# Small, Micro and Medium Enterprise Support Intervention: An Exploratory Analysis of Clustering Effects in Clairwood and Cato Manor, Durban

By

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#### **ABSTRACT**

This study identifies and explores the clustering effects of external economy and joint action of SMMEs throughout clusters in Clairwood and Cato Manor in Durban. It attempts to contribute to an understanding of clustering effects of SMME support intervention that aligns with a wider initiative by local government to engage in the redevelopment of previously disadvantaged areas.

Particularly in the South African context, the market structure is marked by enormous unequal access to basic services based on location and education among other factors to counteract obstacles to SMME development. Agglomeration generates external economies like cooperation, information sharing and inter-firm interaction. Joint action between SMMEs in these clusters and external actors harnesses the collective efforts of all actors to promote specialisation, innovation and upgrade in SMME clusters.

A survey method that combined quantitative and qualitative techniques was applied to conduct voluntary, semi-structured interviews using a questionnaire. External economies, such as, supplier linkages, repayment of money borrowed and product upgrade point to the extent of interactions based on a collective and shared knowledge base. Also, the pursuit of joint action is explored through existing partnerships and the potential for partnerships between enterprises in the future, highlighted qualitatively by prevailing sentiments of entrepreneurs.

The findings suggest that clustering effects in Cato Manor and Clairwood are complex. SMME clustering effects reveal layers of an incipient industrialisation process with two major challenges. External economies for generating relationships with supplier networks are tenuous. Though there is flexibility, it is not sufficient to increase interfirm relationships. Training is lacking among 53 percent of entrepreneurs in the sample. This undermines learning and cooperation for cluster specialisation. Joint action is extremely limited and difficult to achieve. The findings show that 73 percent of survivalist and micro enterprises are individually owned. In sum, cluster effects reveal that enterprises are involved in unrelated activities within the same clusters, which undermines agglomeration and collective efficiency

in SMME clustering. Future research must explore the feasibility of targeted support interventions at SMME clusters that are engaged in similar and related activities by location with specific outcomes for SMMEs development in clusters.

#### **ACKNOWLEDGEMENTS**

I wish to dedicate my dissertation in loving memory of my late twin, Barrington Alexander Arokium. Thank you Barry for your honourable presence in our lives. Mom, Kermi and I miss you.

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#### **DECLARATION**

Submitted in fulfilment / partial fulfilment of the requirements for the degree of Masters in Development Studies, in the Graduate Programme in Development Studies,

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I declare that this dissertation is my own unaided work. All citations, references and borrowed ideas have been duly acknowledged. It is being submitted for the degree of Masters in Development Studies in the Faculty of Humanities, Development and Social Science, University of KwaZulu-Natal, Durban, South Africa. None of the present work has been submitted previously for any degree or examination in any other University.

Student signature	
Date	

#### **ABREVIATIONS**

CBD Central Business District

BSU Business Support Unit

CMDA Cato Manor Development Association

DTI Department of Trade and Industry

EPZs Export Processing Zones

NGO Non-Governmental Organisation

NICs New Industrialising Countries

R & D Research and Development

SME Small and Medium Enterprise

SMME Small Micro and Medium Enterprise

SSA Statistics South Africa

USAID United States Agency for International Development

#### **CONCEPT DEFINITIONS**

Collective Efficiency

Clustering

**External Economies** 

Flexible Specialisation

Joint Action

Small Medium and Micro Enterprise

**Support Intervention** 

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# 1 Introduction

# 1.1 Background of the Study

Internationally, there is agreement that small, medium and micro enterprises (SMMEs) play a fundamentally important role in the process of economic development. In the United States during 1980 to 1986, SMMEs contributed 64 percent of a total of 10.5 million jobs to the economy (Bracker and Pearson, 1986:503). During this same time, output declined from large firms operating in the recession period. Counteracting this decline, manufacturing SMMEs increased production from 33 to 37 percent between 1976 and 1986. Clearly, a gradual increase in production, employment and a significant contribution to the gross domestic product (GDP) over the past decades, established an important role for SMMEs in the process of economic development (Acs and Audretsch, 1988:768; Acs and Audretsch, 1989:255; Blackford, 1994:1; Blackford, 1991:4-7; Cook, 2001:17); Chandra, et al., 2001:1-2; Harbison, 1956; 365; Mead, 1991:409-410; Kesper, 2001:1-2).

However, the failure rate of both start-up and older SMMEs remains high, in spite of their proven resilience over the past decades. SMMEs remain vulnerable due to factors inherent to development and change in firms. In addition, global competition increases growth challenges confronted by local SMMEs. This vulnerability undermines the extent to which these fragile enterprises can reach their potential to take off and remain competitive. This challenge is compounded by the fact that SMMEs are inherently fragile in the early years of their development and during times of change. Studies show that between 50 and 60 percent of entrants exit within four to five years and close to 80 percent within ten years after market entry. Due to this high failure rate, SMMEs are bound to exit the market at any point in time within the first five years of operation (Peña, 2004:224).

The anatomy of constraints and reasons for failure of SMMEs are complex. Research suggests that the grounds for their demise or lack of growth are different for SMMEs in different contexts (Peña, 2004:223). Although the bulk of these problems are similar, they vary in

intensity in different organisations (Bracker and Pearson, 1986:503-504; d'Amboise and Muldowney, 1988:227; Gordon, 1978:24). While these challenges are inherent to SMMEs worldwide, access to adequate and relevant support interventions is even more important to counteract constraints in the process of development, particularly, in the context of a developing country (Morris and Robbins, 2004:2; Lall, 2000:2-3; Schmitz and Nadvi, 1999:1509). Little's (1987:203) study about the performance of Indian SMMEs and Mead's (1991:414) review of this Indian study, support this claim and state that government support interventions can facilitate SMME development and competitiveness. Further, it is argued that Government has a role to play in SMME development. Studies focused on developing countries argue that support intervention is central to improve factor market linkages and strengthen limited organisational capacity and other related vulnerabilities, associated with retarding the progress of SMME growth and development (Akoten, Sawada and Otsuka, 2006:929, 941-942; Chandra et al., 2001:i; Cook 2001:25-26; Lall, 2000:2 and Goldberg and Palladini, 2008:35-36; Morris and Robbins, 2004:2; Venkataramanaiah and Parashar, 2007:241-242).

In South Africa, the Department of Trade and Industry (DTI) agrees that small, medium and micro enterprises (SMMEs) have an important role to play in the economy and have outlined leading sectors that warrant specific based on set criteria (White Paper on National Strategy for the Development and Promotion of Small Business in South Africa, 1995:5 and the Industrial Policy Action Plan, 2007:2-4). Moreover, it is charged with supporting SMME development through the Small Business Development Policy that aims to redress structural and market imbalances inherited during the Apartheid era (Chandra et al., 2001:i).

To date, several studies reveal that support interventions are ill targeted and as such, concentrate on larger SMMEs located centrally in the Western Cape, Gauteng or KwaZulu-Natal provinces. The evidence demonstrates that access to support intervention is negatively affected by reasons related to skills, firm size, sectoral, and race factors. In addition, the lack of awareness of support programmes between firms located in urban, rural and peri-urban areas weakens the effects of SMME support interventions in general (Chandra et al., 2001:V; Kesper, 2002:7-13 and Rogerson, 2004:781).

This research explores the clustering effects of an SMME support intervention in Clairwood and Cato Manor in Durban. Alfred Marshall's theory of agglomeration (1920) cited in Schmitz and Nadvi, (1999:1504) posits firms engaged in similar activities generated a range of localised benefits. Further, the cluster international literature demonstrates that clustering of firms involved in similar or related activities, stimulate incidental localised external economies such as a shared pool of labour, access to suppliers and speciality services as well as the diffusion of new knowledge and ideas (Schmitz and Nadvi, 1999:1504-1505). Notwithstanding, it is agreed that external economies are not sufficient to explain cluster development. Forces at work in the clustering process are usually characterised by a vigorous pursuit of joint action to cope with competitive pressures in the market place. Lyberaki (1994:498) argues that the difficulties that confront SMMEs in the process of development relate to isolation in the marketplace. An attempt is made in this study to contribute to a refinement of our understanding of existing SMME support intervention in Durban. In particular, the focus of this study is to explore clustering effects of external economy linkages and joint action among SMMEs in Cato Manor and Clairwood. Joint action is examined by proxy through existing partnerships between entrepreneurs and the potential for partnerships in the future. In addition, the utilisation of cluster support structures, similarities and differences in economic activities that give rise to collective efficiency in these clusters, are included in the analysis.

# 1.2 Rationale of this Study

The significance of the role of SMMEs is high on the development agenda in South Africa. The national development objectives of employment creation and poverty alleviation rests partly on the assumption that SMMEs will drive growth and development, needed to respond to these socioeconomic challenges. However, there is a clear conflict between national development objectives and SMME growth contributions, as research demonstrates SMMEs contribute poorly to national gross domestic product (GDP) (Kesper, 2001:6-8).

In South Africa SMMEs are on the low end of the enterprise scale and often exist as survivalist enterprises with little capacity for sustained survival or growth. The majority of

SMMEs is stifled due to the tremendous capacity required to achieve critical mass in human capital development. In addition to this, organisational development resources are extremely limited among SMMEs at the bottom of the production ladder (Darroch and Clover, 2005:321).

eThekwini Municipality in KwaZulu Natal has a vested interest in promoting SMME development aligned with national SMME development priorities. SMME development in the local economy is important. It is assumed that in order to drive employment creation SMMEs support intervention is necessary given proven achievements of employment growth and production output around the world. This municipality has identified specific areas to locate and cluster SMMEs in an effort to redress socioeconomic and market imbalances. However, Morris and Robbins (2004:2) state that the role of government is under-emphasised in clusters, networking and inter-firm cooperation literature given the importance of support intervention required for fragile SMMEs. As such, the efficacy of adequate support intervention to facilitate SMME clustering is important for development.

According to Rogerson, (2004:765-782) there is a lack of targeted support intervention required to redress structural and market imbalances. He adds that SMME support is broad and generic. Added to this, Kesper's (2000:7) study finds that the support interventions emphasise institutional and regulatory reforms. She states that there is no clear indication from these initiatives whether support is target to more dynamic or survivalist enterprises. Given a lack of targeted support programmes and scarcity of data to assess the performance and development of SMMEs, it is not clear how SMMEs are going to contribute to the growth of the economy.

Consequently, it is important to deepen and refine our understanding of the extent to which SMME clusters as a support intervention mechanism promotes development in Cato Manor and Clairwood in Durban. While data from this study may not be generalised, the exploration of the effects of clustering, through an analysis of underlying factors that contribute to external economy and joint action, harnesses specific gaps and shortfalls in the markets they serve. Particularly, in the extent to which structural and market imbalances are reinforced by support interventions that are inaccessible, ill targeted and are generally too broad. It provides

a framework, whereby future research about SMME support intervention may focus on increasing knowledge of the effectiveness of the components of cluster development in Durban as a support intervention strategy for SMME development.

# 1.3 Research Aims and Objectives

The aim of this dissertation is the following:

- 1. To explore the clustering effects of external economy and joint action among SMME clusters in Clairwood and Cato Manor in Durban.
- 2. To present and analyse the cluster theoretical framework and the extent to which targeted support intervention is important in overcoming obstacles of external economy and joint action for SMME development.
- 3. To discuss South Africa's SMME policy framework in relation to SMME support interventions for SMME development.

#### 1.4 Research Questions

Research questions for this study are the following:

- 1) What are the factors that generate external economies in the clusters under study?
- 2) What is the extent of existing partnerships for joint action in the clusters under study?
- 3) What is the general attitude of entrepreneurs about future partnerships in the clusters?
- 4) What are the effects of clustering?
- 5) What are the implications of clustering support intervention for development in Cato Manor and Clairwood?

### 1.5 Research Design

The clustering literature increasingly demonstrates that cluster competitiveness is not located at the individual firm but at the collective level, where inter-firm relationships matter in the local context (Smith, 2003:18; Wu, 2005:2-3; Keeble and Nachum, 2002:67-69, Nadvi, 1999:81). This research uses a survey design to explore clustering via quantitative and qualitative analysis using indexes, Likert scales and thematic categorisation to demonstrate the effects of key factors that influence external economies as well as the level of existing partnerships and attitudes about partnerships for the future. In effect, the research design allows this study to identify and explore the underlying factors that contribute to external economies and joint action. Subsequently, it offers a framework through which the importance of a targeted clustering support intervention can be better understood for SMME development in Durban.

Respondent entrepreneurs were briefed about the study through information sessions, conducted by the researcher, with language assistance from Municipal Staff. Six municipal cluster facilities namely: Clairwood Hive, Masakhane Hive in Clairwood and Bellair Hive, Wiggins Hive, Cato Crest Container Park and Umkhumbane Entrepreneurial Support Centre (UESC) were included as part of this study. Data was collected using a questionnaire and semi-structured interviews with entrepreneurs who voluntarily agreed to participate in this study. The confidentiality of their responses was disclosed to them. The interviews were conducted on the 21<sup>st</sup> of April through to the 16<sup>th</sup> of May 2006 and lasted between forty-five minutes to one and a half hours per interview.

This research will demonstrate the significant challenges involved in achieving clustering effects. These challenges are derived from the implementation of a broad economic development strategy by local government to address poverty and SMME development in areas formerly delinked from the mainstream economy. The assumption that agglomeration of SMMEs in clusters will result in employment and SMME development is advanced to make the claim that targeted SMME support intervention to tackle the two challenges external economy and joint action to promote cluster development. An examination of the types of external economies and network linkages formed by enterprises, and the perception of

partnerships to promote clustering collective efficiency through joint action mark elements of incipient layers of an industrialisation process that requires targeted support.

# 1.6 Outline of this study

The structure of this dissertation is as follows: Chapter Two reviews the international literature on small, medium and micro enterprise cluster development and presents arguments for targeted support interventions in achieving clustering effects. Chapter Three analyses South Africa's SMME policy and research about programme performance in the regional and local settings in the light of the clustering development internationally. Chapter Four presents the methodology used to collect and analyse quantitative and qualitative data using a questionnaire. Chapter Five discusses the findings and analysis of the effects of clustering support intervention for SMMEs. Chapter Six concludes the dissertation and makes recommendations for the feasibility of targeted cluster support intervention for survivalist and micro enterprise development.

# 2 The Clustering Theoretical Framework for Small and Medium Enterprise Development

#### 2.1 Introduction

In order to understand why clustering effects are important in small, medium and micro enterprise (SMME) development in the context of Cato Manor and Clairwood in Durban, this literature review must consider the following principles. Firstly, a review of the literature is concerned with a definition of SMMEs and SMME intervention. The second section presents an analysis of the core components of the clustering theoretical framework external economies and joint action. The third section presents a synthesis to argue for the importance of targeted support intervention in overcoming obstacles to external economy and joint action in SMME cluster development.

# 2.1.1 Definition of Small, Medium and Micro Enterprise

Defining small, medium and micro enterprises is complex. Small, medium and micro enterprises are heterogeneous entities. Therefore, SMMEs concentrated in different sectors, have different criteria that set one apart from the other. Likewise, definitions in one country may be different in another (Lyberaki, 1994:500). A universal definition does not exist. However, in general the definitions of small, medium and micro enterprises (SMMEs) include indicators such as: turnover, value of assets and the number of employees that determines the size of an enterprise and rate of employment. SMME definitions allow for the measurement of performance and contribution to the economy. These figures are usually different for different sectors and, as such, official definitions may change over time and as necessary (Little, 1987:226-227).

The European Commission (EC) defines SMMEs by the number of employees. For example, firms with zero to nine employees are micro, 10-99 employees are small, and 100-499

employees are medium and 500 employees and above are large firms (d'Amboise and Muldowney, 1988:226). This means that performance is measured as employment increases or decreases in these firms. In the United States, the Small Business Association (SBA) defines small business as an entity independently owned and operated, but not dominant in its sector of operation. This definition may be applied to enterprises that are not leading financially in their respective sectors. However, this definition makes no clear distinction about medium or micro enterprises and the extent to which contribution to the economy is measured (d'Amboise and Muldowney, 1988).

Similarly, Mead (1991:410) states that the United States Agency for International Development (USAID) definition of micro enterprise includes firms with less than ten employees. Seemingly, definitions are not standard, even among institutions in the same country. In this same review by Mead (1991) of Mazumdar, Little and Page's study, manufacturing SMMEs are defined as small with 50 employees and very small with less than 10 employees. Moreover, due to the differing nature of activities and norms, capital, labour and turnover criteria cannot be usefully applied to a range of sectors that comprise the manufacturing industry in India or other developing countries to define SMMEs (Waite, 1973:155).

Definitions culminate into a set of criteria that impact a variety of sector policies and support programmes. Definitions affect the entry, exit and growth of many firms within different sectors and across countries. Snaith and Walker (2005:106) warn that policy sometimes limits its own reach by using purely numerical boundaries to define a firm's activities, missing out the boundary SMMEs that are most in need of intervention and support. He argues that the use of a diagnostic tool to facilitate a more rounded view of SMMEs offers an internal perspective on what the firm is doing – the 'why and how', rather than 'who they are' by size alone. He adds that this is a relevant factor in guiding policy prescription and performance outcomes in SMME development.

A study by the Organization for Economic Cooperation and Development (OECD) shows that the diversity and richness of SMME characteristics, political strategies and economic conditions are unlikely to ever yield a commonly used and accepted definition. Furthermore, SME intervention programmes, designed to promote small medium and micro enterprise development worldwide, warrant delimitations of productive units, within the SMME nomenclature. While agreed upon definitions for specific purposes may seem complex, it may prove useful in guiding SMME policy and prescriptions for relevant interventions and outcomes in specific contexts (Linder, 2005:10).

#### 2.1.2 Definition of SMME Intervention

The literature about SMME development demonstrates that SMME intervention may be defined as a measure of policy and programmes spearheaded by governments, universities or international agents, and guided by the macroeconomic policy environment, in response to market and non-market inefficiencies that dampen SMME growth and development (Gordon, 1978:26; Peña, 2003:224; Rossigol, 2006:192; Snaith and Walker, 2005:105).

# 2.2 Clustering

Clustering promotes co-operation and competition between firms, that are located near one another, to take advantage of a common labour pool, technologies, information and sharing of ideas; otherwise difficult to access by firms in isolation (Lyberaki, 1994:500). Altenburg and Meyer-Stamer, (1999:1693) Schmitz and Nadvi (1999:1504) refer to clustering by citing Marshall's (1920) theory of agglomeration, which states that firms engaged in similar or related activities generate a range of localized external economies, that lower costs for clustered producers. Moreover, clustering of small, medium and micro enterprises (SMMEs) is important for development because it helps overcome constraints to growth and development.

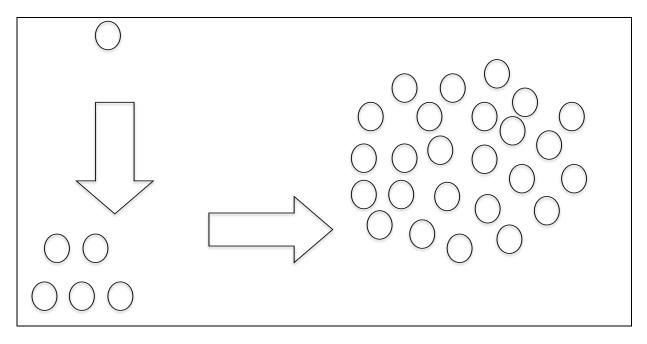
Empirical studies (Schmitz, 2000:324; Schmitz and Nadvi, 1999:1503) claim that for most developed countries, cluster formations occurred over the course of the industrialization period and are described as 'accidents of history'. While SMME clusters exist in developed countries, the clustering literature demonstrates that clustering in developing countries is significant. More recently, clustering is a vigourous alternative industrialization strategy that is primarily concerned with developing countries. Governments spearhead clustering because it is assumed that SMME will grow efficiently through lower transactions cost and generate relationships between firms to help increase learning and through cooperation (Altenburg and Meyer-Stamer, 1999:1693; Humphrey and Schmitz, 1996:1860; Leveitsky, 1996:1).

Studies in development economics and industrial organization suggest SMMEs can grow, and be competitive, through cluster formations to promote growth and development alongside large firms (Nadvi, 1999:81; Pyke and Sengenberger, 1992:4-7; Niu, 2009:445; Sonobe, Hu and Otsuka, 2002:118). However, the statistical significance of industrial production in clustering is difficult to measure. This is partly due to the fact that economic regions do not respect administrative boundaries and industrial classifications often fail to capture existing specialization known to the clustering process (Nadvi and Schmitz, 1999:1504). In the present unstable economic environments in the globalization era, SMME operations are increasingly complex and firms require access to specialist services in order to compete in markets (Helmsing, 2001:298).

# 2.3 Clustering Process

According to Altenburg and Meyer-Stamer (199:1694-1695) clustering implies a continuum in that clusters and their environments are constantly changing, such that each cluster has a specific development trajectory. While there are many types of clusters, attention is given to the clustering process because it determines the extent of external economy and joint action needed to achieve development in clusters worldwide.

Diagram 1: The clustering process



Source: Adapted from Porter, 2003:564

The diagram above illustrates the clustering process. It shows that a cluster originates from an individual firm, whose choice of location near groups of firms engaged in similar and complementary activities intuitively generates opportunities for other firms engaged in the same or similar activities to locate in the same milieu. The increased interaction between firms generates collective efficiency from shared information, learning, knowledge and cooperation (Weijland, 1999:1519).

In clustering, collective efficiency emanates from positive external economies, reductions in input costs and joint action. This outcome in clusters promotes growth and development of clusters and stems from a common set of values embedded in the local milieu of local actors that facilitates trust. In addition, positive externalities give rise to a specific knowledge base, generated in clusters, wherein dissemination of this knowledge filters from various important parts in the cluster chain, such as, links to suppliers of raw materials and other inputs, technology and specialised skills. The advantage of the clustering process is in the ability of agglomerated enterprises to jointly pursue business opportunities. This helps to complement

inefficiencies and counteract competitive pressures (Keeble and Nachum, 2002:85; Schmitz and Nadvi, 1999:1504-1505).

#### 2.3.1 Cluster Definition

According to Altenburg and Meyer-Stamer (1999:1694) a cluster is an agglomeration of firms in a spatially delimited area. They add that clusters usually have a distinctive specialization profile in which inter-firm specialization and trade is substantial. Similarly, Rosenfeld, (2002:2) states that a cluster is "a geographically bounded concentration of similar, related or complementary businesses, with active channels for business transactions, communications and dialogue, that share specialized infrastructures, labour markets and services and that are faced with common opportunities and threats".

Furthermore, implicit in the definition of a cluster is the local business and economic forces, intertwined in a dense socio-cultural fabric, based on shared cultural norms and values embedded in a wide network of institutions, that facilitate dissemination of information, knowledge and innovation that give rise to external economies and joint action (Altenburg and Meyer-Stamer, 1999:1694; Schmitz, 2000:334-335).

#### 2.4 Determinants of the Cluster Growth Path

According to Bremen (Uzor, 2004:9) growth of external economies and joint action are in part determined by five major factors: (1) Size of the market and nature of products. (2) The stock of economies of scale and scope. (3) The rate of upgrading. (4) The nature of supporting institutions and (5) the form of collective efficiency.

#### 2.4.1 Size of the Market and Nature of Products

The size of the market is basically the number of participants and the geographical spread. Market size is an important factor in cluster development because the scale of product demand is determined by the rate of growth of the producer (Uzor, 2004:9).

The quality of the products offered to final consumer plays an important role to the growth of clusters. The traditional quality standard of any product is measured by the value of the products' characteristics. This implies that the durability, the reliability, and the conformity to specification and safety standards of the products are considered as important criteria. In recent times, the issue of product quality shifted to ensure the quality of end product. Also being able to verify the quality control process used, and the quality values installed at each and every stage of production (Uzor, 2004:9-10 paraphrases Nadvi, 1999; Kaplinsky and Readman, 2001). Moreover, product quality is a function of process and functional upgrading. It implies efficiency that the product quality is raised through better application of input factors and management and that firms can provide documented, verifiable and acceptable quality assurance for their buyers on the other (Uzor, 2004:10).

# 2.4.2 The Stock of Economies of Scale and Scope

The ability to penetrate larger markets is important in the process of cluster growth and development. Essentially, there are factors that cause a producer's average cost per unit to decrease as the scale of output is increased in the long term. Additionally, it is assumed that increasing the market base proportionately increases the productivity as well as increasing returns to scale. Implied is that increasing returns to scale can trigger scope for the production of more than one product. The stocks of economies of scale that induce increasing returns are measured by the ability of firms to penetrate more markets and to acquire more capital goods, effective managerial skills and opportunity to diversify products through the division of labour in the production process (Uzor, 2004:11).

The term economies of scope arise due to efficiency of a firm to engage in the production of more than one product, successively. Economies of scope make product diversification efficient if they are based on the common and recurrent use of proprietary knowledge with the least possible output costs (Panzar, and Willig, 1977:481 cited in Uzor, 2004:11).

# 2.4.3 The Rate of Upgrading

The rate of upgrading is important for firms. It is based on the rationale that increasing market share or control cannot sustain the profitability of small business clusters in the long run. Sustainability in the long run is a function of a firm's internal learning processes that allows firms to acquire comparative advantage or competitiveness, which is important in increasing market share. Related to a firm's comparative advantage is the specific path chosen by firms in the production process that allows for a quicker rate of upgrading than its competitors. Furthermore, upgrading processes are systemic in nature and are achieved effectively when firms are linked together in a value chain. In order to understand upgrading it is equally important to understand the concept of value chain. Although this research does not delve into value chain, the relationship between value chain and upgrading are based on identifying key problems in entire production organisation as well as the methods through which upgrading can occur (Uzor, 2004:11-12).

# 2.4.4 The Nature of Institutions in supporting the Cluster

Clustering promotes economic exchange. As such, it is important that a third party is present to support transactions. Institutions are embedded in the factors that influence cluster development and the quality of exchange in production. Related to this, institutions play an important role not only in clusters but also in the development process at large. In order to understand the role of institution in supporting the cluster, it is important to link the concept to social capital (Uzor, 2004:13).

Paraphraising Burt, (1992) and Putnam, (1993), Uzor (2004) state that social capital is defined as a capital jointly owned by the parties in relationship and is not divisible. None of the parties in a collective have exclusive right of ownership of the capital. It is the final arbiter of competitive relations, because it generates positive interactions within a firm, among groups of firms and within an industrial district in order to reduce transaction costs and propagate growth. It is a critical variable that influences the mobilisation of other factors of production such as, financial capital, labour and the production of public goods for the benefit of cluster members. Furthermore, it is defined as the mutual cooperation between firms that sustains the survival of economic relations, repeated market transactions and in inter-firm transactions in an industrial cluster that gives rise to external economies (Gambetta, 1988 and Barr, 2001 in Uzor, 2004:13-14).

#### 2.5 External Economies

Accordingly, Schmitz and Nadvi (1999:1503) cite Marshall's (1920) theory of agglomeration which states that small firms, in similar or related activities in a local setting, can compete, based on external economies, derived from reduced costs. On the demand side, external economies generate market coordination and increased inter-firm interaction, based on cooperation from a shared knowledge base originating from socio-cultural networks and institutions. Access to these inputs induces a reduction in transaction costs and increases market share for local producers. On the supply side, external economies may be generated from access to an increased variety of localized factor inputs, innovation technologies and technical change in subsidiary or related industries (vertical linkages) of technology (Bennett et al., 1999:393-396).

Given the complexity of patterns of interactions in clusters, the cluster literature emphasises external economies are usually derived from nonmeasureable variables such as, trust, network links and related socio-cultural values whose embeddedness (Altenburg and Meyer-Stamer, 1999:1696). The findings from a study in Coimbatore, India by Pillai (2000:1407) demonstrate the complexity of external economy relationships between SMME pump

manufacturers and SMME subcontractors who operate in a relatively old industry with deep relational ties spanning decades. The manufacturers revolutionised how water in the farming and related sector can be pumped from the depths of the earth using electricity as opposed to diesel or animal-powered lifting devices used in the early twentieth century. However, in the 1980s, their longstanding relationship spiralled when a decline in demand for locally produced water pumps was triggered by an increase in demand for imported pumps with better suction power and quality. Manufactures suffered losses in sales of pumps. Subcontractors received less orders to process and relations weakened between the two. With less demand for local pumps, the bargaining power of component and logistics subcontractors declined. The manufacturers pressured subcontractors to lower their rates in order to compete in the local market. External economies deteriorated and a positive history of relations in the clusters was now marked by interaction and relationship links based on kinship ties, caste and related factors (Pillai, 2000:4212).

Indeed, external economies are clearly important in the clustering process. However, the patterns of external economy are complex and vary across sectors and regions. The literature suggests that external economies are prevalent among clusters learning and upgrading processes or products. In a study by Giuliani, Pietrobelli and Rabellotti, (2005:557) using Likert Scales to quantify external economies in four clusters in Mexico, the findings reveal that there is a high level or 8.2 average score for positive external economies in natural resource based clusters (sugar, tobacco) because a crucial role is played in collective initiatives involving industry and government players. Whereas, in the traditional (shoes and apparel) clusters, an average of 6.31 score, and in complex (electronics, aeronautical components) sector average 6.19 and specialised products (software) sectors average 8.7 score for positive external economies. In these sectors, the factors that dictate external economies in the latter clusters are dependent upon SMMEs finding the resources to upgrade. Upgrades of the respective products in the clusters require processes that demand the circulation of information, knowledge and the transfer of specialised skills that enhance external economies.

Empirical evidence in industrial clustering suggests external economies are generated in part by governance systems in economic transactions across a variety of clustering industries which influences the coordination of activities including networks, markets and firms, (Humphrey and Schmitz, 2002:3) This steering of activities within and between firms can also involve public actors and cooperation between public and private actors to improve access to quality inputs and services, innovation as well as the capabilities of clusters to cope with change in the global environment (Altenburg and Meyer-Stamer, 1999: 1696-1697; Giuliani, Pietrobelli and Rabellotti, 2005:556-557; Pillai, 2000:4207 and Keeble and Nachum, 2002:85-87).

Levitsky (1996:10-12) argues that 'flexible specialisation' - a term given to a new alternative to 'mass production', based on the flexible use of general purpose machinery by skilled workers in smaller firms who, by working together, are thus able to manufacture a range of products for changing markets in sub-sectors. This level of organisation promotes governance at sub-sectoral levels because it compels actors to cooperate. Furthermore, it achieves collective efficiency that increases the capability of clusters to innovate and access markets and related resources. Moreover, increased external economies are derived from pressures of the market forcing cooperation towards innovation or through initiated 'collective actions' to facilitate expansion into international markets (Levitsky, 1996:11).

Seemingly, creating external economies in clustering has become a purposeful effort that demands its actors to engage in the circulation of information, knowledge, cooperation and the transfer of specialised skills in a specific milieu with outcomes of collective participation, learning and innovation. The case material discussed with regard to the water pump manufacturers and subcontractors and the traditional clusters in Mexico demonstrate that external economies are important for cluster development. In addition, the institutional environment of networks such as, bargaining associations; engineering training programmes at universities and investments from multinationals in Mexico can prove conducive to cluster expansion through joint action (Giuliani, Pietrobelli and Rabellotti, 2005:557).

#### 2.6 Joint Action

According to the industrial cluster literature, external economies are not sufficient to explain cluster development (Helmsing, 2001:281; Schmitz and Nadvi, 1999:1504). McCormick, 1999:1539) explains that despite the benefits of agglomeration economies, there is a risk in clustering that involves stagnation at low levels of production and distribution. Empirical evidence demonstrates that clusters that consciously engage in the pursuit of joint action gain significantly due to their ability to deal with external shocks, as compared with the gains in external economies in clusters (Schmitz and Nadvi, 1999:1503; Humphrey and Schmitz, 1996:1863). Joint action can be of two types. The first type involves individual firms cooperating (for example, sharing equipment or developing a new product) and the second involves groups of firms joining forces in business associations, producer consortia and the like (Humphrey and Schmitz, 1996:1863).

According to Humphrey and Schmitz (2002:3) the industrial literature in the 1990s focused on technological development in the local context that compelled SMMEs within clusters to conform to learning by interaction. Furthermore, increasing competition from exports force clusters to restructure their production processes and upgrade products that required using new technologies. Although SMME clusters locked into a particular mode of production lack access to the means required upgrading, usually, these clusters suffer losses and exit the market. However, SMME clusters that manage to survive in spite of increasing demands from global buyers for cheaper products, higher quality, and shorter lead times through a conscious pursuit of joint action (Levitsky, 1996:12-13; Schmitz, 2000:327).

SMME clusters involved in joint action are confronted with additional pressures to meet international labour and environmental standards. As such, local industrial cluster adjustments, arising from global challenges, can have significant local effects, that have far reaching structural changes, which shape cluster trajectories, as in the experiences of Indonesia, India among others (Altenburg and Stamer-Meyer, 1999:1695; Lall, 2000:3-6; Nadvi and Thoburn, 2004:112 and Smith, 2003:17).

In Kennedy's (1999:1674-1690) case study about the survival of SMME tannery clusters in Palar Valley in India, demonstrates that in 1973, a shift in government policy to redress a pollution crisis in the tannery industry involved phasing out raw and semi-finished hides and skins over a twenty-year period. This shift triggered a collective response by local SMME cluster tanners and had significant effects to the current industrial structure of the tannery industry. Joint action is proven to influence the path of future cluster development in relation to how the pollution crisis was tackled through the upgrade of processes as well as products to promote finished leather and related products for the export market.

Further to this, Kennedy (1999:1690) states that these local tannery clusters were forced to upgrade production to meet international standards in areas such as the environment, quality, labour conditions and ethics. In order to survive, local tanners jointly built common effluent treatment plants (CETPs) to redress the pollution crisis and to sanitise raw hides and leather. Furthermore, clusters with modern plant equipment were able to sustain operations through extensive horizontal cooperation (from use of common CETPs) that increase interaction between SMME clusters and increased specialized sub-contracting arrangements to increase quality of exports.

In addition, a collective response to the pollution crisis has challenges with respect to quality and quantity of effluent released by each cluster tannery. Changes in the improvement of the pollution crisis spurred cluster upgrading and forged new institutional relations and levels of accountability between private and public actors. Joint action between a local professional body, government and local tanners associations was achieved to enforce cooperation, monitoring and compliance or risk dampening prospects for the viability of common effluent

treatment plants toward increasing economic development prospects in leather exports for the local economy.

Joint action is embedded in social networks. According to Smith (2003:29) it is difficult to generalize the extent of power relations in the clusters. He states that joint efforts may be mediated by negotiated contracts, irrespective of the types of contracting relations that often put emphasis on low-cost, outward processing in clusters. In practice, he states that production plants engage in uneven flows of value underpinned by uneven power relations within and outside clusters. To illustrate, Smith (2003:30-32) states that cluster firms in Slovakia, with over 200 employees, produce trousers for the German market and estimate a turnover of 340,000 pairs of trousers per annum. It is estimated that nearly 90 percent of the sales value accrues to the German merchandiser, contractor and retailers. An estimated 15 percent is paid to the contracting firm in the Slovak cluster, of which, approximately 4 percent is paid in wages to the employees or production workers and managers. Clearly, cluster networks relations underpinned by a joint effort to supply Western retailers have locked Eastern clothing producers in clusters throughout the region to compete on the basis of price. Thus, there is a real risk of dampening relations between joint actors in regional clusters in Slovakia and their Western buyer from low cost production zones in Asia.

The cluster literature demonstrates that joint action is important for cluster development because it creates opportunities for upgrade and expansion of local SMME clusters to reach beyond local markets (Humphrey and Schmitz, 2002: Kennedy, 1999:1673). However, joint action is selective and particularly higher for specialised suppliers in clusters as shown in the Indian and Slovakian cases as well as in Mexican clusters, (see Giuliana, Pietrobelli and Rabellotti, 2005:557).

The industrial cluster literature demonstrates that joint action is difficult to achieve. Moreover, joint action is closely linked to upgrading products and processes in clusters. Joint action has different impacts that follow different trajectories in different sectors (Giuliani, Pietrobelli and Rabellotti, 2005:561). This is an important factor in cluster development and involves a dynamic set of relationships that are underpinned by external economies and embedded in social networks and institutions that present different types of opportunities as well as threats from the various types of arrangements, as discussed above (Smith, 2003:17).

In addition, equally important in joint action is level of collective efficiency, in terms of cooperation between actors at local and global levels (Levitsky, 1996:11). This determines the 'high road' of dynamic efficiency or 'low road' of weak competition and low innovation in clusters. The macroeconomic policy context has implications for the performance of clusters at subsectoral levels (Pallai, 2000:4214). He illustrates that a reduction of investment in irrigation and sewerage systems can have ripple effects for pump manufacturers, subcontractors and related industries. Hence, the macroeconomic context enables competitive advantages of actors and is linked directly to the performance of clusters in the local context.

So in this way, along the continuum of clustering collective advantages gained from external economies and joint action may be directed to more meaningful development trajectories within a particular local context. As such, targeted cluster intervention to clustered SMMEs can create opportunities for less dynamic SMMEs to escape from low wage and underperformance traps (Altenburg and Meyer-Stamer, 1999:1693-1694; Krugman, 1997:98; Niu, 2009:445; Smith, 2003:17; Otsuka, 2002:118; Uzor, O.O., von Andreas K., Lemper, A., Axel, S., Wohlmuth, K, 2004:7).

The next section discusses the importance of targeted support intervention in clustering to promote external economy and joint action.

# 2.7 The Importance of Targeted Support Interventions for Small, Medium and Micro Enterprise Clusters for Development

A striking feature in the SMME development literature is their astounding resilience to burgeon, grow and adapt in times of cyclical or long-term economic recession. This phenomenon is often attributed to the fact that SMMEs are characterized as vibrant, competitive, risk-taking and innovative, making them suitable agents for initiating development and change (Mulhern, 1995:82). The industrial cluster literature demonstrates that SMMEs in clusters worldwide succeed in clustering through external economy and joint action. However, the positive outcomes of external economy and joint action do not preclude clusters an automatic outcome. Moreover, SMME clusters face competition largely from outside the cluster that constrains the clustering process at a subsectoral level in differing contexts that justifies support intervention for clusters irrespective of the level of cluster development (McCormick, 1999:1548; Pallai, 2000:4214 and Weijland, 1999:1515).

There is a longstanding interest by policymakers in both developed and developing countries irrespective of a country's stage of economic development, to lend support to SMMEs because they boost employment for a given investment of scarce capital (Levitsky, 1996:1-2). In the 1950s through 1960s, many countries copied the Indian Model of SMME support until the 1990s when overwhelming empirical evidence from the Italian Industrial Districts suggests clustering enables SMMEs to grow and upgrade easily (Helmsing, 2001:278; Levitsky, 1996:3). In particular, policymakers promote clustering among SMMEs to increase externalities of learning through inter-firm interaction that increase access to resources of information, skills from labour and technology. It is argued that this support creates an enabling environment for SMMEs in clusters and wider economic development (Altenburg and Meyer-Stamer, 1999:1693).

However, there is a broad consensus that clustering SMMEs does not directly preclude an automatic outcome of linkages from cooperation to overcome growth constraints related to competition, technology upgrade and process innovation (Giuliani, Pietrobelli and Rabellotti,

2005:551; Levy, 1994: 1-2; Schmitz and Nadvi, 1999:1503). As such, targeted intervention support policy and programmes can influence SMME support as a vehicle to boost the industrialization process (Altenburg and Meyer-Stamer, 1999:1693). More recently, international aid organizations as well as policymakers share a consensus that in the context of globalization and specialist demands,

Empirical evidence suggests that clustering patterns vary by sector and context, and develop for different reasons. Nadvi (1999:82) draws from case material about Pakistan's surgical steel clusters that systematically mustered exogenous support to compete and acquire one fifth of market share in German and other global markets. He states that evidence from the ground show that employment levels increased and sixty percent of firms cited major achievements in quality standards. Deliberate efforts by government and industry have important implications for cluster upgrading, which can influence firm-size, structure and determine growth trajectories. Hence, clustering as an alternative industrialization strategy can promote cluster-upgrading programmes, particularly through targeted efforts, as in Pakistan's SMME surgical steel manufacturers and Export Processing Zones (EPZs) in the New Industrializing Countries (NICs) of Asia. This is noted in the prevalence of different types of clusters in Asia and now also in Latin America and Africa as well as in other developing countries (Giuliani, Pietrobelli and Rabellotti, 2005:557).

Moreover, the proliferation of SMME clusters in less developed areas in Latin America and Africa may be explained as supply driven employment growth, Mead 1994, cited in Altenburg and Meyer-Stamer (1999:1696). This clustering phenomenon stems from a lack of employment opportunities that affect particular regional areas or small towns in poorly developed areas. Surveys of clusters in Costa Rica, Mexico and Honduras revealed that all cluster entrepreneurs learned their craft outside their cluster location, started a business and trained family members, Hanson, (1991) and Knorringa, (1997) cited in Altenburg and Meyer-Stamer, (1999:1696-1697).

Research suggests that while clustering development patterns vary; trajectories and outcomes are highly differentiated. Even so, it is important to note that dynamic and innovative clusters warrant support intervention to facilitate joint action for international trade, as in the case of

Pakistan's surgical clusters. Similarly, support intervention for less dynamic clustering activities in other developing countries such as Mexico, aim to focus on sector-specific services of information dissemination for SMMEs embedded in poorly resourced regions or towns, thereby, increasing access to external economies that are much needed compared to competitive clusters (Altenburg and Meyer-Stamer, 1999:1697-1698).

Gordon (1978:23-24) argues that a re-examination of SMME policy must tackle distortions in fiscal, pricing and investment policies that hinder efficient allocation of resources. Oftentimes, the opportunities for intervention serve as a response to the demands of SMMEs in the local or regional milieu. The increased interest of in clustering SMMEs serves to generate inter-firm networks, and information dissemination rather than isolate SMMEs in the marketplace (Altenburg and Meyer Stamer, 1999:1698 and Nauwelaers and Wintjes, 2003:203).

The reasons for targeted SMME support intervention vary because particular challenges that trigger intervention have different performance outcomes. Further, the outcomes of SMMEs in one programme may be different to SMMEs in another. McCormick (1999:1531-1532) states that targeted intervention in clusters is relevant to the stage of industrialization and context specific factors across a variety of sectors in different countries. As such, how SMMEs in clusters respond to the challenges inherent in clustering development helps to justify opportunities to make inroads to promote cohesion, and economies of scale (Cowling and Clay, 2005:141; Nadvi, 1999:81 and Weijland, 1999: 1527).

Weijland (1999: 1527-1528) shed light on justification for targeted intervention in Indonesia where government stimulated the rural cotton industry clusters to encourage industrial development and at the same time alleviate poverty. The findings from her study show that sub-sectoral clustering prospects differ widely. Subsectors with stagnant markets, low technology levels and low barriers to entry tend to get overcrowded, thereby eroding individual benefits of clustering in one particular group. In addition, she states that while building viable clusters would not always require intensive guidance, attention was drawn to a food subsector that had relatively self-sufficient enterprises which enjoyed the passive search

and reach effects of clustering, but had gained little from joint production and marketing. If they clustered, they would need relatively little government intervention.

On the other hand, clusters such as garment making has substantial indivisibility problems. This is due to the limited scope that exists for producing a set number of garments using one or more of the same machines that may not generate sufficient economic effects. As such, there is a need for intensive intervention assistance with the capital technology used to make garments to increase production to reach a wider market (Weijland (1999: 1530). Herein, implies an important component of this type of targeted intervention addresses upgrading for efficiency and better quality products. The knowledge transfer process for new technology involves learning and strikes a cord with concepts of cohesion and interfirm linkages that are crucial in clustering. Giuliani, Pietrobelli and Rabellotti (2005:553) argue that support to upgrade functionally and inter-sectorally address the process of tacit knowledge accumulation from building social capital.

In this way, a number of subsector specific policies may be formulated with varying emphasis. Some policies may target upgrading equipment and learning processes, group cohesion, marketing or finance. Moreover, Weijland, (1999:1530) adds that targeted intervention is important in promoting cluster development, particularly, to draw marginal enterprises away from supply-push activities and to assist them to overcome collectively the high barriers to entry of more promising lines of production.

Moreover, the importance of targeted support intervention in SMME clustering helps to steer cluster trajectories towards greater cooperation in specific activities with actors outside clusters, toward outcomes of innovation and quality at the subsectoral level where performance matters (Schmitz, 2000:323-324).

#### 2.8 Conclusion

This section demonstrated that clustering is anchored in the theory of agglomeration. It explains that clustering SMMEs is advantageous due to the closeness of related firms in

proximity. Particularly, the advantages of clustering are important for SMME development, because external economy linkages generate interfirm cooperation. The empirical evidence shows that the potential for SMME development beyond local markets can be achieved through targeted interventions by industry or government to achieve performance outcomes of innovation and cluster upgrade through the conscious pursuit of joint action. In addition, institutions embedded in local contexts can influence cluster development and upgrade by empowering local firms, explicitly setting up codes of practice and laws to induce favorable outcomes for SMME. Further, clustering is a dynamic process, in which collective efficiency is achieved through leveraging positive external economies and joint action from inter-firm co-operation, trust and mutual dependency between SMMEs.

The purpose of this literature review was to demonstrate the importance of targeted SMME support interventions within the cluster framework to counteract particular market and non-market constraints that are often associated with the failure of SMMEs in isolation.

Firstly, while the literature on the theoretical framework for clustering sheds light on the process and dynamics of external economy and joint action, there needs to be research that explores incipient clusters' external economies and joint action at the subsector level. This is important since SMME clustering is a deliberate action pursued by policymakers globally. It helps to generalise in related sectors and justify areas of SMME support interventions, particularly, in transition economies, to begin to meaningfully explain and theorise clustering SMMEs to promote development.

# 3 Small, Medium and Micro Enterprise in South Africa

#### 3.1 Introduction

This chapter connects the previous chapter in its review of the literature on SMME policy. Firstly, it examines the link between pre-transition and the reasons for the lack of performance that characterises the majority of South Africa's SMMEs. Secondly, a definition of SMME in the South African context is revealed. Thirdly, an analysis of the gist of South Africa's SMME policy is reviewed, and a critique of the national SMME policy framework and its related support interventions proffered, to promote SMME growth and development. This is linked to the performance in the regional and local economy. Fourthly, a brief socioeconomic profile of Clairwood and Cato Manor that highlight the cluster areas that are involved in the incipient agglomeration economies of external economies and joint action.

# 3.2 Apartheid and Small, Medium and Micro Enterprise development

Under the Apartheid system, non-whites were excluded from access to high quality education and ownership of financial and property resources (Berry et al. 2002:25). As such, business legislation strictly prohibited ownership of enterprises by non-white population groups (Skinner, 2006:130). Furthermore, according to Skinner, (2002:17) the Black Urban Areas Consolidation Act (Act 25 of 1945) and the Group Areas Act (Act 36 of 1966) restricted the right of non-white entrepreneurs to establish and operate businesses in important parts of the economy. Apartheid legalisation limited the range of goods that could be sold and blocked the formation of companies by non-whites. In addition, a plethora of bureaucratic processes discouraged entrepreneurs from registering their businesses. For instance, a case study conducted in 1988 of informal activities in Khayelitsha, Cape Town, estimated that there were 40 statutory procedures that had to be completed in order to register a business legally (Desmidt, quoted in Standing, 1996:87). The legislative restrictions, combined with the limited opportunities in the formal sector, meant that many people were forced to operate

informally. The restrictive environment, in which they had to operate, however, has meant that these businesses were largely of a survivalist nature. Although there was a relaxation of legislation in the late 1980s and early 1990s, Apartheid history has impacted the nature and extent of small, micro and medium enterprise development in different in areas throughout the country.

SMME contributions to the economy are poor due to the nature of racial distortions in education and business and the political disenfranchisement of non-whites, created a dual economy. The formal sector was associated with high productivity and the informal sector associated with informal businesses and non-white owned enterprises. From the experience of pre-1994, a tendency emerged which favoured big business and discouraged business ownership by blacks. Moreover, it is known that the Apartheid State forcefully undermined black owned enterprise development and therefore stifled competition outright in "white" areas (Rogerson and Rogerson, 1997:89).

The primary focus of government's industrial policy framework centred on low to medium skill industries, such as the primary manufacturing and service sectors. Evidence shows that the fundamental constraint to industrialisation was the inadequate productive capabilities of firms (DTI, 2007:2). Lack of productive capabilities alluded to a shortage of skilled labour, access to credit, finance or outdated technology. In a study, conducted on SMMEs in the greater Johannesburg area, Chandra et al., (2000: 33) findings reveal that when credit was a problem for entrepreneurs, it was related to firm size, age, and the race of the owner. The link between pre-transition and SMME development rests upon racial distortions marked by poor productive capabilities among SMME entrepreneurs. These shortcomings in the South African economy are characterised by a dualistic economy divided along racial lines. The first economy consists of skilled workers with high productivity levels compared with the second economy whose workers are unskilled with low productivity levels. The majority of black South Africans operate in the second economy, also called the informal economy.

## 3.3 Definition of Small, Medium and Micro Enterprise in South Africa

In South Africa, small, micro and medium enterprises (SMMEs) comprise a wide spectrum of firms that differ in size, structure, sector, legal construction and types of economic activity. The National Small Business Act (102 of 1996) defines four categories of firms, which include survivalist enterprises, micro, small, and medium enterprises.

Table 1: South Africa's SMME Categories

Category of SMME	Description	
Survivalist enterprises	Enterprises operating in the informal sector of the economy Mainly by unemployed individuals. Income is generated below the poverty line. Opportunities for growing the business are very small.	
Micro enterprises	Micro enterprises usually operate informally having no license, formal business premises or labour legislation. One to five employees and turnover below the VAT registration level of R300 000 per year. Employees have basic business skills and training. There is some potential to make the transition to a viable formal small business.	
Very small enterprises	Located in the formal economy. Less than 10 paid employees. Include self-employed artisans (electricians, plumbers) and professionals.	
Small enterprises	More established than very small enterprises, formal and registered, fixed business premises. Less than 100 employees. Owner managed, but more complex management structure.	
Medium enterprises	Still mainly owner managed, but decentralised management structure with division of labour up to 200 employees. Medium enterprises operate from fixed premises with all formal requirements.	
Note: Women represent approximately 56 percent of the survivalist company category, 38 percent of micro-enterprises with no employees, and 15 percent of micro-enterprises with 1-4 employees.		

Source: (Education and Training Unit, no date).

The summary description of SMMEs presented in the table above, was formed by number of employees, types of operations and turnover levels. SMMEs may be divided between established formal SMMEs (mainly white and some Indian ownership) in predominantly

urban settings and the emerging SMME economy (mainly African and Coloured), situated in townships, informal settlements and rural areas. According to the White Paper, by far the largest sector is the survivalist enterprise sector. This means that most people are active in the informal sector where they have little institutional support.

According to Berry et al. (2006:1) SMMEs encompass a very broad range of firms, from established traditional family businesses, employing over a hundred people (medium-sized enterprises) down to the survivalist self-employed, from the poorest layers of the population (informal microenterprises). Indeed, the upper end of the range is comparable to the small, micro and medium sized enterprises (SMME) population of developed countries. Statistics reveal that the majority of SMMEs are concentrated on the very lowest end and are primarily black survivalist firms. SMMEs are classified by the Standard Industrial Classification Codes (SIC) with a bewildering number of sectors, sub-sectors and differentiating criteria. For example, the definition of a small firm in the Agricultural Sector is defined as a firm with less than 50 employees, less than 2 million rand annual turnover and total gross assets of less than 2 million rand. Similarly, a small firm in the Manufacturing Sector is defined as one with less than 50 employees, less than 10 million rand annual turnover and a total gross asset value of 3.75 million rand (Small Business Act 102 of 1996). The table below presents the criteria for classification of SMMEs established by the International Standard Industrialisation Classification Codes (ISIC) adopted by South African government.

Table 2: SMME Definition by Industry

Sector or Sub-sector	Size/Class	Total Employees	Total Turnover	Gross Asseti
Manufacturing	Medium	200	R 51 m	R 19 m
	Small	50	R 13 m	R 5 m
	Very small	20	R 5 m	R 2 m
	Micro	5	R 0.20 m	R 0.10 m

Source: Small Business Act 102 of 1996.

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<sup>&</sup>lt;sup>1</sup> Excluding fixed property.

The categorisation of SMMEs allows for the quantification of a myriad of economic indicators to allow for strategic guidance in policy formation, as well as comparability of data, by the national statistical agency, Statistics South Africa (SSA).

## 3.4 South Africa's Small, Medium and Micro Enterprise Policy

South Africa's small, medium and micro enterprises (SMMEs) is supported by a macroeconomic policy framework that assumes importance in the role as of driver of employment creation, income generation and improvements in global competitiveness. These objectives are anchored in the Accelerated Sector Growth Initiative of South Africa (ASGISA) and the Growth, Employment and Redistribution (GEAR) macro-economic strategy, the 1995 White Paper on National Strategy for Development and Promotion of Small Business in South Africa and the Small Business Act of 1997 revised from 1996.

Allied to this, the purpose of the SMME strategic and regulatory framework is to create an enabling environment for a dynamic SMME economy, through continual revision of laws that stifle SMME growth and economic development, with a scope to redress the inherited Apartheid legacy. Skinner (2002:18) argues that current national government policy highlights concrete proposals with respect to all SMME categories, except that of survivalists enterprises. In addition, the Green Paper on Public Sector Procurement, (Notice 691 of 1997) simplified tendering procedures to allow previously disadvantaged SMMEs access, to compete for tenders through its SMME participation programme, facilitated by the Department of Trade and Industry (DTI) (Rogerson, 2004:766-767).

# 3.5 Critique of SMME Policy for SMME Support Interventions

SMME policy framework acknowledges the importance of SMMEs as drivers of development. However, the extent of its role is undermined by the lack of adequate and relevant support interventions, targeted at various sectors and types of SMMEs within these subsectors. According to Rogerson (2005) over the past decade, SMME interventions have been characterised as 'one size fits all'. This generic approach failed to tackle constraints of

SMME sectors, due to the undifferentiated nature of the support programmes (Rogerson, 2005:623). For example, there is no distinction between dynamic firms on the one hand and survivalist, micro, small or medium enterprises on the other hand (Kesper, 2001:176). Rabellotti's (2000:180) review of Leidholm and Mead 1999, study of micro and small enterprises in Africa, argues that while newly established businesses and non-growing enterprises are important for their contributions to poverty alleviation, job creation and in providing a survival income to households, these different types of enterprises have different needs and should be supported in different ways.

Moreover, these studies find that SMME policy objectives are divergent and pose serious challenges to the policy instruments required to lessen constraints facing SMMEs. For instance, the objective of job creation is not specifically addressed in the SMME programmes implemented by non-governmental organisations. Job creation performance of manufacturing SMMEs highlights that few firms increase capacity by employing more workers. In fact, research shows that manufacturing firms, with an increase in revenue, prefer to replace labour with capital equipment to increase productivity. Research evidence strongly argues for specific sector support interventions that promote separate development, based on the sound understanding of problems and opportunities that exist along the development paths of SMMEs (Rogerson, 2005:636).

# 3.5.1 Critique of SMME Policy Related to Support Interventions at Regional and Local Level

In the light of SMME development policy, SMME development is stifled in part by the failure of adequate prioritisation of support intervention programmes, implemented by institutional agents administering SMME support programmes. In relation to this, performance studies tend to categorise SMMEs into two groups in the context of upgrading emerging and supporting established SMMEs in the post-Apartheid era. Key findings reveal that the objectives of employment and economic growth fall short of providing an enabling environment for SMMEs (Kaplan, 2003:2; Kesper 2001:177; Rogerson and Rogerson (2006:55, 2004:768). Kesper (2001:174-177) argues that there is no clear differentiation

between intervention support to dynamic firms on the one hand and survivalist activities on the other, and this compounds issues of access to support.

According to Chandra et al., (2001:3) South African macroeconomic policy and practice suggest there is commitment to engage in pro-poor and pro-growth approaches to achieve socio-economic growth and market competitiveness, but prioritising one over the other merely results in more pro-poor rhetoric than practice on the ground. Moreover, research findings on emergent and established firms evince a dismal picture, specifically in terms of the capacity of firms to perform in alignment with the supply-side business support interventions. Furthermore, research studies about the performance of both emerging and established SMMEs show that SMMEs have not been able to grow since 1994. In particular, established SMME entrepreneurs are pressured to choose between capital investment that may be borrowed to expand operations, or increase profits to employ additional manpower, on a temporary or permanent basis. The picture that emerges is that established SMMEs diminished operations over the years, match their market size or developed niche markets due to a lack of increase in sales and profits.

Allied to this, Kesper (2001:197-198) argues that the research findings demonstrate the weak internal competencies of firms such as, quality control and production organisation, as seen among manufacturing firms in the Western Cape, Vaal Triangle and Gauteng. Hence, firms have reorganised operations based on 'just in time' (JIT) processes, thereby sub-contracting the workload to employees or to other firms and replacing labour with capital. In addition, firms sub-contract work to home based workers to circumvent what they perceive as inflexible and costly labour regulations or rigidities, thereby proliferating in formalization within the Formal Sector, alluding to its lack of absorptive capacity (Kesper, 2001:196).

Furthermore, SMME support interventions, aligned with the national and SMME policy frameworks, seriously lack focus in promoting SMME development. Rogerson (2006: 77) and Skinner (2006:145) show that a major constraint of emerging enterprises in their start-up and operational phases is that firms are institutionally isolated. This impacts access to business development services such as training and finance from commercial banks, et cetera, and highlights the lack of prioritisation of support programmes, across different localities as well

as information dissemination of existing intervention support programmes to support SMMEs. This is a striking feature emerging from studies about emerging enterprises across South Africa (Berry et al. 2002:39-40).

## 3.6 Case Study: Profile of Clairwood

#### 3.6.1 The context of Clairwood

Clairwood is situated in the South Industrial Basin (SIB) located approximately ten kilometres from Durban's central business district (CBD) along the M4, one of the main arterial routes in the South of eThekweni Municipality (referred to as 'the municipality') in the KwaZulu-Natal province. Clairwood is known as a heavy industrial area and is linked to nearby industrial areas of Jacobs and Mobeni about one kilometre to the Southwest. It is interspersed with a residential component of 4,940 people (eThekweni Municipality, Planning Unit, n.d.).

The Table 1 below shows that Clairwood is largely comprised of Black and Indian residents, fifty-nine and thirty seven percent, respectively. Out of the total population, fifty percent of residents between the ages of 15-34 comprise the largest age group. This age group is followed by twenty seven percent of residents between ages 35-64. The youth population is between the ages 5-14 and comprise of eleven percent and residents older than 65 comprise 3 percent.

Table 1: Population of Clairwood

Race	Number	Percentage
Black	2932	59
Coloured	153	3
Indian	1829	37
White	26	1
Total	4940	100

Source: eThekweni Municipality data taken from the Census 2001, n.d.

According to the Planning Unit, (n.d.) the gender composition from municipal estimates reveals that there is forty eight percent are females and approximately twenty six percent are males. In addition, this data shows the economically active population lie between ages 15 and 65 comprise of 1,589 or thirty two percent of the total population. The unemployed comprise of twenty-five percent and twenty percent for the not economically active population or 1,258 and 983, respectively.

Further, the municipality estimates that thirty two percent of households report no income. Annual income estimates for residents reveal that sixteen percent of households earns between R4, 801-R9600 and R9601 – R19, 200. Ten percent of household residents earn between R1-R4, 800 and thirteen percent of households earn between R19, 201-R38, 400 annually (Planning Unit, n.d.).

According to the Spatial Development Framework, (1998: 22) the SIB area is in need of redevelopment. Key upgrades in the area comprise of improving service delivery to redress the racially defined neglect in the infrastructure under the Apartheid regime. This redevelopment is not limited to traffic, electrical, road and storm water upgrades as well as urban greening projects to improve access to better housing developments, recreation and the like. Moreover, redevelopment of the area primarily aims to support implementation of residential housing and mixed-use land developments. (eThekweni Municipality, accessed 25 May 2010).

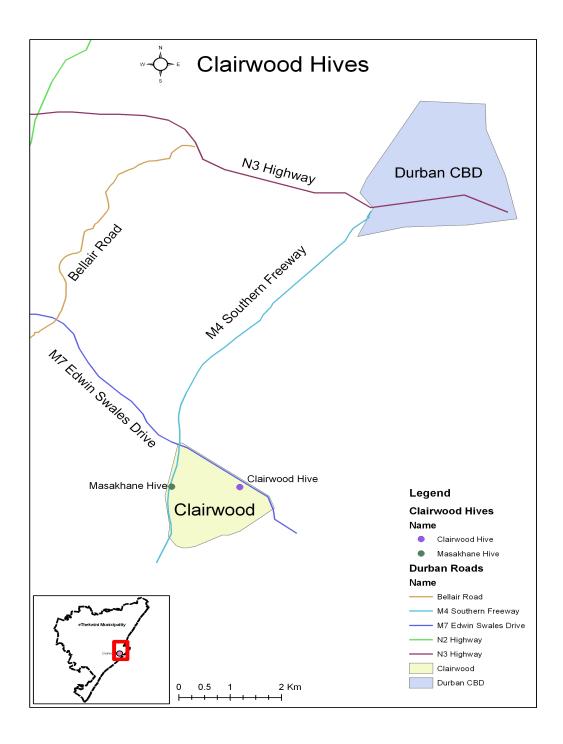
#### 3.6.2 Clairwood Hive Clusters: Location

The Clairwood map below highlights the two hives in Clairwood, namely Masakhane and Clairwood Hives. Both hive are situated near the main arterial highways, M4 to the East and the Edwin Swales Drive or M7 to the West, respectively. They are situated outside Durban's central business district and within the area of known as the second largest industrial hub (after Gauteng province) in the eThekwini Municipal area.

#### 3.6.2.1 Clairwood Hive

Clairwood hive cluster area is situated on 64 Flower Road in the central business district of Clairwood near the Edwin Swales Road that links to Bellaire Road in Cato Manor. Figure 1 below shows the cluster area comprises of sixty-four small and micro size garment producers. The cluster units are less than 80 metres square.

Figure 1: Clairwood Hives



Source: GIS Department, Howard College, UKZN.

#### 3.6.2.2 Masakhane Hive

Masakhane hive is situated along the Southern Freeway or the M4. This area is comprised of small and micro producers. In sum, the Clairwood hive clusters are strategically positioned in the industrial area near Durban's central business district (CBD). The redevelopment of the area is the hallmark of an incipient form of industrialisation that is important for clustering, particularly in setting the stage for the increased interfirm interaction between existing small and micro enterprises (Weijland, 2009:1515). Hence, the importance of the improvement of the physical infrastructure to increase access to basic services as well as access to a network of industrial manufacturers may serve to the clusters' advantage in terms of access to input materials suppliers, market linkages and relevant skills.

According to the *eThekwini Municipality Integrated Development Plan* (2007:104) Durban is South Africa's major port city and the second largest industrial hub after Gauteng province. The report shows that the municipality gained 5.3 percent annual average growth rate in the fuel, petroleum, chemical and rubber products sectors between 1996 and 2005. Furthermore, it is largely known that petro-chemicals, manufacturing and related industries are situated in and around the Clairwood area, however, data about the economic activities or types of work undertaken by residents are not available. Furthermore, the SIB account for approximately 16,8 percent of industrial land area (Spatial Development Framework, 1998: 14).

However, it is less clear to what extent SMMEs in these clusters in the area are currently supported (Skinner, 2002:18). Nor is it clear to what extent hive clustering activities are linked to employment opportunities for residents or industrial or manufacturing firms in and surrounding the Clairwood area. Hence, there is a clear opportunity for further research to explore and understand the linkages between the clusters and the industrial manufacturers in the area as it relates to better targeting of support intervention for the wider SMME cluster development.

## 3.7 Case Study: Profile of Cato Manor

#### 3.8 The Context of Cato Manor

According to the Cato Manor Development Association (CMDA) (2002) Cato Manor is situated approximately seven kilometres from Durban's central business district (CBD). The population of Cato Manor is estimated to be 93 000 people with a geographical area of 1800 hectares. The area is characterised by high levels of unemployment at approximately thirty percent and poverty (CMDA, 2002). Reliable socioeconomic data about Cato Manor prove difficult to access. Cato Manor is known for its history of violence involving land disputes between various settlers over the past fifty decades as result of forced removal of settlers due to segregation policies during the Apartheid regime. Furthermore, Cato Manor is a Presidential Lead Project as well as the beneficiary of the largest urban renewal project in South Africa (CMDA, 2002).

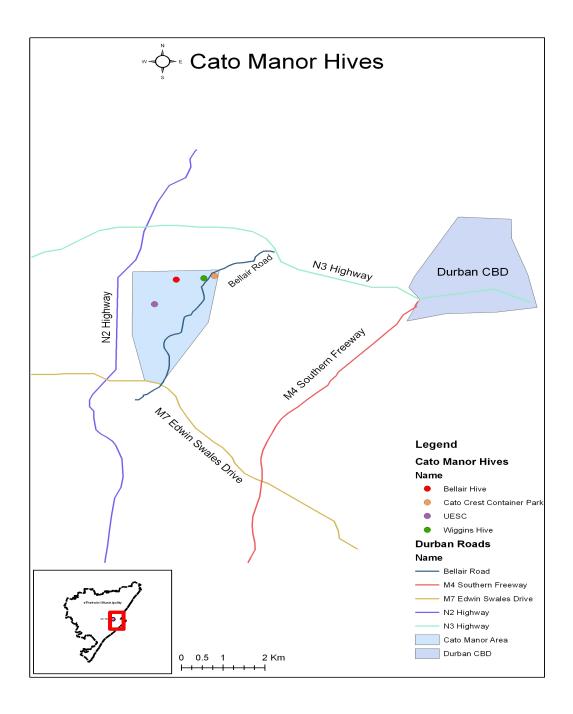
The ambitious redevelopment project of Cato Manor is important because it aims to improve service delivery outcomes for its residents and local entrepreneurs. Particularly, in terms of access to basic amenities and skills development training services and related networks through the implementation of basic services as libraries, recreation and training centres, a community bank that is forthcoming and 25,000 housing units and mixed-use land developments, economic clusters of various sub-sectoral and informal activities (CMDA, 2002).

#### 3.8.1 Cato Manor Hive Clusters

According to Figure 2 below, there are four hive clusters located in Cato Manor. Similar to Clairwood hives, they are strategically situated approximately seven kilometres west of Durban's central business district (CBD). The national N2 highway crosses to the west and the N3 highway connects at Bellair Road, which crosses with the M7 or the Edwin Swales Road to Clairwood. The four hive clusters in Cato Manor, namely, Bellair, Cato Crest

Container Park, Wiggins and the uMkhumbane Entrepreneurial Support Centre (UESC) cluster areas.

Figure 2: Cato Manor Hives



Source: GIS Department, Howard College, UKZN.

The CMDA (2002) states that support intervention for hive clusters in the wider local economic development strategy involves skills training, the provision of additional trading spaces and access to finance. This suggests that hive clusters are beginning to form incipient relationships to boost external economies through support networks and business fairs. (Weijland, 1999:1515-1516) The following are hive clusters.

#### 3.8.2 Bellair Hive Cluster

Bellair hive cluster is situated in Cato Manor and is comprised of forty-five SMMEs upholstery and retail services.

## 3.8.3 Wiggins Hive Cluster

The Wiggins hive cluster offers ten factory units with less than 20 metres floor space for rental to small and micro enterprises.

#### 3.8.4 Cato Crest Container Park Cluster

The Cato Crest Container Park cluster contains twenty containers that offer small and micro sized businesses access to networks and opportunities to improve the skill set of economic actors (CMDA, 2002).

## 3.8.5 uMkhumbane Entrepreneurial Support Centre

The UESC is located on Booth Road and comprises twenty-one factory units. Most of these units are independently operated by SMMEs in this cluster setting. The centre's aim to support businesses is forthcoming (CMDA, 2002).

Although the cluster literature is largely based on case studies of advanced clusters, there are few incipient clusters that share some of the characteristics as Cato Manor and Clairwood. Weijland, (1999:1515-1516) state that incipient clustering is an important in the process of industrialisation because external economies from agglomeration of similar or related activities encourages specialisation and innovation, in spite of the survivalist nature of clusters in Indonesia's cotton industry.

#### 3.9 Conclusion

This chapter discussed the repression of non-white small business activity in the Apartheid era. Since the transition a national SMME policy framework for SMME development highlights the importance of SMMEs to counter unemployment and alleviate poverty. However, several studies about SMME support programmes and SMME contribution to the economy argue that the SMME policy and related SMME intervention support approach is broad and does not make clear exactly how institutional agents, such as local government, should facilitate the creation of an enabling environment for SMME development. In addition, research suggests these institutional agents have not prioritised SMME development programmes according to the specifics of SMMEs in different sectors as well as subsectors. The formulation and design of programs lack reliable data. This is revealed at SMME support institutions and related programmes fail to latch onto SMME realities due to a lack of prioritization of support intervention resources for implementation.

Moreover, the performance of both emergent and established SMMEs is negatively affected. Support intervention is very broad and encompasses one approach for the myriad of SMMEs at different levels along the development path. As such, support intervention does not tackle relevant problems of SMME development, in a targeted and focussed manner, so as to account for the heterogeneous nature of SMMEs in general and allow for sufficient access to resources. The result is a breakdown in the facilitating role of government, which lacks focus on specific support interventions (as discussed in the international literature) for development.

This is illustrated in the profile of Clairwood and Cato Manor where activities by local government aims to promote redevelopment of these and areas, in terms of, increasing access to basic services as, electricity, water, roads, hospitals and schools among others, to address poverty challenges. Furthermore, while the redevelopment of the physical infrastructure can help increase external economies in the local areas, this is not sufficient toward promoting SMME cluster development. Weijland (1999:1517) states that SMME clusters that operated under more flexible, often nonexistent rules and regulations concerning land use and environmental issues are more likely to offer cheap, flexible and unregulated labour force with easy and often free access to materials inputs and links to rural networks. On the other hand, the disadvantages of in this environment are numerous. Further, previously disadvantaged areas were systematically cut off from starting up business operations and hence access to capital, skills, schooling, information and technical know-how was severely limited or non-existent in some parts.

Particularly, in the spaces opened up for redevelopment there is a burgeoning of SMME clustering activities that comprise the landscape and are at incipient stages in the industrialisation process. As such, the significance of targeted support interventions for SMME clusters in Clairwood and Cato Manor cannot be under-estimated. Specific support interventions are relevant in light limited access to basic service delivery in these areas to promote a meaningful external economies required particularly for the sub-sectors that operate in both formal as well as informal environments that lack capital, skills, information and other relevant institutional linkages to promote SMME cluster development.

This study is limited to exploring the clustering effects of SMMEs, in municipal cluster facilities, in Cato Manor and Clairwood in Durban. It attempts to develop a targeted cluster framework, which may serve to be meaningful in the refinement of existing knowledge about SMME support. Although an analysis of the factors underlying external economies and joint action will be explored in these spatially delimited areas, these variables are important in the research and policy environments and have implications for targeting SMME cluster support intervention to boost external economy variables and to involve institutional actors in the clustering process for development.

# 4 Research Methodology

#### 4.1 Introduction

The cluster framework demonstrates market and non-market constraints stifle the fluid generation of external economies and joint action for SMMEs development. Specific support intervention, based on an understanding of the bottlenecks, is necessary to promote SMME development. Through an investigation of the factors, underlying external economies and joint action, this study explores the effects of clustering to demonstrate the importance of targeted and focussed support intervention for SMME development in Durban.

This study combines quantitative and qualitative methods to delve into underlying values that influence cluster linkages, types of links to the nature of existing SMME entities and the potential for partnerships, used as a proxy for joint action.

Schmitz and Nadvi (1999:1507-1694) define a cluster as an agglomeration of firms, in a spatially delimited area, with a distinctive specialisation profile to allow for trade and interfirm cooperation. Similarly, in South Africa, clustering is understood to mean geographic concentration of firms, which focus on one or two sectors, with a high degree of inter-firm interaction to promote competitive synergies. Outcomes of external economies are explained by the high degree of inter-firm interaction from increased linkages and lowered costs. Further, it is argued that joint action is required to respond to market pressures or upgrade in clusters. This may be achieved through mutual co-operation, dependence, and trust between SMMEs and related firms. This chapter presents the research design and methods, used to explore the extent of external economies and joint action from clustering, through the perception of entrepreneurs in clusters in Cato Manor and Clairwood, Durban.

## 4.2 Research Design

In clustering SMMEs, it is commonly postulated that sources of external economies are derived from access to suppliers, labour pools and knowledge spillovers, among others. However, Schmidtz and Nadvi, (1999:1504) argue that this is not sufficient to trigger cluster development. Joint action, derived from shared values, such as, cooperation and trust, are important for SMME cluster development. In order to explore the effects of clustering, the research design adopted for this study allows for a greater insight and knowledge in two main areas. The first is in exploring the nature of external economies, derived from supplier linkages and the learning experiences of entrepreneurs. The second is the extent of joint action among entrepreneurs and the willingness to partner with other SMMEs to exploit growth and development opportunities. The survey approach is used as a design for this study. Denscombe (1998:51) states that the survey approach incorporates a commitment to presenting a snapshot focus at any given point in time, a commitment to a breadth of study and a dependence on empirical data.

According to Denscombe, (1998:5) justification for a survey approach lies in the essence of the word 'survey', which implies that the subject that is surveyed is viewed comprehensively and in detail. What this means is that the use of a survey strategy, enables the researcher to have a wide coverage that creates a panoramic view of a particular time in history and which allows tangible things to be measured and recorded in the clusters. He argues that the survey approach is a research strategy not a method. Furthermore, researchers, who adopt this strategy, are able to use a wide range of methods within the strategy, such as, questionnaires, interviews and observations.

#### 4.3 Research Methods

Bryman (2004:506) argues that qualitative and quantitative approaches have distinct epistemological positions. However, the strengths and weaknesses of each method serve to buttress the rationale for integrating them. Mack et al. (2005:9) state that voice forms part of the core principles of ethics in qualitative research where a participant makes a decision in a conscious and deliberate way, whether he or she is willing to participate or not. On the one hand, both methods serve to buttress internal validity, when describing the relationship between external economies and joint action in clustering. On the other hand, qualitative methods create a platform for semi-structured face-to-face interviews that bears the tone of voice underlying the values of entrepreneurs and shape the pursuit of joint action in clustering.

## 4.4 Population

The population of entrepreneurs from small, micro and medium enterprises (SMMEs) located in clusters known a business support centre, container parks or hives, established in Cato Manor and Clairwood by the local government of eThekwini Municipality. The following is a description of a few of the cluster sites:

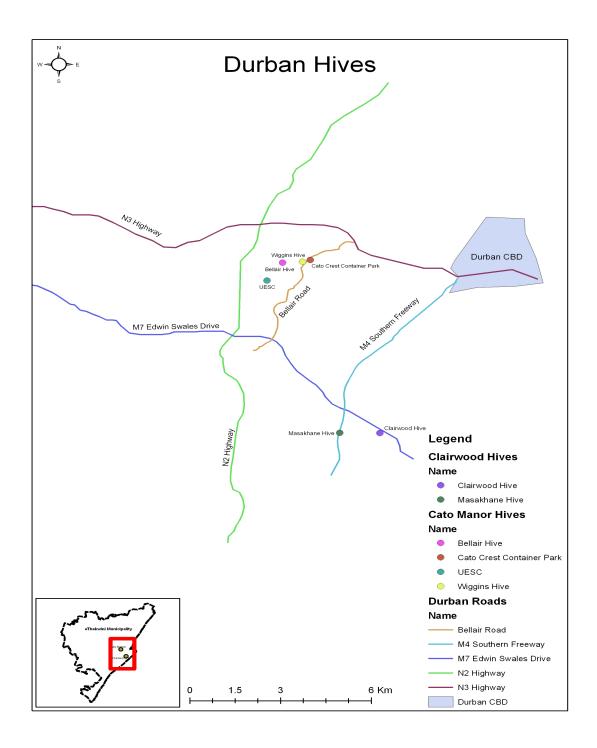
#### 4.4.1 Sample Area

The sample area identified is Clairwood and Cato Manor in Durban. Clairwood is a heavy industrial area with low population density of less than five thousand residents and Cato Manor, a residential area with formal and informal settlements. These areas are known as previously disadvantaged that are situated less than ten kilometres, on the outskirts of Durban's central business district. As shown in Figure 3 below, the sample area comprises of hives clustered at two cluster sites in Clairwood, namely Clairwood and Masakhane Hives

and an additional four sites in Cato Manor, namely, Bellair Hive, Cato Crest Container Park, Wiggins Hive and uMkhumbane Entrepreneurial Support Centre, (UESC).

Clustering activities comprise the use of low technology manufacturing of a variety of goods, such as, clothing, shoes, furniture, metal and glass products as well as retail services. Entrepreneurs occupying a factory unit within each cluster pay a monthly rental between R100-R200. Figure 3 identifies the spatial context of the sample areas outside of Durban's CBD. It shows Cato Manor connects near the main arterial routes along the N3 and N2 and along the Edwin Swales Drive heading east and the M4 south to Clairwood.

Figure 3: Durban Hives



Source: GIS Department, Howard College, UKZN.

## 4.5 Sampling Method

The sampling method was purposive. Babbie et al., (2009:166) state that it is appropriate to select a sample on the basis of your own knowledge of the population and its elements. Especially when selecting from a larger subset of the population that may not be easily identified at any one location. This was conducted involving a consultative process, in which municipal staff assisted in the identification of hive clusters, established by eThekwini Municipality. Subsequent site visits provided an opportunity to inform potential participants about the study share information, related to cluster site, logistics of interview scheduling and travel. This was advantageous because it allowed for building a rapport with the entrepreneurs who voluntarily participated in this study.

The limitation of this method is that it is not representative, since it is non-probability sampling (Cresswell, 1994:15). Further, it was not feasible to include a sufficiently large number of entrepreneurs, since it was difficult to discern if entrepreneurs would be on-site on the day of interviews.

## 4.6 Sample

The sample included a total of 59 enterprises involved in light manufacturing activities. Selection of the sample included SMME support site locations, under management of the Business Support and Enterprise Units of eThekwini Municipality. In addition, due to the lack of representativeness of this sample, results may not be generalised from one business area to another in various locations. Subsequently, the validity of data compiled for SMMEs in Cato Manor and Clairwood calls into question the validity of SMME categorisation under study (Holland and Campbell (2005:25).

In Table 3 below, it shows a list of hives clustering at each of the sites identified for this study. It also lists products produced at each site as well as the total number of fifty-nine respondents who participated in this study. Only nineteen respondents were interviewed at Cato Manor sites, while forty respondents were interviewed in Clairwood.

Table 3: Total Sample of Respondents from Clustering Hives

Cluster Name	Location	<b>Products Produced</b>	Total Respondents
Clairwood Hive	Clairwood	Pinafores	18
Masakhane Hive Cato Crest	Clairwood	Pinafores	22
Container Park	Cato Manor	Clothing	4
		Traditional clothing & attire, furniture and	
Wiggins Hive	Cato Manor	burglar gates.	3
Bellair Market	Cato Manor	Clothing, upholstery and furniture	5
		Clothing, footwear and accessories, furniture, machine parts and	
<b>UESC Business</b>	Cato Manor	glass doors.	7
Total	-	-	59

#### 4.7 Fieldwork

The fieldwork for this study was executed in three stages. The first stage involved consultations over three weeks with municipal staff to gain permission to interview entrepreneurs in six clusters. The second stage comprised of introductions and information sessions with entrepreneurs to familiarise them about the purpose of this study, exchange contact details and to answer any questions or concerns they may have. Lastly, telephone calls allowed for the scheduling of face-to-face interviews at mutually convenient times for SMME entrepreneurs.

Given that survey design was used for this study, it is important to mention that fieldwork was carried out at six sites in total, as this covers the breadth of municipally supported clusters throughout the two areas. The consultative process proved to benefit the communication process and facilitated information sharing in isiZulu.

Four preliminary meetings with municipal staff facilitated introductions to potential respondent entrepreneurs who volunteered to schedule an interview. The following consultations were held:

- 1. Meeting with Officials of the Business and Enterprise Support Unit on the 4<sup>th</sup> April 2006.
- 2. Meeting with UESC Manager on the 10<sup>th</sup> April 2006.
- 3. Meeting with Cato Manor Area Based Management (ABM) Economic Development Officer on the 26<sup>th</sup> April 2006.
- 4. Meeting with Clairwood and Masakhane Hive Manager on the 17<sup>th</sup> May 2006.

The advantage of initial consultations and introductions to potential respondent entrepreneurs allowed for pre-testing of the types of questions in the questionnaire and to refine specific theme areas and the exchange of contact information. For example, during scheduling, entrepreneurs showed interest during discussions about the types of questions in the questionnaire. This created opportunities for input and feedback into the though process in designing the questionnaire and allowed the researcher to operationalize questions in a meaningful and relevant manner.

This was an important part of the sampling process because, as a researcher, establishing credibility and respect with officials and entrepreneurs was paramount in facilitating rapport with the majority of isiZulu entrepreneurs, since I do not speak isiZulu. Once rapport was established respondent entrepreneurs voluntarily spoke in English.

#### 4.8 Data Collection

The primary method for collecting data involved the use of a questionnaire, as a diagnostic tool, to conduct semi-structured face-to-face interviews. Denscombe (1998:51) states that diagnostic tools may be interpreted as tests. They have a role to play in research to measure things like knowledge and ability. Furthermore, he argues diagnostic tools involve the

application of a uniform procedure, with emphasis on measuring a specific attribute that may be the basis for comparison.

May (2001:100) quotes (Fowler, 1988:107) and Kallet, (2004:1230) pointing out that face-to-face semi-structured interviews have the advantage of allowing interviewers to have greater influence in the potential quality of data collected to ensure internal validity or credibility of the study. In addition, it allows the same questions to be answered by allowing the interviewer to ask it differently, especially, if language is a barrier. Given the types of questions for face-to-face interview, it was possible to sense moments when respondent entrepreneurs did not feel comfortable answering certain questions. In these cases, the researcher was able to reassure respondents of the strict confidentiality with which responses are treated. It is important to note that all information was recorded as primary data collected during 2.04.2006 to 17.05.2006. Face-to-face interviews lasted on average one and a half hours.

## 4.9 Data Analysis

Data captured is summarised and presented descriptively, using excel, and qualitatively into themes and categories. One main cluster effect analysed is the underlying values of entrepreneurs in these clusters. These values are implicit and link into triggers of access to suppliers, influence competition and access appropriate technology that shape SMME cluster development.

The second cluster effect examined is the extent of a conscious pursuit of joint action, required to achieve SMME cluster development. This is measured using partnership as a proxy to analyse the extent of existing entities and the prospect of partnerships between SMMEs in the clusters. This type of arrangement is highly selective in clusters and often warrants an agent or mediator (Schmidtz and Nadvi, 1999:1509). Furthermore, the implication of these responses, in relation to the perception of SMME performance in the cluster, is important and it is expected to reveal the nature of existing clustering support in the clusters under examination.

Further, the responses, collected for these two broad areas, present nominal measures to describe variables in addition to the Likert Scaling technique to bear out patterns of intensity for variables, used in descriptive analysis of external economy and joint action in SMME clusters. Scaled data involves using a range of numbers to code and quantify variables and to check for degrees of intensity to allow for meaningful descriptive analysis.

Data for open-ended questions are described qualitatively. These responses revealed the independent thoughts of entrepreneurs. They were carefully evaluated and put into themes and categories to explore and answer the research questions. In particular, the underlying values, that drive these external economies, stem from existing arrangements between SMMEs. This, in addition to the prospect of partnerships between SMMEs, is used as proxies for joint action. According to Ulin, Robinson, Tolley and McNeil (2002:144) this process, of analysing qualitative data, is beneficial in speeding up the process of identifying similarities and differences in themes within categories. Moreover, the qualitative questions for this study were not analysed using a computer software package. The process proved feasible and practical to report responses, as stated in the questionnaire, since it comprised only a minute component of the categories for hands-on and objective analysis.

#### 4.9.1 Cluster Effect: External Economies

Empirical evidence of external economies exploring the extent of cost-savings benefits from clustering is analysed in two respects. One aspect pertains to the flow of specific knowledge, generated from external conditions, which shape clustering effects. These effects are in turn linked to the nature of SMME linkages to suppliers of input materials, loans from banking institutions and its effect on the work ethic and related knowledge created among entrepreneurs, to survive amidst competitive pressures in the marketplace.

An analysis of this data captured using Likert Scale ratings between one and three, one and four or one and five to calculate the average percentages. Babbie and Mouton, (2002:137) state that a scale rating takes advantage of any intensity structure that may exist. In this case,

the existence or lack of supplier links may influence degrees of variability in the advertising of products and frequency of new client increases.

Data collected for external economy linkages are operationalised using nominal and Likert Scale ratings. In addition, careful evaluation of cluster responses to an open-ended question was placed into one theme: 'accumulation of shared knowledge'.

## 4.9.1.1 Accumulation of shared knowledge

For this study, the 'accumulation of shared knowledge' refers to a collective of tacit experiences and behaviours between enterprises that translate into specific actions, gauged from positive or negative external linkages. The accumulation of shared knowledge in clusters is demonstrated in the following categories: 'work ethic' and 'product quality' in the clusters.

Moreover, 'accumulation of shared knowledge', plays a vital role in forming external relationships in clustering because it underpins a tacit knowledge system that drives clustering. This is then linked to additional external economies derived from access to material and loan suppliers, advertising, services and the like, to explore and understand the intrinsic nature of clustering activity under examination.

#### 4.9.2 Cluster Effect: Joint Action

Joint action represents an active force forged between SMMEs to deal with new competitive pressures or issues of governance. Joint action is relevant particularly when external economies are insufficient and can serve as a catalyst for successful cluster development. 'Entity structure' and 'partnership' are used as proxies for joint action and are analysed twofold. One pertains to quantitative evidence about entity structure of SMMEs as well as the total number of entrepreneurs banded in enterprises, in the clusters under study. The second pertains to the prospect of future partnerships and has the advantage of demonstrating the sentiments of mutual dependence, co-operation and trust between entrepreneurs in the clusters

In addition, specific themes are explored from responses identified for an open-ended question pertaining to attitudes of entrepreneurs about partnership prospects between other SMMEs in the cluster. These response statements were evaluated and categorised into "pro partnership" and "against partnership" themes. These themes represent value positions underpinning joint action or lack of it in clusters. These values revealed are important and impact various types of decisions taken to safeguard survival, trust and co-operation in clustering activities. Munoz, Raven and Welsh, (2006:46) argue that insights into the culture and management style of entrepreneurs, increases our understanding of value judgements, linked to prioritisation of cluster activities for the benefit of SMMEs in the clusters. In addition, they cite the extent to which cluster occupancy, as well as similarities and differences in economic activities, all give rise to a collective efficiency in these clusters.

#### 4.9.2.1 Pro-partnership

The theme of 'pro-partnership' refers to value statements or responses from entrepreneurs in favour of pursuing partnerships for joint action in existing clusters. The strategic relevance of joint action in clusters is important and reveals the reasons why buzzwords, such as: 'increased knowledge and sharing of ideas', 'access to government support', and 'market expansion' are utilised.

#### 4.9.2.2 Against Partnership

The theme of 'against partnership' refers to value statements or responses from entrepreneurs against partnering, which undermines joint activities in the clusters under study. Attitudes against partnership are made up of statements such as, "keep profits to myself", "mistrust" and "conflict in management".

#### 4.10 Conclusion

This chapter explained the survey, design and methods used to capture and analyse data to answer the research questions set out for this study. Voluntary response sampling of SMME entrepreneurs was used, because the aim of this study is to explore the extent of clustering support intervention. It is assumed that the SMMEs, in this sample, are clustering in Cato Manor and Clairwood because they are largely involved in differing or similar activities and are in close proximity. Moreover, identifying the extent of external economies and joint action in these clusters, broadly harnesses the attempt to understand the extent of clustering as a strategy for SMME cluster development in Cato Manor and Clairwood. While the results of this research cannot be generalised, it was adequate to obtain a survey of details in breadth, voluntarily from entrepreneurs, to accurately answer the questions for this study.

Primary data collection involved consultations with municipal staff to obtain permission to conduct interviews, establish knowledge of each site and to meet with entrepreneurs to arrange the logistics of interviews. Finally, the sample creation of entrepreneurs, that voluntarily responded to be interviewed face-to face in semi-structured settings.

The data collected was analysed both quantitatively and qualitatively. Quantitative data was presented descriptively using nominal and Likert Scale ratings. Qualitative data was evaluated and categorised into themes on the basis of similarities.

The findings presented were used to answer the research questions set out for this study and to explore the extent to which local Government support intervention structures promote SMME clustering. The findings herein are synthesised with similar research on cluster support intervention from research worldwide.

# 5 Data Findings and Analysis

#### 5.1 Introduction

With a shift in the economic landscape in industrialised countries to services, knowledge and information intensive industries, the international cluster literature demonstrates empirical evidence in support of the importance of support for SMME clustering as an alternative industrialisation strategy for development, particularly, in developing countries. In South Africa, the SMME policy framework and related support intervention programmes agree that SMMEs are engines of economic growth. However, research argues that there is a mismatch as the focus is too broad and it is not clear how SMMEs are going to promote development from the ground. Furthermore, SMME support programmes are concentrated in central areas across provinces. This creates a discrepancy in support intervention on many fronts, as support does not reach the majority of SMMEs, namely the survivalist enterprises.

The aim of this chapter is to present data exploring the effects of clustering. This is done through the examination of SMME clusters established by local Government in Cato Manor and Clairwood, approximately 12 kilometres North-West and South of central Durban, respectively. This chapter begins by exploring external economies and linkages to material suppliers, banking institutions from loan repayments timeframes, and the accumulation of a shared knowledge base from training, work ethic, product knowledge and advertising. In addition, joint action is explored through existing partnerships and the potential for partnerships between entrepreneurs in the future. It also examines the use of cluster units, by location, and the extent of product differences and similarities in economic activities in these clusters. The chapter will conclude with an analysis of the findings on clustering effects and the implications for collective efficiency in the clusters in general.

#### 5.2 External Economies

External economies refer to cost-savings benefits incurred from clustering SMMEs (Weijland, 1999:1520). This is analysed in two related categories. The first aspect pertains to the supplier linkages for raw materials and capital. The second concerns the extent of the flow of knowledge 'in the air' between enterprises involved in similar activities.

## 5.2.1 Supplier Linkages

Given that these SMME clusters are situated in previously disadvantaged areas that are under redevelopment, it is not unusual to operate flexibly to maximise limited access to external economy resources (Levitsky, 1996:11 and Weijland, 1999:1517). Table 4 below shows that 83 percent of entrepreneurs do not have contracts with suppliers. Only 3 percent have contracts with their materials suppliers. While some, if not most SMMEs in clusters probably have relationships with suppliers directly, the evidence suggests that these relationships are mostly informal. In addition, the evidence shows up poor levels of supplier linkages, and suggests poor inter-firm activity that may be explained by examining the location of suppliers. In questionnaire 34, a local entrepreneur at Bellair Hive, emphasise that the value of storing up stock is important to the process of production because he is not certain if he will be able to purchase in the future. In doing so, he ensures that he will be able to produce final products for his customers due to the limited supplier networks to access to resources. Schmidtz and Nadvi (1999:1509-1511) state that specialized suppliers of raw materials and components nearby reduce the need for entrepreneurs to store up inputs.

Table 4: Supplier Contract

Response	Count	Percentage
Yes	3	5%
No	49	83%
Non Response	7	12%
Total	59	100%

While reasons for poor linkages vary from context to context, it is important to bear in mind that failure to access supplier markets, dominated by spontaneous efforts and flexibility, can create positive external economies for few while undermining market entrant incentive for many enterprises in the hive clusters under study. Furthermore, poor distribution networks in Latin America, Eastern and Southern Africa are a major factor in explaining the inferior growth performance of small enterprise clustering. However, while supplier contracts give an indication of the extent of access to supplier networks, it reveals that a lack of it implies flexibility. But more importantly, the response from an entrepreneur about storage of stock is valued. It suggests the weakness of currently broad interventions to promote SMME clustering in Cato Manor and Clairwood. In addition, the enforcement of contracts and economic co-operation are often hampered by institutional failures that explain why many Latin American and East African clusters remain rudimentary (McCormick, 1999:1532; McCormick, 1998 and Ferrand, 1997 cited in Schmidtz and Nadvi, 1999:1506-1507, Schmitz, 2000:327 and Levy, 1993:82).

## 5.2.2 Loan Repayment

Altenburg and Meyer-Stamer (1999:1696-1697) argue that most of the entrepreneurs in clusters in poor environments where unemployment is high do not have substantial savings (using Mexican clustering examples). Even so, they are forced to engage in self-employment survivalist activities, which sustain their families, rather than the creation of dynamic firms. Moreover, they are delinked from the formal business community and operate in an environment, where transactions are informal and there are no legal mechanisms in place to compel business partners to meet liabilities. In these circumstances, entrepreneurs usually lack collateral and are not even registered.

In Table 5 below, eight percent or a total of only five enterprises in the sample borrowed money from financial institutions. While 3 percent expected to repay their loan in full within six months to one year or between one and two years, another 2 percent indicated that loan repayment is expected within six months and other responses revealed between two to five

years. By contrast, this suggests that ninety-two percent of the enterprises in clusters did not respond to this question because they did not apply or do not qualify for loans from banking institutions. Levitsky (1996:33) states that SMMEs are at a disadvantage for loans because they do not keep systematic records required by banks. However, in Latin American countries foundations have been set up for micro enterprises, primarily to help increase access to financial resources and training.

Table 5 Loan Repayments

Repayment Time	Total Loan Applicants	Percentage
Less than 6 months	1	2%
6 months to 1 year	2	3%
Between 1 to 2 years	1	3%
Between 2 to 5 years	1	2%
Longer than 5 years	0	0%
Total	5	8%

## 5.2.3 Accumulation of Shared Knowledge

The 'accumulation of shared knowledge' refers to a collective of tacit experiences and behaviours, shared between enterprises in clusters. These behavioural patterns create the platform for shared knowledge that governs levels of co-operation, trust and mutual dependence. These in turn guide external economies and relationships formed in clustering.

The qualitative responses from semi-structured interviews attempt to explore knowledge and how it is generated or transferred in Cato Manor and Clairwood. For this component of the study, the responses captured about the highs and lows of daily operation, are meant to strike at the root of clustering to be able to filter how its effects are derived. As such, these responses are thematised and placed into two main categories that form the framework for clustering analysis.

Table 6: Entrepreneurial Training

Response	Total Respondents Trained in the Sample	Percentage
Yes	24	41%
No	31	53%
Incomplete	1	.04%
No Response	3	5%
Total	59	100%

Training is important because creates conditions that increase the reach and access to labour and skills needed to promote cooperation that strengthens SMME clustering linkages (Levitsky, 1996:15). In Table 6 above, 41 percent of entrepreneurs indicated "yes" to completing their formal training related to their current business activity and 53 percent responded "no" they do not have formal training related to their current business activity. The evidence suggests that most entrepreneurs acquired knowledge pertaining to their business activity elsewhere, informally. 41 percent may have acquired training on their own account or from previous employers (Altenburg and Meyer-Stamer, 1999:1695). Furthermore, Levitsky (1996) argues that policymakers and donors must move away from advocating SMMEs to rely on their own, to realise that they do not have capacity and require targeted support for hands-on training to harness collective efficiency in clusters and tackle competition in local markets.

#### 5.2.4 Knowledge of Work Ethic

Work ethic is a set of values based on hard work, reliability and diligence in maintaining social skills. Responses, about work ethic in enterprises, reveal that entrepreneurs in these clusters share a strong personal sense of work ethic, wherein, information spillovers, with regard to sourcing, marketing and product advertising, are derived to reflect positive external economies about the various types of knowledge accumulation. This is demonstrated in the various statements pertaining to the work ethic of entrepreneurs:

"Good planning, using the right equipment and skilled labour" (Questionnaire 45, 25 April 2006, uMkhumbane Entrepreneurial Support Centre (UESC)).

"Communication aids in understanding issues that affect our business" (Questionnaire 31, 2 May 2006, Bellair Hive).

"I go for advice on how to improve my designs" (Questionnaire 27, 2 May 2006, Masakhane Hive).

"I am a hard worker" (Questionnaire 9, 26 April 2006, Masakhane Hive).

"If I stop running this business I would not be able to get a job very soon since jobs are very scarce" (Questionnaire 16, 2 May 2006, Clairwood Hive).

"It is because of my relationship between me and my customers" (Questionnaire 19, 2 May 2006, Clairwood Hive).

"I am dedicated to my business; I even work for another company to keep my business going" (Questionnaire 5, 27 April 2006, Cato Crest Container Park).

It is clear from the responses that entrepreneurs, in different clusters, share a common opinion about the type of character it takes to enforce work ethic. These statements reflect that entrepreneurs take ownership and personal commitment which forms part of collective in clustering. These statements strike a chord with Belussi and Pilotti (2002:125) who state that, the advantages of specific industrial clustering, is the creation of tacit 'contextual knowledge', which is difficult to imitate elsewhere, because it resides in the process of absorbing external knowledge. An extension of their knowledge of work ethic for instance, spurred from personal experiences, customers, employers and the like, forms a framework of specific knowledge that is diffused freely 'in the air'. Moreover, the entrepreneurs' statements, illustrate deliberate processes at work that drive creation and refinement of their knowledge, based on the environments in which they operate. This know-how is continuously applied to drive survival of business activities and relationship linkages within and outside clusters.

#### 5.2.5 Product Knowledge

For this study, product knowledge is generated in the process of marketing final products within and outside clusters to existing and potential customers. This process is a function of communication flows, between market and socio-cultural networks that embody specific knowledge about a particular product. Product knowledge, gleaned from existing products, is rapidly diffused among cluster entrepreneurs who take risks by exploring new products in the markets because the tolerance level is high due to relationships bound by socio-cultural based knowledge exchanges.

This is demonstrated in various statements about how product knowledge is created in the clusters below:

"I go out and sell at other places outside my place of origin" (Questionnaire 54, 22 May 2006, Clairwood Hive).

"I try ways to attract them (customers) by sewing latest fashions" (Questionnaire 48, 21 April 2006, Bellair Hive).

"My customers are satisfied by the style of design and materials I am using" (Questionnaire 32, 21 April 2006, Wiggins Hive).

"Quality of work, service that we are improving and our referrals from customers" (Questionnaire 36, 9 May 2006, UESC).

"I spend most of my profits in making sure that the material (for customers) is always available" (Questionnaire 39, 26 April 2006, Masakhane Hive).

The responses about the creation of product knowledge revealed are derived from market-based relationships. This forms one of the drivers of external economies in the clusters under study. Specifically, entrepreneurs share a distinct knowledge and awareness of what type of products to produce. According to Keeble and Nachum (2002:79) this local knowledge sharing and diffusion reflects the presence of an intricate network, of mainly informal contacts, among local actors, made up of personal face-to-face encounters, casual information flows, customer-supplier co-operation and the like.

Indeed, the responses support a subtle, but direct link between SMME cluster entrepreneurs and the external environment, in which suppliers and buyers are part of a continuous process involved in the transferring of product knowledge. While the clusters under study mainly spread product knowledge by copying from each other and lack innovativeness and dynamism, it is important to note that the responses here strike a chord with Berlucci and Pilotti's (2002:129 and McCormick's (1999:1531) explanation of the incipient stages of the evolutionary growth path of Italian Industrial Districts where 'contextual knowledge', originates from personal experience and know-how within social and productive networks.

Yet still, improvements in the flow of information outside the clusters can increase spillovers in surrounding areas to feeds into innovation, as illustrated in the statements (Altenburg and Meyer-Stamer, 1999:1698).

#### 5.2.6 Product Advertising

Altenburg and Meyer-Stamer (1999:1698) argue that forward and backward linkages are usually less developed in clusters where the norm for marketing is through friendship or aftersales ties from regular customers. In addition, the majority of firms, involved in survivalist business activities in clusters, do not have the means to invest in advertising. In Table 7 below, 46 percent of entrepreneurs in the clusters responded "no" they do not advertise their products using printed media. 17 percent advertise "occasionally", 12 percent "always" and 10 percent "rarely" advertise their products. As shown, product knowledge feeds from personal experiences and direct exchanges outside and within these clusters. Levitsky (1996:31) argues that focus of all resources with specific goals must support SMMEs in clustering in developing countries.

Table 7: Product Advertising

Response	Total Count	Percentage
Always	7	12%
Occasionally	10	17%
Rarely	6	10%
No	27	46%
No Response	9	15%
Total	59	100%

#### 5.3 Joint Action

Joint action refers to two or more enterprises in partnership to undertake a particular business activity or activities within clusters. The deliberate force, on behalf of entrepreneurs to work together to counter competitive pressures, gives rise to collective efficiency in clustering. External economies represent passive advantages that benefit individual enterprises and joint action involves deliberate efforts of groups of enterprises in clusters to promote growth and development collectively (Schmitz and Nadvi, 1999:1504).

An examination of existing partnerships and the potential for partnerships in the future are used as proxies to explore the extent of joint action in the clusters under study. The potential for partnership is illustrated by "pro partnership" and "against partnership" statements.

#### 5.3.1 Existing Partnerships

The cluster literature demonstrates that joint action is important for upgrading in clusters and particularly so, in overcoming competition in local markets (Pallai, 2000:4209-4210; Schmitz and Nadvi, 1999: 1505). In Table 8 below, 12 percent or 7 out of 59 enterprises in the sample formed partnerships and 73 percent or 43 enterprises are sole proprietorship. Self-employment constitutes the majority of enterprises in the clusters due to the high levels of unemployment in Clairwood and Cato Manor. As such, taking up employment in informal workshops in their

neighbourhood is a means for survival. Mead, (1994:1882) cited in Altenburg and Meyer-Stamer, (1999:1696) and Kesper (2002:1) demonstrate that the proliferation of 'enforced self-employment' in survivalist activities is 'supply-driven'. This trend is confirmed in research about South African SMMEs that shows the vast majority of the SMMEs in the economy grow in numbers, but not in size (Rogerson, 1997:88).

Table 8: Existing partnerships between entrepreneurs

Response	Count	Percentage
Number of enterprises in partnership	7	12%
Sole Ownership	43	73%
No Response	9	15%
Total	59	100%

Indeed, the evidence reveal there is a poor level of existing partnerships in the clusters under examination. This phenomenon is similar to Mexican clusters that are characterised in the cluster literature as survivalist, micro and small scale enterprises that owe much of their self-employment undertakings to unfavourable macroeconomic conditions, as reflected in the high poverty and inequality that characterises many poor areas. Although existing partnership is poor, these clusters share important socio-economic ties that justify opportunities for specific clustering support by the mere fact that these enterprises contribute to employment and income generation activities (Altenburg and Meyer-Stamer, 1999:1693-1698).

### 5.3.2 Potential for Partnership

While existing partnership is poor, exploring potential partnership is important for successful clustering in the future. Joint action requires partnership to exploit market opportunities that individual firms are not capable to compete individually. In Table 9 below, 53 percent of the respondents indicated 'yes' to partnering with enterprises in the future. The reasons for this include opportunities for market expansion, increased knowledge and sharing of ideas, a chance to earn more money for growth of SMMEs in the clusters. Responses for 'no' to

partnership with other enterprises shows 31 percent, and 17 percent indicated that 'maybe' they will partner with another enterprise in the future.

Table 9: Potential for Partnership

Response	Count	Percentage
Yes	31	53%
No	18	31%
Maybe	10	17%
Total	59	100%

The qualitative responses from each entrepreneur stated were explored. These are captured in statements categorised by 'pro partnership' and 'against partnership' below:

'Pro partnership'

"I want to share ideas but it has to be someone with knowledge and seriousness about business, not people who want quick cash" (Questionnaire 5, 27 April 2006, Cato Crest Container Park).

"So that we can share knowledge and divide the work amongst each other, we can also gain a lot from our different experiences" (Questionnaire 16, 2 May 2006, Clairwood Hive).

"Work is easier when you are in partnership, Government supports businesses in partnership" (Questionnaire 22, 27 April 2006, Cato Crest Container Park).

"In order to share ideas in running and marketing our business" (Questionnaire 31, 21 April 2006, Bellair Hive).

"...business will grow and members will share their skills" (Questionnaire 37, 22 April 2006, Bellair Hive).

From the statements above, entrepreneurs suggest that they are willing to form partnerships in the future to pursue business activities jointly, based on the potential benefits of working together. Moreover, according to Schmitz (2000:326-334) the industrial cluster literature shows that co-operation between firms, improves performance. He confirms this by adding that positive and statistically significant correlation findings show that cooperation from joint

action, improves the performance of three out of four clusters. It does not mean that individual enterprise excellence does not matter. It does matter, since the excellence of one individual enterprise tends to have positive effects on other enterprises in the cluster. These effects may be revealed through support for learning, specialised skills, knowledge transfer or sharing experiences and other external economies.

'Against potential partnership'

"We want to grow first on our own before considering partnership with other business partners" (Questionnaire 30, 21 April, 2006, UESC).

"It can help where work is shared but I am hesitant that conflict may occur" (Questionnaire 42, 26 April 2006, Masakhane Hive).

For some enterprises, joining forces with other enterprises is perceived as beneficial, but it is also a complex matter. More so in the types of clusters under examination because of the informal nature of transactions that are effectively void of contract enforcement. This compromises the potential to reap the benefits of shared work, a positive externality 'own its own'. However, this positive externality must be weighed against a suite of disadvantages that must be taken into account, particularly, in survivalist clusters (Altenburg and Meyer-Stamer, 1999:1697-1698).

"Two businesses have different ideas and styles of running, which would lead to conflict in management" (Questionnaire 45, 25 April 2006, UESC).

"I don't trust people, I tried it before but it did not work" (Questionnaire 3, 2 May 2006, Clairwood Hive).

"Partners are not honest and trustworthy" (Questionnaire 36, 9 May 2006, UESC).

In order ... "to avoid conflict with other partners" (Questionnaire 39, 26 April 2006, Masakhane Hive).

"I prefer to reap the benefits myself" (Questionnaire 41, 25 April 2006, UESC).

Overall, these statements reflect attitudes against joint action that generally pose a danger to successful clustering. The statements 'against potential partnership' reveal that an enterprise is weary of conflicts that usually occur when two or more enterprises undertake business activities jointly. This sentiment is most likely attributed to disappointments from previous experiences that revealed untrustworthiness amongst the other enterprises in clusters. Indeed, a lack of trust, among cluster members, can obstruct the process of learning and retard incremental steps, whose burden must be shared among cluster members, to lead to successful clustering (Schmidtz and Nadvi, 1999:1506).

Altenburg and Meyer-Stamer (1999:1697) find that most survivalist clusters demonstrate this sort of attitude. They argue that this is due to a culture of imitation that makes entrepreneurs unwilling to co-operate and share certain types of information. They add that this sort of sentiment stems from opportunistic or even predatory behaviour. As such, exchanges are limited mainly to spot transactions whereby purchases for materials are bought individually which would be cheaper if bought jointly. While this is a negative externality, it is perfectly rational to act in this way.

#### 5.4 Small, Medium and Micro Enterprise Clustering

#### 5.4.1 Clairwood and Cato Manor Hive Clusters

The clusters examined in this study are presented in the table below. It presents the names of clusters, location, the types of products produced and the total number of SMMEs occupying units within each cluster in relation to maximum occupancy levels for clustering SMMEs. In South Africa, clustering means geographic concentrations of firms with a high degree of interaction between firms in one or two sectors.

Table 10: Description of SMME Clusters

Cluster Name	Location	Products produced	Total respondents	Total units used	Total units
Bellair Market	Cato Manor	Clothing, upholstery and furniture	5	5	35
Cato Crest Container Park	Cato Manor	Clothing	4	4	35
Wiggins Hive	Cato Manor	Traditional clothing & attire, furniture and burglar gates.	3	5	30
Masakhane Hive	Clairwood	Pinafores	22	50	Open plan
Clairwood Hive	Clairwood	Pinafores	18	72	72
UESC Business	Cato Manor	Clothing, footwear and accessories, furniture, machine parts and glass doors.	7	10	23
Total	-	-	59	151	195

Table 10 above shows the numbers of enterprises in a cluster range from thirty-five to seventy-two. In three cluster establishments, there are five enterprises in a cluster with the capacity for thirty-five enterprises in Cato Manor and Clairwood. This suggest that the lack of uptake of cluster units by entrepreneurs is probably due to the fact that many local entrepreneurs are unaware of the clusters and for those who are aware; they may have chosen not to relocate to the clusters because they are satisfied with their current location. Another possible reason is that entrepreneurs are not informed about the procedures involved in locating their business in the clusters. Three of the five clusters in this study, proved difficult to find since signage was not posted near these sites. This is unusual since the international literature points out that in clusters, members range from a few hundred to several thousand small firms (Altenburg and Meyer-Stamer, 1999:1696).

According to Berry et al, (2002:40) intervention incentives led by the DTI failed to reach SMMEs because of a lack of information dissemination about their existence. Related to this, there is red tape accompanying applications and the discouragement of previous applicants, whose dismal experiences to obtain support made them withdraw. The result is SMME support intervention initiatives that are poorly utilised and not fully accessed.

The relatively low number of enterprises that managed to enter into these clusters, suggest important implications for the clustering under examination. On the one hand, external economies, related to the knowledge base generated in two clusters, namely, Clairwood and Masakhane Hives, through pinafore product differentiations, by market-based interactions, suggest patterns can be imitated easily within and between clusters. This implies that the knowledge base is primarily generated and transferred via copying. However, poor product innovativeness may be partly explained by a lack of adequate or entrepreneurial training that hinders product improvement and upgrade in a systematic way.

On the other hand, differing economic activities, in the same clusters in Cato Manor, suggest there are far more negative external economies than positive ones. On a positive note, there is a common knowledge about work ethic in these clusters. However, what is sadly striking in these clusters is the poor level of inter-firm activity that can be extracted between enterprises. Even more, the evidence suggest barriers to opportunities for economies of scale, based on the fact that supplier links are limited, due to remoteness of enterprise and suppliers whose interaction is very informal. Moreover, opportunities for joint action based on unrelated economic activities are a major disadvantage in achieving successful clustering.

#### 5.5 Conclusion

This chapter presented the findings of both the quantitative and qualitative methods, used to explore the effects of clustering in SMME support structures, in Cato Manor and Clairwood in Durban. It explored external economies, derived from linkages to materials suppliers and the existence of loans from banking institutions through repayment timeframes. The extent to which the accumulation of a shared knowledge base is generated or transferred from training,

work ethic, product knowledge and advertising is also explored. Joint action was explored through existing partnerships and the potential for partnerships between entrepreneurs in the future as well as cluster occupancy and similarities and differences in economic activities that give rise to collective efficiency in these clusters.

The findings point out that SMMEs in these clusters conduct daily exchanges on an informal basis and that they are largely survivalist enterprises. There is low inter firm activity as eighty percent of entrepreneurs operate individually. Entrepreneurial training related to self-employment activities suggests entrepreneurs lack the management skills, required to organise and improve production in a systematic way. This is demonstrated in the extent of poorly developed external economy linkages that lack dynamism, as is proven in the nature of informal transactions between enterprises and suppliers of raw materials, as well as an extremely limited number of loan repayments to banking institutions. The main mechanism for the accumulation of a shared knowledge base is derived through informal learning and imitation within clusters (by trial and error face to face and word of mouth advertising). This gives rise to more negative than positive externalities and suggest competition is based on price rather than the quality of products that are indeed often of a poor quality.

On the one hand, although joint action, from existing self-employment survivalist enterprises, is very low, entrepreneurs in partnership arrangements are usually involved in the same economic activity but this also represents between only two and ten percent. Fifty three percent indicated their willingness to partner jointly in the future because there is an understanding that there are potential benefits that come with shared work, such as sharing ideas, earning more money and the like.

On the other hand, joint action is difficult to achieve. While entrepreneurs know about some of the benefits of joint action, as highlighted in their statements 'for partnership', an estimated forty seven percent of entrepreneurs indicated they would not partner with other entrepreneurs because of a lack of trust. Their unwillingness suggests that micro entrepreneurs prefer to work alone in clusters and this stems from negative experiences as highlighted in the statements 'against partnership'. From this, collective efficiency is near non-existent in these

clusters, as there is an unwillingness to cooperate jointly and, while inter-firm interactions are informal, they are extremely limited.

Consequently, clustering is limited in those cluster infrastructures that are not fully occupied, in three out of five clusters. There were one hundred and fifty-one members in total at the time of this study. This shows that the number of cluster members is relatively small compared to international clusters, and that economic activities between members are by and large unrelated, which makes external economies from inter-firm interaction and cooperation impractical. On top of that, enterprises involved in similar activities produce the same products, wherein, improvements are based solely on taking risks to imitate the latest fashions, which gain approval from word of mouth feedback of customers and their networks.

Notwithstanding the above, clustering among survivalist or micro-enterprises is still an important mechanism in safeguarding self-employment and income generating opportunities; in spite of negative externalities, poor inter-firm linkages by producing different products and a lack of trust between members in the clusters in the study.

## 6 Chapter 6: Conclusion and Recommendations

#### 6.1 Implications for Clustering as a Targeted Support Intervention

The international literature demonstrates that SMMEs are engines for growth and development in developed and developing countries. Clustering is a proven alternative industrialisation strategy for SMMEs involved in similar or related activities, concentrated in a particular location in developing countries (Altenburg and Meyer-Stamer, 1999: 1694; Schmitz, 2000:325; Schmitz and Nadvi, 1999:1505 and Pyke and Sengenberger, 1992:7). However, because there is a high failure rate among SMMEs in early and start-up years, it is important that SMME intervention support is targeted to promote growth and development. Recent SMME research in South Africa shows that support intervention is differentiated by levels of access by location, sectoral and related factors, attributed to the structure of the economy and characterised as 'one size fits all', with no clarity on how SMMEs will achieve development (Kesper, 2001:1-2; Rogerson, 2004:781 and Waite, 1973:154-156).

The argument that targeted support intervention is important for SMMEs in clusters is immediately grasped in the manner in which this study identifies and explores the poorly developed clustering effects of survivalist and micro enterprises in hive clusters, established by local government in Cato Manor and Clairwood. This was achieved by application of a survey method

The findings show that clustering effects derived from external economies and joint action is complex. It is not known how clustering in Cato Manor and Clairwood is going to promote SMME development. The evidence shows that hive cluster areas are platforms for survivalist or micro enterprises involved in independent economic activities to basically earn a living, based on a shared value of working hard. Joint efforts usually involve three to thirty-five entrepreneurs pursuing one activity. The findings suggest that although two clusters in Clairwood produce pinafores, the means for product improvement is done on an ad hoc basis by copying the latest fashions as few advertise beyond 'word of mouth.' Moreover, entrepreneurs copy each other and this fuels mistrust, and competition based on price. This

undermines the process of accumulation of knowledge through learning needed for cooperation and upgrade in clustering.

As such, joint action is difficult to achieve under these conditions. The findings suggest that institutional efforts are too weak and fail to muster co-operation, trust and mutual dependence among SMMEs in clusters. The majority of enterprises are individually owned. This suggests that although activities are undertaken jointly in few cases, the scope of activities is extremely limited because inter-firm transactions are limited to informal spot transactions that pose high risks to their ability to compete in the wider local markets in Durban's CBD.

In the next section, recommendations for future research and final thoughts conclude the chapter.

#### 6.2 General Recommendations

From the poorly developed clustering effects in Cato Manor and Clairwood, it is clear that the importance of targeted SMME support interventions for development should not be underestimated. Hence, the incipient clustering processes must be targeted to achieve development (McCormick, 1999:1531). The following general recommendations are suggested: Firstly, SMME policy frameworks aligned to support intervention programmes need more focus. These are related to the need for a refinement of knowledge in the extent to which the wider macroeconomic and political economy influences the complex realities in which micro and survivalist enterprises operate.

Secondly, exploring specific support interventions for differing types of activities among micro and survivalist enterprises, by location and by sector will help identify the inherent advantages of enterprises within these concentrations. This narrows targeting efforts to strengthen weaknesses within informal survivalist and micro enterprises within the SMME nomenclature. It helps to spell out clear targets, programmes, actions and related outcomes of support interventions.

Thirdly, the feasibility of clustering micro and survivalist enterprises as a strategy for SMME development should be undertaken to identify specific local conditions and available resources that are advantageous for cluster support to spin-off in different localities.

#### 6.2.1 Specific Recommendations

In particular, the specific focus of clustering upgrade in Cato Manor and Clairwood, must tackle two main elements to begin to realise the benefits of clustering: to pursue deliberate joint action to include external players. This can, in turn, influence increased linkages between survivalist and micro enterprises with outcomes of improved external economies that promote learning and cooperation skills.

The first is the pursuit of deliberate joint action must be explored to innovate clothing production through piloting specific projects, for example, such as, the production of pinafores to include relevant stakeholders within clusters, as well as institutional actors, like local government and other businesses located outside Clairwood. Joint action in one subsector can infuse information sharing and forge cooperation in other subsector activities. In particular, external economy links will be forged with upstream upholstery suppliers from increased interactions. Hopefully, this will encourage cluster members to cooperate and develop mutual dependence and trust. These are the basic tenets that are important in building inter-firm relationships for successful clustering in the long term.

The second is that from this collective effort greater focus is required on boosting relationships to sustain linkages from its location, through organising support of business associations, other institutional agents, like financial services organisations, Funders, local government, Durban Chamber of Commerce and the like. These agents can harness specific objectives to sustain external economies in these clusters that help develop competitive linkages over the long haul.

#### 6.3 Conclusion

Justification for the targeted support intervention for SMMEs clustering in hives in Cato Manor and Clairwood, stems from the need to redress remnants inherited from the legacy of Apartheid. Allied to this, the redevelopment of these previously disadvantaged areas reflect the national objectives to alleviate poverty and promote employment opportunities for local economic development. Government concedes that the vehicle for achieving these objectives is to promote SMME development.

As such, eThekwini Municipality is mandated to create employment and facilitate SMME development. The municipality has sought to address the challenges of development, in previously disadvantaged areas in a noble way, by creating spaces in which survivalist and micro enterprises can cluster and earn a living. The findings suggest that these incipient steps taken so far along the process of industrialisation are important, but it is not sufficient, as the constraints of SMMEs in these clusters are not tackled in their specific context. In addition, the findings suggest that SMME clustering support intervention merely reflects the delivery of physical infrastructure with no clear objectives as to how local government will facilitate SMME clustering in the hives to tackle daily and recurring problems and challenges involved in operating a business in a resource poor environment for the achievement of external economies and the conscious pursuit of joint action required for cluster development. According to the entrepreneurs, they feel that they have been left to the vices of the market and each other. To achieve success, there has to be an understanding of the needs of SMMEs in clusters in different subsectors and a commitment to address these challenges in a systematic way that achieves results. This is a long-term process that is dynamic and requires ongoing efforts and specific actions to fine-tune desired outcomes and objectives.

#### REFERENCES

Acs, Z. J. and Audretsch, D. B. (1989). Small-firm Entry in US Manufacturing. *Economica* 56: 255-65.

Acs, Z. J. and Audretsch, D. B. (1988). Innovation in Large and Small Firms: An Empirical Analysis. *The American Economic Review* 78(4): 768-690.

Altenburg, T. and Meyer-Stamer, J. (1999). How to Promote Clusters: Policy Experiences from Latin America. *World Development* 27(9): 1693-1713.

Babbie, E., Mouton, J., Vorster, P. and Prozesky, B. (2001). *The Practice of Social Research*. Oxford: Oxford University Press.

Beaudry, C. and Swann, P. (2009). Firm growth in industrial clusters of the United Kingdom. *Small Business Economics* 32:409–424.

Belussi, F. and Pilott, L. (2002). Knowledge Creation, Learning and Innovation in Italian Industrial Districts. *Human Geography Special Issue: Beyond "Happy Communities" in Economic Geography* 84(2): 125-139.

Bennett, R. J., Graham, D. J., Bratton, W. (1999). The Location and Concentration of Businesses in Britain: Business Clusters, Business Services, Market Coverage and Local Economic Development. *Transactions of the Institute of British Geographers* 24(4): 393-420.

Berry, A., von Blottnitz, M., Cassim, R., Kesper, A. Rajaratnam, B., and van Seventer, D. E. (2002). The Economics of SMMES in South Africa. Trade and Industry Policy Strategies.

Blackford, M. G. (1991). Small Business and Its Rivals. *The Business History Review* 65(1): 1-26.

Blackford, M. G. (1994). Small Business in America: A Historiographic Survey. *The Business History Review* 65(1): 1-26.

Bracker, J and Pearson, J (1986). Planning and Financial Performance of Small, Mature Firms. *Strategic Management Journal* 7: 503-522.

Bryman, A. (2004). Social Research Methods. Oxford: Oxford University Press 506-507.

Cato Manor Development Association. (2002). *CMDA Sustainability Report*. Durban. http://www.cmda.org.za.annual report 02/content.htm

Carpenter, R. E. and Petersen, B. C. (2002). Is the Growth of Small Firms Constrained by Internal Finance? *The Review of Economics and Statistics* 84(2): 298-309.

Chabane, N., Goldstein, A. and Roberts, S. (2006). The changing face and strategies of big business in South Africa: More than a decade of political democracy. *Industrial and Corporate Change* 15(3): 549-577.

Chandra, V., Moorty, L., Nganou, J.P., Rajaratnam, B., and Schaefer, K. (2001). Constraints to Growth and Employment in South Africa: Evidence from the small, medium and micro enterprise. Survey Report 2. Informal discussion papers on aspects of the economy of South Africa. The World Bank Southern Africa Department.

Cowling, M., and Clay, N. (1995). Factors Influencing the Take-up Rates on the Loan Guarantee Scheme. *Small Business Economics* 7:141-152.

Cresswell, J.W. (1994). A framework for the study. In Research Design: Qualitative and Quantitative Approaches. Thousand Oaks: Sage Publications. 1-19.

Denscombe, M. (1998). *The Good Research Guide for Small Scale Research Projects*. Buckingham: Open University Press.

Department of Trade and Industry (1995). White Paper on National Strategy for the Development and Promotion of Small Business in South Africa. Cape Town. Department of Trade and Industry, Republic of South Africa, 20 March 1995.

Department of Trade and Industry (1996). *Small Business Act 102 of* 1996. http://www.acts.co.za/ntl small bus/index.htm, accessed 22 March 2008.

Durban Metropolitan Area (1998). Durban Metropolitan Area Spatial Development Framework.

http://devplan.kzntl.gov.za.idp\_reviewed\_2009\_10/IDPS/Durban/Adpoted/SDF(original).pdf

eThekweni Municipality (n.d) Planning Unit id Clairwood. http://www.durban.gov.za/durban/wardCatalog/displayPUResults2?planUnitDescription=Clairwood

eThekwini Municipality (2006). eThekwini Economic Review 2006/2007. Economic Development Unit, Durban.

http://durbanportal.net/shared%20Documents/eTkekwini%20ReviewFinal0607.pdf

Feser, E. J. (2002). Tracing the Sources of Local External Economies. *Urban Studies*, 39(13): 2485-2506.

Giuliani, E., Pietrobelli, C. and Rabellotti, R. (2005). Upgrading in Global Value Chains: Lessons from Latin American Clusters. *World Development*, 33(4): 549-573.

Gordon, M. (1994). The European Union's support for new technology-based firms: An assessment of the first three years of the European seed capital fund scheme. *European Planning Studies* 2(4): 435-462.

Helmsing, A.H.J. (2001). Externalities, Learning and Governance: New Perspectives on Local Economic Development. *Development and Change* 32:277-308.

Hudson, R. (2002). Changing Industrial Production Systems and Regional Development in the New Europe. *Transactions of the Institute of British Geographers* 27(33): 262-281.

Humphrey, J. and Schmitz, H. (1999). The Triple C Approach to Local Industrial Policy. *World Development* 24(12): 1859-1877.

Kennedy, L. (1999). Cooperating for Survival: Tannery Pollution and Joint Action in the Palar Valley (India). *World Development* 27(9): 1673-1691.

Krugman, P. (1997). *Pop Internationalism*. Cambridge, The Massachusetts Institute of Technology Press.

Kuratko, D. F. and LaFollette, W. R. (1987). Small Business Incubators For Local Economic Development. *Economic Development Review* 5(2): 49-55.

Lall, S. (2000). Strengthening SMMEs for International Competitiveness For the Egyptian Centre for Economic Studies. Workshop on what makes your firm internationally competitive? Elizabeth House, University of Oxford Cairo March 6-8, 2000. 1-33.

Levitsky, J. (1996). Support Systems for SMEs in Developing Countries: A Review. Paper commissioned by the Small and Medium Industries Branch, United Nations Industrial Development Organisation (UNIDO) 1-42.

Lindner, A. (2005). *SME Statistics: Towards more systematic statistical measurement of SME behaviour*. Organisation for Economic Cooperation and Development. Expert Group Meeting on Industrial Statistics. New York: United Nations. http://unstats.un.org/unsd/industry/meetings/eg2005/AC105-22.PDF.

Little, I. M. D. (1987). Small Manufacturing Enterprises in Developing Countries. *The World Bank Economic Review* 1(2): 203-235.

Llobrera, J. T. Meyer, D. R. and Nammacher. G. (2000). Trajectories of Industrial Districts: Impact of Strategic Intervention in Medical Districts. *Economic Geography* 76(1): 68-98.

Lyberaki, A. and Pesmazoglou, V. (1994). Mirages and miracles of European small medium and micro enterprises development. *European Planning Studies* 2(4): 499-521.

Mack, N. W. C., MacQuees, K.M., Guest, G. and Namey, E. (2005). *Qualitative Research Methods: A data collector's field guide*. North Carolina: USAID.

Malmberg, A. S. O. and Zander, I. (1996). Spatial Clustering, Local Accumulation of Knowledge and Firm Competitiveness. *Geography* 78(2): 85-97.

Matthew, P. M. (1997). From Beautiful 'Small' to Flexible Specialisation: Asian Experience of Small Enterprise Development. *Economic and Political Weekly* 32(3): 84-86.

McCormick, D., (1999). African Enterprise Clusters and Industrialization: Theory and Reality. *World Development* 27(3): 1531-1551.

Morris, M. and Robbins, G. (2004). The role of government in creating an enabling environment for inter-firm cluster co-operation: Policy lessons from South Africa. Oyelaran-Oyeyinka, B. and McCormick, D. (eds) In *Industrial Clusters in Africa: Pattern Practice and Policies for Innovation and Upgrading*. forthcoming: United Nations University Press. 1-28.

Munoz, J.M., Raven, P., and Welsh, D.H.B (2006). An exploratory study of retail service quality expectations and perceptions among Philippine small/medium enterprises. *Journal of Developmental Entrepreneurship* 11(2): 145-156.

Nadvi, K., and Schmitz, H. (1994). "Industrial Clusters in Less Developed Countries: Review of 15 Experiences and Research Agenda", IDS Discussion Paper No. 339. Institute of Development Studies, Sussex University.

Pillai, M. P. (2000). Industrial Clusters under Duress: Coimbatore Pump Manufacturers and Liberalisation. *Economic and Political Weekly* 35(48): 4207-4216.

Peña, I. (2004). Business Incubation Centres and New Firms Growth in the Basque Country. Small Business Economics 22: 223 –236.

Porter, M. E. (2000). Locations, Clusters and Company Strategies. Clark, Gordon, L., Feldman, Maryann, P. and Gertler, Meric, S. (eds) In *The Oxford Handbook of Economic Geography*. New York: Oxford University Press. 253-276.

Porter, M. E. (2003). The Economic Performance of Regions. *Regional Studies*, 37(6) (7): 549-578.

Rogerson, C.M. (2004). The Impact of South African government's SMME programmes: a ten year review (1994-2003). *Development Southern Africa* 21(5): 765-777.

Rogerson, C. M. (2006). Developing SMMEs in peripheral spaces: The experience of Free State South Africa. *South African Geographical Journal* 88(1): 66 -78.

Rogerson, C.M. (2007). Small Enterprise Development in South Africa's Lagging Regions: The Case of Mpumalanga Province. *Urban Forum* 18(1): 60-93.

Rossignol, N. (2006). New incentives for SMEs: Life made easier for small manufacturers in Europe. Journal of Generic Medicines 3(3): 187-193.

Schmitz, H. (2000). Does Local Cooperation Matter? Evidence from Industrial Clusters in South Asia and Latin America. *Oxford Development Studies* 28 (3): 324-335.

Snaith, B. and Walker, J. (2005). Medium-sized enterprises: Providing targeted support for a dynamic force in the economy. *Northern Economic Review* 36: 91-106.

Skinner, C. (2002). Understanding Formal and Informal Economy Labour Market Dynamics: A Conceptual and Statistical Review with Reference to South Africa. Research Report No. 50. School of Development Studies, University of KwaZulu Natal, Durban.

Skinner, C. (2006). "Falling through the policy gaps? Evidence from the informal economy in Durban, South Africa. *Urban Forum* 17(2): 125-148.

Smith, A. (2003). Power Relations, Industrial Clusters, and Regional Transformations: Pan-European Integration and Outward Processing in the Slovak Clothing Industry. *Economic Geography* 79(1): 17-40.

Uzor, O.O., von Andreas K., Lemper, A., Axel, S., Wohlmuth, K. (2004). Small and Medium Scale Enterprises Cluster Development in South-Eastern Region of Nigeria. Report No. 86. Institute for World Economics and International Management, Colloquium, University of Bremen, Germany.

Venkataramanaiah, S. and Parashar, S.P. (2007). Enhancing the competitiveness of SMMEs through industrial clusters: The Indian experience. *International Journal of Technology Management and Sustainable Development* 6(3): 227-243.

Weijland, H. (1999). Microenterprise Clusters in Rural Indonesia: Industrial Seedbed and Policy Target. *World Development* 27(9): 1515-1530.

# **APPENDIX A: Questionnaire**

ADMINISTRATIVE INFORMATION		
NAME OF RESEARCHER		
DATE OF INTERVIEW		
PLEASE TICK APPROPRIATE BUSINESS SITE	Ξ:	
BUSINESS LOCATION	SITE (tick)	UNIT NO. (write #)
1. Clairwood Hive	(*****)	(11200 11)
2. Backus Road Hive		
3. Cato Crest Container Park		
4. Wiggins Hive 5. Bellair Hive		
6. Tenants of UMkhumbane ESC (UE	SC)	
7. Other Feeder Source	(SC)	
NAME OF RESPONDENT/OWNER: POSITION: NAME OF BUSINESS: BUSINESS ADDRESS:		
POSTAL CODE:		
PHONE NO:		
CELL NO:		
SECTION 1: FACT SHEET  1. What is the name of your business?		
1.1 What is your VAT registration Number?		
1.2 When did you start your business?		
Month Year		
1.3 Do you have a lease?	Yes	No

		1	2
1.4	Will you renew your lease?	1	2

NO	QUESTION	YES	NO
1.5	Are you the sole owner of this business?	1	2
1.6	If no, do you have business partners?	1	2
1.7	Is there a legal contract between all parties involved?	1	2

1.8 What is the legal entity of your business?

1.	Sole Proprietorship	2.	Cooperative	
3.	Pty Limited Company	4.	Partnership	
5.	Closed Cooperation	6.	Other	

1.9 How many owners are in this business venture?	Please enter exact number,	(Business
partners must be interviewed separately)		

1.10 What do you manufacture?

Please tick the appropriate box and specify the types of products produced.

PLEASE TICK ONE	PRODUCT	SPECIFY
		TYPES
	Clothing	
	Furniture	
	Machinery	
	Pipes	
	Footwear	
	Other, please specify	

1.11 How many items are produced weekly? <i>Please write number below</i> .	
1.12 What is the value of items produced weekly?	
1.14 What is the floor space of this unit?	_Sq Metres

How would you describe the following?

Organised Organised Disorganised I	1.15	Organisation of work space?	Very	Somewhat	J	Somewhat
			Organised	Organised	Disorganised	Disorganised

1.10	Size of workspace?	Very Large	Large	Adequate	Very Small	Small

The next three questions pertain to employment turnover.

1110 1	the next time questions pertain to employment turnover.					
NO	QUESTION	NO.OF EMPLOYEES				
		PART-TIME	FULL-TIME			
1.18	How many employees in					
	2003 were replaced in 2004?					
1.19	How many employees in					
	2004 were replaced in 2005?					
1.20	How many employees in					
	2005 were replaced in 2006?					

## SECTION 2: ATTRIBUTES & SKILLS Q.2 to Q. 2.13

In this section, questions relate to your personal qualities and skills. *Questions to be answered by Owner(s) only.* 

2.1 How many years of experience do you have in this field? <i>Please enter number of years?</i>

2.2 Do you have	YES	INCOMPLETE	NO
formal training			
related to your			
work?			

If applicable

п аррисаоте			
	RESPONSE	CODE	TICK
	Business		
	Management		
	Training		

Mechanical	
Training	
Wood works	
Training	
Sewing &	
Knitting	
Procurement of	
Metals	
Other, please	
specify	

If applicable

2.4 When did you complete your training?	RESPONSE	CODE
Month		
Year		

QUESTION	Extremely Important	Important	Somewhat Important	Not Very Important	Unimporta nt	Extremely Unimportant
2.5 Is it important for you to have good relationships with employees and clients?	5	4	3	2	1	0
2.6 What do you think about the idea of keeping all your business appointments?	5	4	3	2	1	0
2.7 At the moment, do you think it is important to change the way you do business for the better?	5	4	3	2	1	0
2.8 How do	5	4	3	2	1	0

you value respectful communication in the work environment?						
2.9 What do you think about suggestions from employees about your management style?	5	4	3	2	1	0
2.10 What do you think of one good reference to your business?	5	4	3	2	1	0
2.11 How important was your decision to locate your business here?	5	4	3	2	1	0

0	UEST	ION
$\sim$		1011

2.12 If your business did well but you fe	lt that you are not a	chieving the kind	of growth you
want what would you do?			

Choose the best option for your business needs.

2.13 If	Train workers	Rotate	Hire more	Let go of
employees	adequately	stronger	skilled	employee
neglected to		employees	labour	
perform their duties as		to cover weaker		
expected due to		employees		
a lack of proper				
training, what				
would you do?				
	4	3	2	1

# SECTION 3: COMMITMENT Q 3.1 to Q. 3.5

3.1 If you had to undertake entrepreneurial training to improve the way you want to run your
business, but the training occurred during the same time you planned to open a shop, how would you handle this conflicting situation?

NO	QUESTION	Every time	Sometimes	Not all the time	Hardly
3.2	Being an entrepreneur				
	means that I have to expect				
	a lot of changes and be				
	ready to accept these				
	changes whether good or				
	bad?				
3.3	Running a business means				
	that if necessary, one has to				
	be prepared to work seven				
	days per week at anytime pf				
	day or night?				
3.4	If you owed a debt which				
	threatened the future of				
	your business and you knew				
	that you can pay less than				
	the minimum, would pay				
	less than the minimum?				
3.5	In times of financial				
	trouble, how many times				
	were you able to obtain the				
	help you needed for your				
	business to remain open?				

#### **SECTION 4: FINANCIAL STATEMENTS**

Fieldworkers: This section will assess your present financial position and areas of financial needs. If available, kindly refer to your cash book or income and expense statements. This information is strictly confidential and will not be used for auditing purposes. The following worksheets is to the advantage of the business owners.

Q4.1 through Q4.4

4.1:

PROJECTED INCOME STATE	EMENT FOR 2005 & APRII	L 2006
SALES	FINANCIAL YEAR 2005	APRIL 2006
COST OF RAW MATERIALS/SALES		
Opening stock		
Purchases		
Closing stock		
Gross Profit		
Other income		
Interest received		
TOTAL INCOME		
EXPENSES		
Advertising		
Interest-Bank		
Interest on loans		
Bank charges-fees		
Rent		
Water & Electricity		
Insurance		
Depreciation of Equipment		
Salaries (if applicable)		
Wages		
Fuel		
Bad Debts		
Telephone and postage		
Stationery		
Other, specify		
NET PROFIT		

#### Section 4.2: Assets and Liabilities Worksheet

Please ask owner to submit a register of assets and liabilities, if unavailable please proceed to ask for approximations of monetary value over the three year period; 2004, 2005 and 2006. Please do not rush through this worksheet. Write neatly and clearly.

D1	7		.1 •		1 1	
Please	compl	oto	thic	1420V	vch	oot
<i>i</i> lease	$\cup \cup \cup \cup \cup \cup$	CIC	LILLO	VV () I	unit	CCL.

Trease comprete this worksheet.		
1. ASSETS		

YEAR	2006	2005	2004
1.1 Fixed Assets			
Land and building at current value			
Plant/factory equipment at current value			
Motor vehicles at current value			
Vehicle at cost (if applicable)			
less: accumulated vehicle depreciation			
Total Assets			
1.2 Current Assets/Cash			
Finished goods			
Stock at hand			
Work in progress			
Raw materials (input)			
Total Cash			
Debtors			
Cash and bank balance			
Bank Overdraft			
Total Current Assets			
Total Assets			
2 Long Term Liabilities			
Owners' Funds <sup>1</sup>			
Long Term Borrowings			
Secured loans			
Capital employed <sup>2</sup>			
Current Liabilities			
Accrued Tax			
Loans			
Creditors			
Bills payable			
Insurance payable			
Total current liabilities			
Total liabilities			

## 4.3 When do you think you will payoff your loan? If applicable

Less than 6 months	
6 months to 1 year	
Between 1 to 2 years	
Between 2 to 5 years	
Longer than 5 years	

<sup>&</sup>lt;sup>1</sup> Owner Fund means money from owner, family, friend or partner that was used to invest in business and hence is a loan, e.g., Stokvels.

 $<sup>^{\</sup>rm 2}$  Capital employed is the sum of fixed assets and working capital .

# SECTION 5: MARKETABILITY Q 5.1 to Q 5.20

5.1	Do you have a contract with a raw	YES	NO
	materials supplier?	2	1
5.2	Do you buy raw materials from other	2	1
	suppliers without a contract?		
5.3	Is the price of your input materials	2	1
	relatively stable?		

5.4 How would you rate the price of your product compared with other prices of the same product?	Competitive	Not competitive

5.5	Do you increase the price of your product when	Always	Occasionally	Rarely	No
	input costs increase?	4	3	2	1
5.6	Do you have a specific group of buyers which	4	3	2	1
	you cater to on a regular basis?	4	3	2	1
5.7	Do you advertise your product?	4	3	2	1
5.8	Have you had new clients as a result of your advertising?	4	3	2	1

5.9 How many		RESPONS	ES	C	ODES		
clients have secur	red	1-10					
at the moment?		10-20					
		20-30					
		30-40					
		40 and abo	ve				
5.10 How likely	Ver	y Likely	Likely		Unlikely	Ver	y Unlikely
is that that you	4		3		2	1	
will increase							
your clientele							
over the next							
three to six							
months?							

5.11	What is your level of	Very Satisfied	Satisfied	Unsatisfied	3
	satisfaction with the				Unsatisfied
	quality of your product?	4	3	2	1

5.12 Will improving	YES	NO
your product make it	10	0
more competitive?		

5.13 If yes, how can your product improve?					
5.14 If no, why not?					

5.15	Do you know who your main	YES	NO
	competitors are?	2	1
5.16	Is it difficult for new direct competitors to start-up in this sector?	2	1
5.17	Do you sell at other marketplaces?	2	1
5.18	Do you often lose your customers to competitors?	2	1
5.19	Do most of your customers return?	2	1
5.20	Do you deliver your products to your customers on time?	2	1

# SECTION 6: HISTORICAL GROWTH AND JOB CREATION POTENTIAL Q 6 TO Q6.11

The following are questions about trends in levels of profit, production output and turnover.

6.1 Are you satisfied with the rate of growth of your business in general?

YES	NO
20	1

6.2 Since you	Profits	Production Output	Turnover <sup>3</sup>
started up your			
business, how			
would you			
describe the trend			
in the following?			
Increasing	3	3	3
Decreasing	2	2	2
Negative	1	1	1
No Change	0	0	0

6.3 How would you describe the trends in the following this year, 2006?	Profits	Production Output	Turnover
Increasing	3	3	3
Decreasing	2	2	2
Negative	1	1	1
No Change	0	0	0

6.4	In general, are you satisfied with the	Very	Satisfied	Unsatisfied	Very
	level of progress your business	Satisfied			Unsatisfied
	achieved in profits for this year?	4	3	2	1
6.5	Overall, are you satisfied with the	4	3	2	1
	level of production outputs for this				
	year?				
6.6	Are you satisfied with the level of	4	3	2	1
	product turnover?				
6.7	Are you satisfied with the level of	4	3	2	1
	skills of your employees?				
6.8	Are you satisfied with the number	4	3	2	1
	of jobs your business has created?				
6.9	Do you foresee the creation of	4	3	2	1
	employment in your business within				
	the next 3 to 6 months?				

6.10 If you had to	AMOUNT	RESPONSE
sell your business,	R1-R200	1
how much do you	R201-R400	2
think it is worth?	R401-R800	3
	R801-1200	4

<sup>3</sup> Turnover is defined as the total price of goods traded within a period of time; price \* volume of goods traded.

R1201-R2500	5
R2501-R4000	6
R4001-R7000	7
R7001-R10000	8
R10001-R15000	9
R15001 and above	10

## SECTION 7: TECHNICAL MERIT Q7 to Q7.5

The questions below are concerned with the technical design and quality of your product

7.1 Do you agree that your product is produced in a cost-effective manner?	Agree	Agree Somewhat	Disagree
7.2 Do you agree that the technology used to make your			
product is efficient?			
7.3 Do you agree that the design of your product is			
technically sound?			

7.4 How would you describe the quality of	Very	Good	Average	Below	Poor
your product compared to the same products	Good			Average	
on the market?					
7.5 How would you rate the materials used to					
make your product?					

# SECTION 8: NEEDS DETERMINATION Q8 to Q 8.11

In this section, the respondent's present and future business needs are assessed.

8 Why do you think your business thrives despite the highs and lows of daily operation?							
.1 What are some of the challenges you face doing business? Please list areas of reaknesses: 1							
	_						
-							
•							
•							

8.2 If you had the technical support to improve your product, What aspect would you improve to produce a better quality product?	Technical Design	Equipment upgrade	Efficient Production process	Skilled employees	Better quality of raw materials	Other, specify:

8.3 At the moment,	Technical Advice	Marketing Support	Financial Bookkeeping	Business Networking	Administrative Support	Investment Strategy	Other(s), specify
what	Auvice	Support	Bookkeeping	networking	Support	Sualegy	specify
support							
services do							
you need to							
run your business							
effectively?							
circuit cry:							

8.10 Do you have additional comments about your business development needs?								
	•••••							
	• • • • • • • • • • • • • • • • • • • •							
Thank y	ou for you	ur valuable	time.					