land in rural communities especially where land is wanting. Thereafter, farmers’ organisations received the necessary enabling environment which included right of access to water, guarantees to capital and operational financing and a ready market for sugar cane (RDMU, 2008a).

Despite these efforts and the nature of investments involved (sugar cane production under irrigation is estimated to require capital investments ranging between R50, 000 and R60, 000 per hectare (probably higher at current prices), high productivity continues to evade these out-grower organisations. Financial performance fell below expectations for some organisations. This was attributed to low productivity and fluctuations in sugar prices. This unfortunately prompted large scale growers to suggest that smallholder sugar cane production was unsustainable (SSA, 2009).
5.2 Summary

This study sought to examine and explain the position of the smallholder cane grower organisations in the Komati Basin on the Swaziland side (KDDP). The focus of the study was to explore the status of organisations and identify key issues that can be associated with performance. The study was implemented as an exploratory research. It invoked the case study approach. This was on purpose. The case study method was deliberately selected partly because it facilitated the use of mixed method paradigm and partly it promoted the use of multiple cases. The case study allowed the researcher to investigate a contemporary situation (smallholder cane grower organisations) within real life context (KDDP project development area); it allowed the researcher to handle both qualitative and quantitative data originating from several sources which included interviews, documentation, artefacts and observations.

5.3 Findings

The findings revealed the following:

Organisations originate for a reason. They come into being to address issues that cannot otherwise be solved by an individual. Hence organisations provide context and mechanisms with which organisations achieve goals (Scott, 1992) with the guidance and supervision of SWADE, SSA and Mhlume Sugar Mill

1. All organisations were under the guidance of SWADE, SSA and Mhlume Sugar Mill. Their characteristics differed little. Their history was akin – all came into being to address issues of food insecurity, improved quality of life, and poverty alleviation. Governance and strategic management structures differed little as did resource availability and human resource management.

2. Financial management was divergent; some organisation did not experience financial hardships and readily accessed finance. Vukani and Ingcayizivele appear to have experienced serious financial problems and have sought GOS
intervention. Three organisations have completely paid up their loans and this was ascertained through mass media report and chairpersons submissions. Some of these organisations are already making huge investments with STANLIB with others paying dividends.

3. The state to which organisations had established an enabling environment differed. All had sheds for storage of inputs; some had one or more tractors and an assortment of equipment. Some had a full complement of harvesting equipment while others were not so lucky. They depended on hiring particular equipment from others.

4. Major challenge that organisation face was the high cost of pumping. Most of the organisations have installed three phase units to drive their huge motors.

5. Land disputes were another challenge endemic in the KDDP. Many organisations have not started operations because of land disputes. Ingcayizivele has a simmering land dispute that refuses to disappear despite the directives of the King’s Office. In some organisations land disputes flare up because of lack of transparency with members demanding annual payment of dividends.

6. Organisational structure was a major focus. Evidence revealed that, to a large extent, all organisations used division of labour to promote specialisation; decision-making was highly centralised with employee-participation being non-existent. Formalisation was evident, which was not surprising given that sugar cane is an industrial crop and the industry protected by various policies, rules and regulation. These institutions reflect normative obligations that must be taken into account to remain legitimate and to avoid hefty punishments for ignorance. These include complete plough-out in the event the crop is infected above particular thresholds.

7. An exploratory analysis revealed significant relation between farm size and formal and specialisation. This probably suggested that as the farm size increases, so do demands for more employees and hence more need for division of labour and the associated training and supervision requirements.

8. Theoretical perspectives pertaining to organisations revealed that structure is dictated by institutional theory as they have to follow and abide by policies,
rules, regulations and procedures if their crop is to be accepted for milling. Secondly, organisations do not own their resources including land, finance, labour, etc., they are dictated to by the resource-dependence theory and transaction cost theory. Access to resource and cost of accessing those resources becomes critical. These in turn affect organisational structuring. Major issues included cost of electricity, labour and cost of borrowing. The presence of networks was minimal.

9. Contingency theory also comes into play—“there is no one best way to organise”. In this study, it was evident that the theory comes into. The organisations’ management system led to the conclusion that mechanistic systems were in operation owing to the strong bureaucracy adopted by organisations.

10. Finally chairpersons were in agreement that resource levels were favourable. Secondly most agreed that they have the self-confidence to access resources and productively use them. Thirdly most showed considerable entrepreneurial commitment. Entrepreneurial leadership was limited but critical for developing entrepreneurship in KDDP. Mangweni Tingoni was an excellent example of strong entrepreneurial leadership.

5.4 Conclusions.

This study was conducted in Komati River Basin. This area recently received two prime developments. Two dams were constructed one at Driekoppies and the other at Maguga to support farming operations in this lowveld ecology that experiences high frequencies of dry spells and even drought.

The study was conducted in Swaziland side of the Komati River and involved smallholder cane grower organisations. It sought to assess organisations with a view to explaining their characteristics. To this end organisation structure was discussed based on data collected from chairpersons, committee members and employees. The data were complemented by secondary data sources.
The findings revealed that organisations were alike in several aspects including history, governance, strategic management and human resources. Their organisation structuring showed specialised forms in line with their operations. Centralised decision-making did not give room to employees but rather participation was made [possible through representation by the farm supervisor. Formalisation was strongly enforced. This was necessary because the product has to meet particular standards between planting and delivery to the mill. Non-compliance results in heavy economic losses. This led to the conclusion that to achieve desirable results according to institutional demands, the mechanistic management system was appropriate.

Entrepreneurial resource environment was favourable; self-confidence among chairpersons was somewhat divergent while commitment to entrepreneurial development was mixed. Only one organisation showed excellent leadership for entrepreneurial development.

This study failed to access the more sensitive data such as profit and loss accounts, budgets and budget variances and as such performance assessments could not be made. This made it impossible to determine empirically what the situation is among the organisations.

5.4 Recommendations.

The study of the KDDP smallholder cane grower organisations was very challenging. The study identified several issues that need to be studied as standalones including governance, leadership and strategic management; human resources climate; financial management; performance evaluation; entrepreneurial orientation; and the impact of the KDDP to-date. This study was in the end perhaps too broad to address these specific issues. Having said this it must be recalled that this study was exploratory and aimed to unearth potential research fields.
The overall recommendation from this effort is that the study needs to be repeated taking more samples of organisations with a focus on some specific areas such as those listed above. This approach will release empirical data to improve this product.

Secondly, the study has revealed that though communal land is fraught with challenges, with proper discussion and orientation, it is possible to convert communal, often mismanaged, land into productive enterprises. SWADE has to be commended for achieving this. The work of SWADE provides valuable lessons for many other African countries to draw on to improve the productivity of their traditional land.

Networking is weak. And yet there is great potential for these organisations to evolve excellent networks to deal with the many issues and shortcomings that bedevil their operations, reduce productivity and increase costs. According to High, Pelling and Nemes (2005) while networks and communities are interesting in their own right, it is in combination that they can form a powerful tool for development. Individually, communities on their own provide powerful focus of social energy and resilience, but without the linking function provided by networks they risk becoming isolated from the broad pool of human experiences and learning in which tomorrow’s solutions to emerging issues might be found (High, et. al.). Networks on the other hand, are perhaps too diffuse and fail to provide an adequate basis for organised action, except in circumstances where the need to do so overrides the transaction costs involved in negotiating across different interests. Presence of a network can deal with issues of haulage and pooled input purchases for organisations. The place of communities lies in affording their labour for farm operations such as weeding and harvesting as well ensuring some form of security to plant and equipment belonging to organisations. Thefts of irrigation pipes, irrigators, and accessories beside just vandalism have been rampant on some of the schemes. These linkages can be of benefit to communities and organisations.

The present situation regarding input supplies is that each organisation seeks suppliers as when need arises. And yet it is known what inputs are required for the whole season to support farming operations. Supplies of these inputs can collectively be organised and thus cutting down on transaction costs.
The lack of professional management teams does not augur well for long term operations and the organisations capacity in handling millions of Rands yearly. Granted SWADE is handling most of backstopping, these organisations need to realise that it is in their best interest to appreciate such services. Possibilities of hiring joint managers to run two - four organisations can be cost-effective and contribute to increased productivity. The view that farm managers are expensive while it may be true, gains from having such a professional sooner than later become visible through increased productivity. It is a route which no doubt can bring forward those potential yields that the neighbouring estates are achieving.


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http://iris.nyit.edu/~schartman/mba0120/chapter2.htm (31/10/2009)


Restructuring and Diversification Management Unit (RDMU), Mbabane, Swaziland


Swaziland Sugar Association (SSA). (2009b).The importance of the sugar sector to Swaziland’s economy.


APPENDIX I

INTERVIEW SCHEDULE FOR EMPLOYEES

SECTION A:

DEMOGRAPHIC DATA

Name of Association: ____________________________________________________

1. Name of respondent: __________________________________________________

2. Sex: Male: __________ Female: __________

3. Age:

<table>
<thead>
<tr>
<th>Age group of respondent</th>
<th>Tick</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 18 years</td>
<td></td>
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<tr>
<td>18-30 years</td>
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<tr>
<td>31-45 years</td>
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<tr>
<td>45-60 years</td>
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<tr>
<td>Over 60 years</td>
<td></td>
</tr>
</tbody>
</table>

4. Educational level:

<table>
<thead>
<tr>
<th>Highest education attained</th>
<th>Tick</th>
</tr>
</thead>
<tbody>
<tr>
<td>No education</td>
<td></td>
</tr>
<tr>
<td>Primary</td>
<td></td>
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<tr>
<td>Secondary</td>
<td></td>
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<tr>
<td>High school</td>
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<tr>
<td>Tertiary</td>
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</tbody>
</table>

5. Marital status: Married _____ Single _____ Widowed _____
6  Are you a member of the Organisation?

7  Are you a member of the Executive?

8  Are you happy with your job?

9  Would you leave to work on another sugar estate sugar a job opportunity open up?

10 Why and under what conditions would you leave?

SECTION B:

SPECIALISATION

The following OPERATIONS (set of activities) are carried out on the farm. Please indicate how the operations are organized and/or carried out: Who does what operations? Is the operation carried out by one person or a team? Is it always the same people doing the operation? To respond please select one of the responses suggested using the following scale:

1 = Operation carried out by same employees all the time;
2 = Operation carried out by same employees only sometimes;
3 = Operation always carried out by different employees all the time;
4 = Operation carried out by same employees all the time under same supervisor;
5 = Operation sometimes carried out by same employees but under same supervisor;
6 = Operation carried out by different employees under different supervisors all the time.

Who carries out the following operations?
<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>1</th>
<th>3</th>
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<th>6</th>
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</thead>
<tbody>
<tr>
<td><strong>General Operations</strong></td>
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<tr>
<td>Preparation of operations planning chart place</td>
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<tr>
<td>Distribution of farm inputs</td>
<td></td>
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<tr>
<td>Training of employees for different tasks</td>
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<tr>
<td>Making field records</td>
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<tr>
<td>Maintenance of irrigation systems</td>
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<tr>
<td><strong>Plant Protection</strong></td>
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<tr>
<td>Conducting field inspections to identify Smut infection in fields</td>
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<tr>
<td>Preparing Smut inspections programme</td>
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<tr>
<td>Compiling state of infestation REPORT</td>
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<tr>
<td>Training staff for Smut identification- different fields/different sugar cane ages;</td>
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<tr>
<td>Conducting smut rouging expeditions;</td>
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<tr>
<td>Conducting post-rouging surveys</td>
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<tr>
<td><strong>Planting</strong></td>
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<tr>
<td>Training planting teams</td>
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<tr>
<td>Planning and arranging planting resources</td>
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<tr>
<td>Ensuring quality planting work is carried</td>
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<tr>
<td>Monitoring and recording quality of work</td>
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<tr>
<td>Planting hygiene</td>
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<tr>
<td>Compiling weekly planting returns</td>
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</tbody>
</table>
### Ratoon Crop Management

1. Making arrangements for trash burning
2. Training thrash burners
3. Carrying out actual operations
4. Carrying out post-burn operations

### Fertiliser Management

1. Training fertiliser operators
2. Soil sampling operators
3. Confirming fertilizer recommendations
4. Carrying out fertiliser applications

### Irrigation Management

1. Training irrigation crew as
2. Plan and implement irrigation schedules
3. Who assigns people to work in irrigation
4. Checking applicators proper functioning
5. Managing irrigation infrastructure
6. Maintenance/ irrigation plant/equipment

### Harvesting

- Prepare field before burning takes place
- Pre-sugar cane cutting arrangements
- Cane burning preparations and actual burning
- Actual cane cutting arrangements and operations.
Cutting operations are conducted according to required standards

<table>
<thead>
<tr>
<th>Task measurements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitoring cut cane quantity and quality assessments</td>
</tr>
</tbody>
</table>

**SECTION C**

**CENTRALISATION**

This section measures the degree to which employees participate in decision-making; it is the extent to which power is concentrated in the top echelons of the organisations and extent some of it is devolved to lower ranks. These measures are operationalised by two separate sets of questions

**Index of hierarchy of authority: Scale of measurement:**

Please identify which of the following suggested responses describes your organization best in response to the question using the following scale: 1 = Indvuna makes limited decisions but has to consult Farm Managers; 2 = Indvuna can make limited decisions without consulting; 3 = Assistant Farm Manager Only makes Decisions; 4 = Farm Manager only person to make decisions; 5 = The Executive Committee only makes decisions; 6 = Chairperson or representative only make decisions.

Who makes decisions about the following?

<table>
<thead>
<tr>
<th>ITEM</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
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<tbody>
<tr>
<td>Hiring new employees</td>
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<td>Deciding on number of employees to hire</td>
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<td>Internal labour disputes</td>
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<tr>
<td>Overtime to be worked</td>
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<tr>
<td>Dismissal of employee</td>
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<tr>
<td>Methods to use in recruitment</td>
<td></td>
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<tr>
<td>How to carry out assigned task</td>
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<tr>
<td>Machinery/equipment to use on given operation</td>
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<tr>
<td>Item</td>
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<tr>
<td>I participate in Executive Committee Meetings</td>
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<tr>
<td>I participate in disciplinary committees</td>
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<tr>
<td>I participate in budget meetings for the farm</td>
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<tr>
<td>I participate in recruitment of labour force</td>
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<tr>
<td>I participate in decisions taken about the labour force</td>
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<td>I participate in wage negotiations</td>
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<tr>
<td>I participate in setting production programmes</td>
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<tr>
<td>I participate in setting production budgets</td>
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<tr>
<td>I participate in staff-management committee meetings</td>
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</tbody>
</table>
SECTION D

FORMALISATION

Formalisation refers to the degree to which your organisation relies on rules, regulations and procedures to direct the behaviour of its employees. In short it is the extent to which rules and procedures are followed in your organisation.

Scale: The following table lists information about your organizations. Please indicate which statement or response best fits your organisation by merely saying Yes meaning you are aware that your organisation uses the means; No meaning you are not aware that your organisation uses the means; Do not know.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Yes</th>
<th>No</th>
<th>I do not Know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employees have written employment contracts I showing conditions of their employment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rules in this organisation are written but are not rigidly enforced as long as I do a day’s work</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>This organisation has given have told all the relevant rules and regulations to follow as employees.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The organisation always trains before a new task are assigned</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Every operation has its own procedures</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Indvuna ensures that all employees arrive on time and leave at right time</td>
<td></td>
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<tr>
<td>Once in the field I work I work without referring to Indvuna</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Late coming is punishable</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>We clock in when we report and clock out when we leave</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indvuna closely supervises employees</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## APPENDIX II

### INSTRUMENT FOR COMMITTEE & MANAGEMENT

#### SECTION A

### DEMOGRAPHIC DATA

**Name of Association:** ____________________________________________

1. **Name of respondent:** ____________________________________________

2. **Sex:**  
   - Male: __________  
   - Female: __________

3. **Age:**

<table>
<thead>
<tr>
<th>Age group of respondent</th>
<th>Tick</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-30 years</td>
<td></td>
</tr>
<tr>
<td>31-45 years</td>
<td></td>
</tr>
<tr>
<td>45-60 years</td>
<td></td>
</tr>
<tr>
<td>Over 60 years</td>
<td></td>
</tr>
</tbody>
</table>

4. **Educational level:**

<table>
<thead>
<tr>
<th>Highest education attained</th>
<th>Tick</th>
</tr>
</thead>
<tbody>
<tr>
<td>No education</td>
<td></td>
</tr>
<tr>
<td>Primary</td>
<td></td>
</tr>
<tr>
<td>Secondary</td>
<td></td>
</tr>
<tr>
<td>High school</td>
<td></td>
</tr>
<tr>
<td>Tertiary</td>
<td></td>
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</tbody>
</table>

5. **Marital status:**  
   - Married: _____  
   - Single: _____  
   - Widowed: _____

6. **You are a member of the:** ________________________________

7. **What experience do you have in sugar cane farming?** ________________
10 Could you please provide the following information/documents to facilitate this study?

- Size of your farm:________________________________________
- Number of employees __________ M: __________ F: __________
- Annual cane deliveries (since beginning of operations)
- Annual sucrose volume (since beginning of operations)
- Yield per/ha (TCH)/YEAR
- Sucrose yield/ha/YEAR
- Income earned (since beginning of operations)

11 Does your organisation have a strategic plan to guide operations?

Probe: (Obtain copy if possible)

i). What are its major highlights:

ii). What is it that the organisation wants to achieve?

iii). In your opinion is it realistic?

iv). Does your executive committee participate in the management of the farm?

v). Do you always get your budgetary requirements e.g. inputs, provided at the right time all the time? Or only sometimes?

SECTION B: RESOURCES

Could you please provide us information on the state of your resources?

1 HUMAN RESOURCES

Probe:

Do you have a qualified Farm Manager with experience in sugar cane production? Provide details.

...........................................................................................................................................................................

...........................................................................................................................................................................

How long have you been running this estate?

...........................................................................................................................................................................
What are the functions of farm manager?

Do you have a qualified Finance Officer?
Y:   N:

How long have you been running this estate?

What are his/her functions?

How many permanent farm employees work on the farm?
Males: ........................................ Females: ..................................................

How many of these are Members of the organisation?
Members: ........................................ Non-Members: ..................................................

How many of your employees are also on your Board/Executive Committee?

Do you have skilled workers on the farm? (Including tractor drivers, welders, plumbers.)
Members: ........................................ Non-Members: ..................................................

How many seasonal labourers do you hire during peak demand?

Why does the organisation give priority in employment foreigners?
2 WATER

Probe: Please describe your experiences with water supply for irrigation (discuss access to water, cost, shortages and reasons for the shortage, problems with payment, if any).

FINANCE

Probe
Please describe your experiences with seasonal financing for your operational activities?

What is the state of the seasonal loan repayment?

4 EU and Sugar Markets

Probe
Since the loss of the European Union preferential market status, please describe what the effects have been on Farm Income?

Probe: Has this affected loan repayments? Explain

Probe: How has it affected farm operations (e.g. purchase of inputs)? Explain how?
5 KNOWLEDGE AND INFORMATION

Knowledge, information and technology are critical for sugar cane production.

**Probe:** Describe your major sources what your major sources have been since you started your organisation and operations in order of importance (List role played by each organisation)

………………………………………………………………………………………………..........................

………………………………………………………………………………………………..........................

**Probe:** To what extent have you developed working relationship with other organisations and sugar estates to exchange information and technology on sugar production?

………………………………………………………………………………………………..........................

SUGAR CANE PRODUCTION PRACTICES

1) SPECIALISATION

OPERATIONS (set of activities) may be carried by one person or a team of employees routinely as they fall due every season. Some of these operations are similar; some may most likely be carried by a senior staff member e.g. training, monitoring. Others are routine monitoring activities: They may be carried by same team or teams or person every season. These operations have been grouped to reflect their closeness/of relatedness.

Please respond to the attached question using the following scale:

Please select the response that best describes your style of managing the particular operation using the following scale:

1= same person/same team for given operation this season

2= same person/same team for given operation every season;

3= Different person/ different team for given operation every season;

4= Assistant or Farm manager’s responsibility to conduct activity;

5= Outsourced activity;

6= Special teams every season-centralised.
### Training thrash burners

<table>
<thead>
<tr>
<th>Training thrash burners</th>
<th>1</th>
<th>1</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Training staff to identify Smut in different fields at different sugar cane ages;</td>
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<tr>
<td>Training thrash burners</td>
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<tr>
<td>Training planting teams</td>
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<tr>
<td>Training of employees for different/ particular tasks</td>
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<tr>
<td>Training irrigation crew on different systems</td>
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</table>

### Planning and Field Preparations

- Prepare fields before burning takes place
- Preparation of operations planning chart place
- Planting hygiene
- Planning and arranging planting resources
- Prepare fields before burning takes place

### Irrigation Operations

- Plan and implement irrigation schedules
- Managing irrigation infrastructure
- Maintenance of irrigation systems
- Maintenance of irrigation plant and equipment
- Checking Irrigation applicators for proper functioning
- Calibrating irrigation systems

### Monitoring, Recording

- Monitoring cut cane quantity and quality assessments
- Monitoring and recording quality of work
- Compiling field records
- Compiling weekly planting returns

### Plant protection

- Conducting Smut rouging expeditions;
- Conducting post-rouging surveys
- Conducting inspections to identify Smut infection in fields
- Conducting Smut rouging expeditions;
Harvesting

Ensuring cane-cutting operations conducted according to required standards
Carrying out post-burn operations
Actual cane cutting arrangements and operations.

2 CENTRALISATION

This measures the degree to which members participate in decision-making; it is the extent to which power is concentrated in the top management.

Scale of measurement: (Index of hierarchy of authority)

Please identify which of the following suggested responses describe the practice in your organization best. To do this, please use the following scale: 1 = Chairperson; 2 = The Executive Committee; 3 = Only Farm Manager; 4 = Assistant Farm Manager; 5 = Indvuna can make decision but has to consult Farm Manager; 6 = Indvuna can make decision without consulting.

Who makes decisions about the following?

<table>
<thead>
<tr>
<th>Item</th>
<th>1</th>
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</table>
**Index of hierarchy of Participation in Decision-Making**

Please identify which of the suggested responses fit the following statements about your organization practices best using the following scale: *Employees participate in decision-making*

1 = Never participated; 2 = Participate on occasions; 3 = Sometimes participate; 4 = Often participate; 5 = frequently participate; 6 = partake all the time.

<table>
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<tr>
<th>Item</th>
<th>1</th>
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<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Most workers participate in Executive Committee Meetings</td>
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<tr>
<td>2. Most workers participate in decision-making in disciplinary committees most times</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>3. Workers participate in budgeting for farm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Workers participate in recruitment of labour new employees</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>5. Workers participate in all decision taken about labour force</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>6. Workers participate in wage negotiations</td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>
3 **FORMALISATION**

This is the degree to which an organisation relies on rules, regulations and procedures to direct the behaviour of employees. In short it is the extent to which rules and procedures are followed in an organisation.

Scale: The following table lists information about your organizations. Please indicate which response best fits your organisation by merely saying **Yes** meaning you are aware that your organisation uses the means; **No** meaning you are not aware that your organisation uses the means.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Yes</th>
<th>No</th>
<th>I do not Know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employees have written employment contracts showing conditions of their employment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rules in this organisation are written but are not rigidly enforced as long as I do a day’s work</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>This organisation has given us and told us all the relevant rules and regulations to follow as employees.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The organisation always trains before a new task are assigned</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Every operation has its own procedures</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indvuna ensures that all employees arrive on time and leave at right time</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Once in the field I work I work without referring to Indvuna</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Late coming is punishable</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>We clock in when we report and clock out when we leave</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indvuna closely supervises employees</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4 **CHALLENGES**

What do you consider to be your major challenges as a farm manager on this farm?

What is that needs to be done for this organisations to become as productive as the large estates?

................................................................................................................................................

................................................................................................................................................
APPENDIX III

CHAIRPERSONS’ INSTRUMENT

IN-DEPTH INTERVIEW PROTOCOL (CHAIRPERSONS)

The purpose of conducting this interview is to obtain detailed information about your organisation, how it conducts business with a view to understand where it is coming from and where it is headed to in the next five to ten years.

We need to record all the information we discuss here so that we can have an accurate record, a record

The interview will commence with general questions and move on to specific ones.

--------------------------------------------------------------------------------------

SECTION A: GENERAL

1. PROFILE OF CHAIR

Could you please tell us about yourself, your position and your work as Chairperson of the Association

Probe: Please tell us your name:
........................................................................................................................................

How long have you been a Member of this organisation?
........................................................................................................................................

What were you doing before you joined the Organisation?
........................................................................................................................................

Profile:

(i) Estimate age: ..................................................................................................................

(ii) Estimate education level: .................................................................................................. 

(iii) Assess skills: .....................................................................................................................

Are you a full-time farmer? Yes:________________________ No:________________________
SECTION B

ORGANISATION

1. HISTORY OF ORGANISATION

Please describe to us the History of your organisation from beginning to where it is now. (Let the Chairperson narrate the story without interruption/use the prompts below if necessary and as appropriate)

Probe: How did your organisation start? Please provide as much detail as you can.

Probe: What was your main goal when the organisation started?

Probe: What are the most important goals that you wish the organisation to achieve? Five – ten years from now!

Probe: Do all members belong to the same chief?

Probe: Since formation of your organisation, have you experienced land disputes?

Probe: Could you please describe the reason/circumstances that led to the formation of your organisation.

Probe: What are your future plans?
For organisation?


For community?


2 GOVERNANCE ISSUES

(How do you as chairperson and your committee run the organisation?)

Probe: Please discuss what the constitution puts down as most important issues/ideas about your organisation? Please explain.

Probe: Why did you select these issues for inclusion in your constitution:

How is organisation administered?

Membership:

Probe: How many members are you in the organisation?

Total: ..............................................................

# Men Members: .................. #Women Members: ..............................................................

Are all paid up members? Yes: _________________________ No: _____________________

How does one become a member?
Probe: Do you have a committee or a Board?

Committee: ________________________________ Board: __________________________

How many office bearers are there on your Board/Committee? _______________________

How many office bearers are Males: …… Females: …..............................

Probe: Please describe how office-bearers are elected?

How often do you hold elections to replace office bearers?

Who stands for the elections?

What is the role of the executive committee in the organisation?

Probe: Thinking back, please walk us through the major reasons that made you form the association and who the driving force?
3 STRATEGIC PLANS

Probe: What are the main features of your strategy plan?

In your strategic plan, what is it that you want to achieve in the planned period?

Probe: How will the plans best be delivered?

Does your executive committee/board participate in the management of operations? Please indicate how this happens

Describe how the EC is involved in management

Financial issues

Does the committee always provide budgetary requirements e.g. inputs, always on-time all the time or only sometimes on time? Please explain

Do you give out dividends at end of year?

What plans do you strongly believe will be achieved at all costs?

Probe: You are the chairperson of the organisation, what is that you wish to achieve during your rule as chairperson:
4 FARM DEVELOPMENT

Your farm is now well-developed. Please give us details pertaining to farm developments from beginning until now.

Probe: Please provide details as to when your organisation started farm developments? What are the activities that the organisation was heavily involved in from beginning to the first crop of sugar cane delivery to the mill?

Probe: What were the major problems that you experienced during the first few years of operations or start of farming? Please describe the Problems:

How did you address these problems?

Probe: Are developments now completed or are they still on-going?

What is it that the organisation now wishes to do in the next five years?
5  HUMAN RESOURCES

Probe: What is the position of human resource situation?

Total permanent labour: ___________

Permanent # Males ____________________ Permanent # Females: ____________________

How many of the employees are Members of the organisation?

# Male Members: .................. # Female Member: .................................................................

How many employees are also on your Board/Executive Committee?

# Male Members? ............... # Female Member: .................................................................

Do you have skilled workers on the farm? (Include tractor drivers, welders, plumbers,) among Members: .................................. Non-Members: .................................................................

Maximum # casuals employed every year: ______________________

Probe: How well is your FM or supervisor trained to handle sugar production? Is the Farm managed by a fully qualified and experienced supervisor of manager? What training has he undergone: How long has he been with the organisation?

..........................................................................................................................
..........................................................................................................................

How long has he been employed as your farm Manager on this estate?
..........................................................................................................................
..........................................................................................................................

What are the responsibilities of your Farm Manager?
..........................................................................................................................
............................................................................................................................
Probe: Is the Finance Officer fully qualified and experienced to manage your fiancés? Please explain how?

How long has he been employed as your Finance Manager been employed??

What are the responsibilities of your Finance Officer/ Manager?

Probe: What employment regulations do you follow in running the farm?

Do employees participate in decision-making in matters relating to farm operations? Please explain.

Do your employees have employment contracts?

Are your employees trained for and before every operation undertake?

What regulations do you use in managing and recruiting workers?

Probe: Why do you employ outsiders?
**SECTION C**

**RESOURCE AVAILABILITY, ACCESS AND UTILISATION**

*In this section we assess the state of entrepreneurial resources or availability of assistance and support services that are available to facilitate business developments?*

The section has three subsections that refer to different aspects of business or entrepreneurship.

**SUB-SECTION-1**

*This section consists of position statements and for each statement you are asked to assess and provide a decision as to the extent to which you agree with the statement using the following scale relating to level of agreement: 1 = I definitely do not agree; 2 = I do not agree; 3 = I somewhat tend to disagree; 4 = I somewhat agree; 5 = I agree; 6 = I definitely agree.*

These statements are as follows:

<table>
<thead>
<tr>
<th>Item #</th>
<th>Position Statement</th>
<th>Rating Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>GOS provided strong support to smallholder cane growers’ organisations</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>2</td>
<td>GOS continues to provide strong support to smallholder cane growers’ organisations</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Bankers and other financial institutions such as FINCOR have invested heavily in the smallholder cane growers’ organisations</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Bankers and financial institutions are continuing to support the smallholder cane growers’ organisations and associated entrepreneurs e.g. transporters</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>The communities in KDDP have also been supportive to the smallholder cane growers’ organisations particularly during the initial period.</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Since smallholder cane growers’ organisations started growing sugar cane in KDDP, many businesses have also sprung up.</td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>---</td>
<td>----------------------------------------------------------------------------------------------------------</td>
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</tr>
<tr>
<td>7</td>
<td>Since the smallholder cane growers’ organisations started operating, many other non sugar cane businesses have commenced</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Since the smallholder cane growers’ organisations started the infrastructure has greatly improved</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Since the smallholder cane growers’ organisations started, the mass media has continued to publish success stories about the KDDP as opposed to the past</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Since the smallholder cane growers’ organisations came into being many agricultural input companies have set shop in KDDP</td>
<td></td>
</tr>
</tbody>
</table>
**SUB-SECTION-2**

This section assesses entrepreneurial self-confidence which is the strength of your belief that you can successfully carry out the roles and tasks required of an entrepreneur. How do you rate your confidence regarding the completion of the following roles or tasks within the stipulated time limits?

This section again consists of ten position statements. Please give your level of agreement pertaining to the extent to which you agree with the position statement using the following scale: 1 = very low certainty; 2 = low certainty; 3 = somewhat certainty; 4 = quite certain; 5 = Certain; 6 = Very certain.

<table>
<thead>
<tr>
<th>Item</th>
<th>Position Statement</th>
<th>Rating Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Attract employees to work in organisation</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>2</td>
<td>Obtain finance to open a new business</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Obtain finance for operations in new business</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Deal with distributors</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Compete with other farmers or others in my line of business</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Comply with government policies and procedures</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Comply with Swaziland Environment Authority requirements</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Adopt better and state of the art technology as it comes out</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Getting financial management advisory services</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Accessing technical support services</td>
<td></td>
</tr>
</tbody>
</table>
**SUB-SECTION-3**

This section assesses entrepreneurial commitment which is the extent to which an employee is committed/identifies with and is involved in the organisation. Based on your experience, you are in a better position to respond to the following suggested situations using the following response scale:

1 = I definitely do not agree; 2 = I do not agree; 3 = I somewhat disagree; 4 = I somewhat agree; 5 = I agree; 6 = I definitely agree. ....

<table>
<thead>
<tr>
<th>Item</th>
<th>Position Statement</th>
<th>Rating Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>If this business idea is not successful, I am willing to go to work for someone else</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>2</td>
<td>If this business idea is not successful, I will never go to work for someone else.</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>If this business idea is not successful, I will try another new idea until I succeed,</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>I work on my business for as long as it takes until it succeeds</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>My person view about life is that “Do whatever it takes” to establish your own business.</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Starting a business is much more desirable than other career opportunities I have ever thought of.</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>If I have a business it will help me achieve other important goals in my life</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Overall, my skills and abilities will assist me to start a business</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>I am confident I have the energy to start a business,</td>
<td></td>
</tr>
</tbody>
</table>
CHALLENGES

What are your major challenges that your organisation face now?

......................................................................................................................

......................................................................................................................