



MASTER'S PROGRAMME IN URBAN MANAGEMENT AND DEVELOPMENT

(October 2008 – September 2009)

MANAGING SPORT IN THE POST-PRIVATISATION ERA IN ZAMBIA:

*An assessment of sporting behaviour and facilities provision in
Kalulushi*

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UMD 5 Report number:

Rotterdam, September 2009

EXECUTIVE SUMMARY

Zambia, though famous for its copper production, has suffered a socio-economic distortion after privatisation of the Copper Mines from State-Parastatal (ZCCM) to private operation. The heaviest of this impact has been felt in municipal service delivery, particularly in towns on the Copperbelt Province, where services previously rendered by ZCCM including sport and recreation, have deteriorated both in quantity and quality.

As noted by several scholars, even in places previously with the best sport facilities have either been abandoned or are in state of neglect. Though sport has been seen worldwide to generate both economic and social benefits, the biggest challenges though for policy making has been to determine the range of sports services and to establish whose responsibility it is to provide, avail and make accessible the range of services in question. Kalulushi has been no exception to this trend, a situation which prompted the undertaking of this exploratory case study research. The objective of the study was to explore strategies to improve management of sport in the post-privatisation era, through an assessment of the sporting behaviour and levels of facilities provision in the central area of Kalulushi.

Based on two important theories and with heavy reliance on documented concepts, common measuring criteria and knowledge in sport, the author proceeded to execute the case study research. Supplemented by observations and digital pictures, closed and open-ended questionnaires were administered to residents and school respondents to assess the current sporting behaviours and sports needs. A similar set of questionnaires were administered to Local authorities, government authorities, private sports providers, former ZCCM employees and current major mining companies to assess the levels of facilities provision and to allow for a comparison in sports activities and facilities currently and before privatisation.

The field data and major findings were analysed qualitatively and quantitatively aided by statistical software SPSS Version 17.0 from which the researcher has made conclusions.

The research primarily established that, though the existence of infrastructure and its state has a theoretical influence on sporting behaviour, the observed poor state and distribution of sports infrastructure in the study area, did not completely hinder residents from engaging in sports activities, as evidenced by 72 % general sport participation and higher participation levels from residents with limited facilities.

Most interesting still, the research identified a unique relationship between sporting behaviour and facilities provision, which relationship appeared to be more sensitive to quality as opposed to mere existence of sports facilities. This was evidenced by desertion or non utilization of run down facilities in preference for improvised facilities at home or in other public places, which observation not only fitted in the adopted model, but also paralleled existing literature which links

increased participation and evoked sporting behaviour with improved quality of sports facilities.

However the research further established and concluded that in fact this 72 % sport participation reflects a drop in participation compared to the time of ZCCM, attributing it to de-motivation factors including loss of interest and poor infrastructure of most designated sports areas. The findings further reveal that people have adapted by creating alternative means either by improvising facilities in public open spaces or squeezing into school infrastructure.

The research identifies friendship and family influence as the major source of sporting behaviour complimented by the desire for physical fitness and social interaction.

The research found out that people undertake diverse sporting activities, but noted high participation in open-door sporting activities with, Football, Netball, Basketball, Volleyball and Athletics being the most popular and participated in sports across all age groups, in schools and generally within the residents. Sport participation was generally more among respondents in schools than those outside school, further confirming the special influence schools have on society's sporting behaviour and presumably also because of the mandatory nature of sport in Zambian schools. Interestingly, the research further identified a sensitive gender relationship in participation, with males being more probable to participate than females.

Generally therefore, the research concludes and confirms that sports activities and facilities were better managed in ZCCM period compared to the current situation, which assertion is justified from both pictures of remnant infrastructure and the testified declined in sport participation and sport diversity. And where as ZCCM administered a diverse range of sporting activities, and promoted sporting through regular sports festivals and sponsorship, the current research concludes that implementation of such approaches have been minimal or never attempted in the current regime except in schools where regular sports competition among schools are held. This has been accentuated by absence of sports policy, (reflected in low prioritization and non committal of adequate resources by both the private and public). This has made it difficult to identify and properly plan for the sports needs, or realize possibility of tapping the available private sector's (mining companies) contribution to the district recreation service provision. Though participation levels are relatively still high, the current deplorable state of infrastructure poses a limitation both in the sport diversity and sporting places. It is thus feared that if not abated, community motivation in sport will decline putting the district at a risky of breeding a physically inactive and poorly integrated society.

Arising from these findings and conclusions, the author recommends an immediate formulation of a sport and recreation policy within the existing the framework of the existing District Strategic Plan, to guide the planning and implementation of sports related activities, which include; rehabilitation of all dilapidated infrastructure, community sensitisation on the importance of sport and information dissemination on available sports and facilities.

The author also recommends recruitment of qualified personnel to oversee sporting activity and superintend over maintenance of facilities and to also curb the deduced vandalism of sports facilities.

Finally tax incentives should be introduced to effectively tap the private companies' corporate social responsibilities and contribution to the district recreation service provision.

The author recommends among others, further research in gender perceptions of sport participation among adults population and exploration in low cost designs for multi-facility sports arenas.

Sports, participation, facilities management, post-privatisation, Kalulushi

FOREWORD

“**IF** Good health is not merely the absence of diseases, but the availability, accessibility and provision of opportunities such as sport and recreation that promote active styles and meaningful lives, **THEN** it is beyond conviction that the time is now to build on that understanding to encourage governments, local governments, development agencies and communities to see how sports could be included more systematically in the development strategies of our cities if we have to achieve the much cherished global development agenda enshrined in the MDGs”

(UNICEF, 2005, p.37).

DEDICATION

This dissertation is dedicated to my wife Harriet Ndhlovu Chamoto and my new baby boy Emmanuel Junior Chamoto, who both survived a very difficult situation while I was away from home for studies in the Netherlands. May the good Lord continue showering his blessings upon and rendering the protection to my family.

ACKNOWLEDGEMENTS

My first acknowledgements are owed to the Almighty God for sustaining my life and enabling me to study in the Netherlands. I want also to specially acknowledge my supervisors Dr. Wim Blauw and Dr. Fang Yiping for their valuable guidance and continuous efforts in shaping my thesis.

I want again to appreciate my spouse for giving me the encouragement to proceed with the studies and more especially for the courage in nursing the pregnancy alone while I was away. I acknowledge my children, Marther, Gloria and Chimwemwe (Chichi) for enduring stay without Daddy for one year and more important, for their intercessory prayers for my protection and success whilst in Holland. In the same vein I would like to thank Uncle Boniface for his parental support and care shown and for constantly keeping an eye on my family during the whole of my study period in the Netherlands.

I thank and acknowledge my employers, Kalulushi Municipal Council, for granting me study leave to enable me pursue the Masters Degree in Urban Management and Development and also for covering up the financial and logistical gaps in areas where my scholarship did not adequately cover. To my departmental staff I say thank you for adequately filling in the gap when I was out and for your technical support in data transmission which became a valuable input in my thesis.

To all my classmates, I say thank you for your critique and the ideas we exchanged in and out of our specialisation periods.

May I also say my gratitude to my sponsors- NUFFIC/NFP for awarding me a scholarship, which undoubtedly made my studying and living in Holland possible. I pray for a continued bilateral relationship between Zambia and the Dutch Government.

I acknowledge also my research assistants, Gilbert Kowa, Mwiza Nyirongo, Prince Nyirenda, Chipasha Katebe and others for their endurance, honesty and timeliness in data collection without whose support it would not have been possible to collect the data within the short research period or arrive at my research conclusions. I equally recognise all my respondents – Central and Local Government officials, private mining companies, former ZCCM employees, private sports providers, *residents* and *pupil* respondents, whose names have been kept anonymous, for their valuable responses which generally made my research to stand.

Lastly but not least, I would like to thank all the Head and Senior Teachers at Kalulushi Trust School, Kalulushi High School and Chavuma High School for granting me permission to select research samples from their schools. All the other people who directly or indirectly contributed to the successive compilation of this Masters Degree thesis, I thank you too.

ABBREVIATIONS

AGT	ACHIEVEMENT GOAL THEORY
AMSP	APTER MOTIVATION STYLES PROFILE
ANOVA	ANALYSIS OF VARIANCES
ARPA	ALBERTAN V RECREATION AND PARKS ASSOCIATION
CSO	CENTRAL STATISTICS OFFICE
CSR	CORPORATE SOCIAL RESPONSIBILITY
DHMT	DISTRICT HEALTH MANAGEMENT TEAM
DPAR	DAILY PHYSICAL ACTIVITY RECALL
DPU	DISTRICT PLANNING UNIT FUND
HIV/AIDS	HUMAN IMMUNAL VIRUS/AQUIRED IMMUNAL DEFICIENT SYNDROME
MDG	MILLENIUM DEVELOPMENT GOALS
MVPA	MODERATE –VIGOROUS PHYSICAL ACTIVITY
PMI	PARTICIPATORY MOTIVATION INVENTORY
RT	REVERSAL THEORY
TPB	THEORY OF PLANNED BEHAVIOUR
UN	UNITED NATIONS
UNICEF	UNITED NATIONS INTERNATTONAL CHILDREN EMERGENCY FUND
ZANA	ZAMBIA NEWS AGENCY
ZCCM	ZAMBIA CONSOLIDATED COPPER MINES
ZCCM-IH	ZCCM-INVESTMENT HOLDING

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1.0. CHAPTER ONE

RESEARCH INTRODUCTION

1.1. Introduction

Worldwide sport has been seen to generate both economic and social benefits, and more recently as a teaching means. As observed by UNICEF (2005), even in the absence of formal schools, sports activities are now seen as means of teaching and helping people to heal from social problems. Arguable though, a more established and widely agreed benefit of sport participation is in the health promotion, where it is viewed vital to body fitness and health care cost reduction by retarding incidences or severity of illness (Christ Church City Council, 2002). Other scholars such as, Larsen and Manderson (2008) have stressed that health is in fact not the absence of diseases, but the availability, accessibility and provision of opportunities such as health related services like sport and recreation that promote active styles and meaningful lives. But the biggest challenge policy makers might face is not only to determine the range of services, but also establishing whose responsibility it is to provide, avail and make accessible the range of services in question.

The following chapter therefore introduces the research aimed at exploring strategies to improve management of sport in Kalulushi Municipality, emanating from the observed deterioration in sport infrastructure after privatisation of the Zambia Consolidated Copper Mines (ZCCM), which situation is feared might in the long run result in declining sport participation and consequently physical inactivity and reduced social integration.

1.2. Research background

The research was developed based on the following socio-economic profile and circumstances.

1.2.1. Location and historical development

Kalulushi is the smallest mining town on the Copperbelt Province of Zambia, located between longitudes 28 degrees east of the Greenwich Meridian and latitudes 13 degrees south of the Equator. The district borders Mufulira to the North-East, Kitwe to the East, Chingola to the North and Lufwanyama to the West. It developed in the 1950s to provide accommodation and logistical support to the then Chibuluma Mines and other corporate divisions. Before 1977 Kalulushi was under the jurisdiction of the City of Kitwe. However, due to growth in population, Kalulushi attained district status in 1977 and subsequently became a Municipal Area in 1992 (DPU, 2005).

1.2.2. Demographic characteristics

During the 2000 census of population and Housing, Kalulushi recorded a population of 75,806 people (C.S.O. 2000). Currently the Municipality has a projected population of 79,279 distributed over a total area of 725 square kilometres, with an average population density of 109.4 people per square kilometre (DPU, 2005).

1.2.3. Socio-economic traits and service delivery before privatisation

Kalulushi evolved around mining as the major economic activity but subsequently due to population increases, diversified into agriculture taking advantage of the vast agricultural land in the outlying areas. Historically copper production in Zambia started in the 1930s during which period the country was still under the British colonial rule, and has remained the country's economic backbone long after independence in 1964. In 1982, and as part of its strategy to improving coordination of copper mining activities, government formed the Zambia Consolidated Copper Mines (ZCCM), a parastatal company which operated in most towns on the Copperbelt province, some parts of Central and Lusaka provinces where mining activities were concentrated. Following the economic decline in the late 1980s and the unsustainable mining production, Zambia, in the early 1990s, and under the influence of the World Bank, embarked on privatization of non-performing parastatal companies including ZCCM.

Though officially pronounced in 1993, major privatisation of mining companies started in 1997, with Chibuluma Mines (based in Kalulushi) being the first to be privatized to a Metorex Group of Companies. All the state owned mining companies were subsequently privatised to new private companies. This marked the end of ZCCM activities, though a few of its historical, social and environmental liabilities are still being handled by a quasi-state owned Investment Holding company (ZCCM-IH).

However, besides the major responsibility of coordinating copper production, ZCCM was during operations, also responsible for provision of medical, educational, sport, recreation and essential municipal infrastructure and services including electricity, water supply and sewerage services, under some form of social policy which many scholars have described as '*cradle to grave*' (Kangwa, 2001; Fraser & Lungu, 2006; N'gombe, 2008, p. 4).

Though the objective of privatization was purely intended to introduce efficiency in the operations of these parastatals, Fraser & Lungu (2006) observe overwhelming physical and documented evidence that the privatization of ZCCM seriously distorted the socio-economic set-up of most towns on the Copperbelt province, whose economic survival was dependent on copper production. And though there are exceptional claims of increased production and efficiency, generally the benefits of these structural adjustment measures seem not to have trickled down enough to the satisfaction of the local people. Unemployment studies in Kalulushi in 1998 by CSO revealed that 15.4% of the district population was unemployed. And bearing in mind that over one third of the population is in the active labour force, the impact of unemployment is highly felt, as the large proportion of the population is dependent on a few people as breadwinners. Also a World Bank funded study of the Copperbelt Province (ZCCM-IH, 2003) revealed that apart from social service deterioration, over 500 people lost jobs in Kalulushi alone, some of whom are struggling to cope with social stress, a situation exacerbated by the deteriorating sporting and recreation activities. In fact, according to the recent Living Conditions Monitoring Survey for the period 1991-2006, 85 out of every 100 people are dependent on other people for livelihood, and poverty levels are currently estimated at 40-65% (CSO, 2006). Theoretically, this is a typical evidence of the back-lash socio-economic effects a city with a mono economic base tends to receive when its competitive position is unsustainable (see Van Den Berg, 2003). Copperbelt generally and Kalulushi in particular, suffered several socio- economic and environmental impacts some of which persist to date.

1.2.4. Service delivery after privatisation

Privatisation not only reactivated the Local Government Act (functions of local authorities), but also incidentally revealed the municipal service delivery deficiency which had remained hidden in the pre-privatisation regime.

It must be clarified though that even during the ZCCM era, councils still had the legal obligation to provide Municipal services and social services, but in practice most of the services were provided by ZCCM. After privatization however, this obligation reverted back to the Councils, with the new mining companies focusing mainly on copper production. Lamentably this swift handover occurred at a time when government had destabilised the financial base of most councils through take-over of potential revenue sources and institution of detrimental policies that affected and continue to affect the financial viability of Councils (Ndeke et al, 1999, p. 3).

Resultantly due to the presumed weakened financial position, execution of municipal functions has been selective, predominantly limited to salaries, solid waste management, street lighting, roads maintenance and general health programmes such as grass cutting, building control and cemetery activities based on councils perceived prioritisation criteria.

Amongst the services that have deteriorated after privatisation, is sport. The collapse of sport infrastructure is a common characteristic of Kalulushi today. While understandably the negative impacts of privatisation were too diverse and too many to tabulate, the apparent dysfunctional sport system, amplified by lamentations from local residents, intimate the collapse of sport management, which theoretically, and if unabated, can result into low sport participation. It is also believed that job losses arising from privatisation, set in changes to the socio-economic behaviours of residents with a priority focus on livelihood survival and reduced motivation for sporting or recreation activities. For other onlookers including the author, this sport deficiency has continued to cast worries for youths' possible exposure to social vices and contraction of the HIV/AIDS pandemic, as most youths have resorted to alternative means of recreation such as excessive beer drinking. Whatever the underlying causes, sport activities appear to be on the decline if not in a state of neglect.

Despite the fact that some of the new mining companies on the Copperbelt have embraced support to sport and recreation as part of their Corporate Social Responsibility (Simuntanyi, 2008, pp.68-95), this support is too minimal to abate the deterioration and unattractiveness of most of the sports infrastructure in Kalulushi today. Though various calls have been made to the new mining companies for increased sponsorship in sporting activities, there are strong arguments to the contrary that companies should not be compelled to assume the development role of government, but rather that they should be invited for a shared responsibility (Obara & Jenkins, 2006; Chenga et al 2008). And as observed by Fraser & Lungu (2006), even in towns and places previously with the best sport and recreation facilities, public parks, playing fields, recreation halls, swimming pools and other communal centres have either been neglected or abandoned (see also Simuntanyi, 2008, p.9). In the case of Kalulushi, despite the periodic support rendered by Chibuluma Mines to sport activities, the Zambia News Agency records a serious condemnation from the District Commissioner when Chibuluma Mines sold to a private individual, the only Recreation Club in Kalulushi Central (ZANA, 2005).

1.3 Problem statement

After privatisation of the Zambia Consolidated Copper Mines, sport systems and infrastructure have deteriorated a situation which has resulted into underutilization or abandonment of most sport facilities. A snap survey on some potential sporting areas and parks reveal a general sense of desertion and deterioration while in others, an absence of related infrastructure. While there could be some designated sports and community halls and centres, most of these are poorly patronized and/or have limited, deteriorating or with totally collapsed facilities. Desperately still, other designated sports and recreational centres have been assigned to worship services. Open sporting activities are randomly organised often in dilapidated sports fields with apparently no formal coordinating mechanism. It is feared that this situation might result into low sport participation and consequently, reduced social interaction.

This erosion of social infrastructure has continued and will undoubtedly continue to increase the municipal pressure in terms of rehabilitation costs, thereby limiting society's opportunities to realise healthy living through required participation in sport or recreation. With a youthful population, Kalulushi faces a risk of breeding a physically inactive society, a situation which might have serious health consequences and a weakened social and moral foundation for the future generation.

Therefore this research aimed at assessing the sporting behaviours and mechanisms of sports facility provision with a view to identifying strategies to improve and sustain sporting in Kalulushi. It is assumed that with increased sport participation, youth delinquency will reduce, the society will become more interactive, integrated and engaged besides the other perceived health benefits.

1.4 Research objectives

Arising from the above problem statement, and in view of the critical role sport can play in fostering urban social development, the author undertook a study whose main objective was **to explore strategies to improve management of sport in Kalulushi.**

Sub objectives

- To assess current demand for sport.
- To examine Factors influencing community participation in sport.
- To identify Factors affecting the provision of sports facilities.
- To provide a comparative analysis of sporting and facility provision currently and before privatisation.
- To recommend strategic options for increasing and sustaining sport participation and facilities management.

1.5 Main Research Question:

What strategies can be adopted to improve management of sport in Kalulushi?

Sub-questions:

- What sport activities do people in Kalulushi currently engage in and where are such activities being conducted?
- What sport activities do the people in Kalulushi need?
- What factors influence community participation in sport in Kalulushi?
- What factors influence the provision of sport facilities in Kalulushi?
- What differences exist in sporting and facilities provision currently and in the ZCCM era?

1.6 Research Justification

Generally there are well established arguments on the benefits of sport participation which far outweigh the negative effects (Santos, et al., 2008). Sport is not only attracting local attention, but also global recognition. According to the UN Global commitment of 2002, sport is seen as an important tool for the achievement of the Millennium Development Goals. Therefore, there is strong emphasis to member countries to identify and avail resources for sports initiatives (UNICEF 2005, p. 4). Sport is also seen as an important mechanism for moulding human social behaviour through social integration and also because of its potential to target large population.

There is also no such study previously conducted in Kalulushi and perhaps even on the Copperbelt Province. Therefore this research will contribute to knowledge on sport management in Zambia generally. Specifically for Kalulushi and especially from the background that sporting is on the decline, the research will provide a reference point for policy and strategic intervention.

Lastly sport is among the accented to rights under the UN Articles on the Rights of Children. Therefore interventions in the sport will not only confirm the country's compliance but also guarantee the preservation of the children rights to play and recreate often seen in sport participation.

1.7 Research Delimitation and scope

The research was limited to *exploring strategies* and assessing the *demand* and *supply* factors of *sport participation* and *facility provision* in Kalulushi. Sport participation was limited to the measure of type of sport, incidence and frequency of participation, but did not include measurement of the outcomes theoretically argued to result from sports participation (such as delinquencies, cohesion, social engagements, health benefits etc) or scientific measuring process of determining individual fitness. While sport participation is also theoretically related to some psychological factors, it was beyond the scope of this study to include such factors (see also section 2.4). As Kalulushi has a number of sub centres, such as Chambishi, Chibuluma and several peri-urban areas, this research was conducted specifically in Kalulushi Central.

1.8. Thesis Structure

Chapter One: Research Introduction

The author gives the research background by briefly discussing the socio-economic and demographic characteristic of Kalulushi district, the context of privatisation and the implication it had on service delivery generally and sporting activity in particular. The research objectives and questions are also defined in this chapter. The scope of the study and its delimitation and justification are also discussed.

Chapter Two: Literature Review

This chapter provides theoretical understanding by reviewing documented literature, concepts and theories related to sports and facilities provision. The conceptual and theoretical framework for the research are developed and adopted from this chapter.

Chapter Three: Research Methodologies

The data collection methods and instruments used in the research are discussed in detail here, including the samples and sampling methods. The research questions are recapped with research variables operationalised. Data and methodological reliability and validity are also discussed in this chapter, with data presentation and analysis techniques clearly defined. The research constraints, timings and resources used in the research are indicated.

Chapter Four: Data Presentation and Analysis

This chapter presents the research findings and analytical arguments based on researched theories on the research subject, and using the measuring tools developed in chapter three. A logical reflection is made on all the research questions and criteria of assessment to arrive at the presented findings.

Chapter Five: Conclusions and Recommendations

The research wraps up with the presentation of main research conclusions and recommendations and proposition of areas of further study. A reflection is also given in this chapter on how this research relates to other similar researches and on the reliability of its mythologies and findings.

1.9 Summary

The chapter introduced the research topic and the background circumstances associated with the problem. The research objectives, questions and justification of the study have been outlined. Though the observed problem of deteriorating sports infrastructure and the consequential poor sport participation were real, the underlining causes or solutions remained blurred, as the analytical overview discussed in this chapter only provided different dimensions of the possible causes and implications of the observed problem for the future socio-economic development of

the municipality. In order to fully comprehend the situation, research was required to establish real causalities, co-relationships and implications for an informed policy intervention in the sport sub-sector, much of which was guided by the theoretical and methodological framework discussed in the next chapters.

2.0. CHAPTER TWO

LITERATURE REVIEW AND THEORETICAL FRAMEWORK

2.1. Introduction

While cities are centres of economic development and a hive of trading activities, often with high rise buildings and sophisticated tunnels, it is argued that the pride of any city does not necessarily lie in such, but also in the extent to which such a city fulfils the basic functions of living, working, recreation and communication (Knaap, 2006). Though in recent times, working, shopping (as part of living) and technological information flow have assumed dominance, the absence or deficiency in sport, as a component of recreation, has proven to leave a huge hole in the city functionality, resurfacing debate as to whether sport or more broadly recreation, is an extra supply or a fundamental requirement of the socio-economic fabric of cities. However, recent national and international studies clearly suggest that sport is not only attracting recognition, but that several political and national decision makers are assigning positive meanings and regarding it as either a tool or a solution to social problems (see Eekeren van, 2007).

According to the UN Global commitment of 2002, sport is seen as an important tool for the achievement of the Millennium Development Goals. Consequently, there is strong emphasis to member countries to identify and avail resources for recreation initiatives (UNICEF 2005 P. 4).

Within the objective of exploring strategies to improve and sustain sport participation, this section therefore seeks to review literature surrounding sport and the theoretical and institutional frameworks within which such literature is captured. In order to define the operating frame for the rest of the document, the section will unbundle the sports debate, by discussing questions which include; what is sport, how do we measure it, who is involved, at what stage, why, where and why not participate, under whose supervision and for whose gain? The chapter wraps up with a review of four important theories related to sport based on which two theories have been picked and the conceptual framework adopted.

2.2. What is sport?

UNICEF (2005, p. 4), defines sport as all forms of physical activity that contributes to physical fitness, and include all competitive or locally organised games all of which can use rules, customs or competitions. According to Northwest Territories Municipal Council (2003, p.11), sport is an activity that involves the discipline use of muscles groups, mental preparation and application of strategic methods. To strike a distinction between sport and recreation, the author refers to the definition of recreation by Christchurch City Council (2002), where recreation is defined as some form of leisure or physical activities that encourage individual or a societal participation by providing some sense of fun.

In this document sport is therefore defined as *a component of recreation, characterised by physical activities and include all games (competitively or locally organised) that involve the disciplined use of muscles and observation of rules, and may be participated in by either an individual or a team.* Note also that for the purpose of the research, the main focus is on group

sport, which from research, is believed to contribute largely to social cohesion and social integration within society (Kawachi & Beckman, 2000).

Sport, implicitly from the adopted definition, can be organised through informal arrangements by individuals or private organisations and (more commonly) through formal means by the public machinery. Sport can be undertaken indoor usually in multi-facility sport structures, or in enclosures such as recreational halls and community centres. It can also be conducted out door, particularly for sports activities that require huge spatial areas like football, volleyball, tennis, basketball. Parks, apart from providing ambient havens for recreation activities, are also often used for sports activities. This depends largely on the demand and supply factors of sporting and also the legislative and institutional framework guiding recreational sport and provision of associated facilities.

2.3. Sports for Whom

Anybody can participate in sport, and largely at any time, though normally there could be (for logistical and security reasons) pre-set operating hours whether such sport is publicly or privately provided. In many parts of the developed world, access to sport is becoming an important requirement regardless of gender, class or geographical locations (Edinburgh City Council, 2000). However note that while physical activity is important for infant growth, Hosper (2008) describes the participation of children below 10 years in physical activities as 'Play', which activity is further argued to decline sharply before the child enters the adolescent age, but intensifies in adolescent age. In adults, and as observed by several scholars, their participation tends to decline as they grow older (Stratcorp Consulting, 2006, p.37; Cradock et al, 2008; Santos et al, 2008; Changiz et al, 2008), thereby limiting the potential sporting age focus for this research to 10-35 years. However as will be discussed again in chapter three, this research will take a much broader age perspective, partly to test the validity of such generalized assertions.

2.4. Measuring sport activity

Naturally whether driven by an income motive (professional level) or for mere participatory motives (amateur level), sport is a freely chosen activity, mainly measured in its participation in terms of the number of hours and frequency against standard measuring criteria in a specified sport or range of sporting activities.

Admittedly however, the biggest challenge in any sport related study is in the measurement, as most measuring tools use a combination of subjective and objective measuring variables and criteria. This can be confirmed by the varieties in the measuring styles of sport participation. For instance, Karen and others (2008, p.95-100; Cradock, 2008,) define sport participation as being active in any sport at least once per week for not less than 30 minutes. While agreeing with the 7 days, others have tended to reduce the block of 30 minutes to 20 minutes (Santos et al, 2008). Owen (2007) makes it even more complicated. He increases both the number of days in a week from once to twice and also the duration from 30 minutes to 60 minutes, an argument the author believes should be emanating from the medical fields. Specifically and in support of this argument, some medical health arguments suggest that in order to stay healthy or improve health, an individual requires to accumulate 60 minutes of physical activity everyday (Northwest Territories Municipal Council, 2003, p.12). Yet Motl and others (2001) uses the 3 Day Physical Activity Recall (3DPAR), which are converted to 30 minutes blocks per day and compared to

the equivalent Metabolic values to determine whether an individual is engaged in Moderate or Vigorous Physical Activities (MVPA). Purely this is a complicated medical test which is not only beyond the scope of this research and the researcher, but perhaps more important, is slightly beyond the scope of the ultimate intended beneficiary beside the logistical and time constraints if it were to be adopted. The other liberal approach often in use, measures the number of official sporting events participated into in the last 12 months or mere participation in any type of sport in the past 12 months (Cindy & Lindner, 2004; Motl, 2001; Stratcorp Consulting, 2006).

From the above complications, the author generates four points worth noting as they also form the basis of how sports participation has been measured in this research. Firstly, that sport must be measured by type. Secondly, a proxy estimation of the duration, frequency and history of participation must be at least established even without using the advanced scientific or medical test, with participation of a period of 2-3 times per week for a minimum of 30 minutes each time, being described as active participation. Thirdly, the sporting arrangements (formal or informal arrangements) must be understood and analysed if a genuine policy intervention has to be instituted. Lastly it might also be desirable to establish whether such participation is on a competitive or non-competitive scale.

2.5. Arguments for sports participation

Generally sport is known worldwide to generate both economic and social benefits. Historically, the value of sport and recreation can be traced as back as 1938 when the early Dutch historian Johan Huizinga drove the point home and proclaimed that '*in addition to homo sapiens -man the thinker, the growth of culture is dependent on homo ludens -man the player*' (Dzierzak, 2008, p.4), which proclamation is presumed to be behind the growing interests in recreation sport in the 21st century.

A more established and widely agreed benefit of sport participation is in the health promotion area where it is viewed vital to body fitness and health care cost reduction by retarding incidences or severity of illness (Christ Church City Council, 2002). In line with this argument, Larsen and Manderson (2008) stress that health is in fact not the absence of diseases, but the availability, accessibility and provision of opportunities such as health related services like sport and recreation that promote active styles and meaningful lives. Though the argument is plainly valid, the author still feels Larsen and Manderson have evaded the question as to whose responsibility it is to provide, avail and make accessible the range of services in question. For adults sport improves body health and also reduces their dependency on other people when they are in old age.

Economically and besides the fun it creates, sports contribute to employment generation particularly for sports activities done on a competitive level. For certain cities like Kuala Lumpur and Sydney, sport is an important avenue for attracting tourists who come to watch or participate in international sports events like the Olympics, though admittedly such an argument may not be within immediate applicability in Kalulushi. But on the individual level, sports have potential to enhance one's economic and social status mainly through enhancing higher education opportunities for participants. In Zambia for instance, several sports persons have received higher education benefits from sport, e.g. Samuel Matete (Athletics), Kalusha Bwalya

(Football), Amon Simutowe (Chess) and many more upcoming sports persons too numerous to enlist (Author's knowledge and experience).

From another human development perspective, sport helps in reducing emotional stress, builds self esteem, confidence and thus enhances leadership skills. For youths, sport is seen as an important tool for bringing them together to resolve social differences and therefore reduces emergence of anti-social behaviour by curtailing the number of hours they could possibly be exposed to social vices or risk behaviour styles (see UNICEF, 2005). Sport therefore offers good opportunities for better lifestyles.

In fact with the growing threats from the HIV/AIDS pandemic, UNICEF is using sport as a media for awareness and prevention strategies to combat HIV/AIDS. Such strategies have been adopted in several countries including Zambia (Kalusha Bwalya Sports Academy) where sports-related foundations have been formed to promote good youth values. Also in Monze District of Zambia, the Global Sport Integrated (an International NGO) is using the transformative power of sport as a social development tool to help youth grow and learn socially, physically and emotionally (see <http://www.beyondsportzambia.org/index.html>).

From a sociological angle, participation in sport has been closely tied to reduced social conflicts, reduced incidences of neighbourhood crime and increased social cohesion which are good recipes for social integration (Kawachi & Beckman, 2000; Cradock, et al, 2008; Canadian Parks and Recreation Association, 2008). In the absence of formal schools, sports activities are now seen as means of teaching and helping people to heal from social conflicts. For example in Sudan, Rwanda and Liberia where decades of civil wars have disrupted social ties, reconstruction efforts are gaining strong grounds through sports activities (UNICEF, 2005; United Nations, 2003).

Worth noting also is the fact that in many developed countries for example in Canada, USA, Australia and several parts of the UK, sports participation is seen as a valuable method of reducing obesity and the likelihood of chronic diseases (see Puska, 2009), an argument which assumes remote relevance in Africa and in the study area in particular, due to wide spread of poverty which leaves people rarely with obesity.

Figure: 2.5. (a) Enhanced learning through sport participation



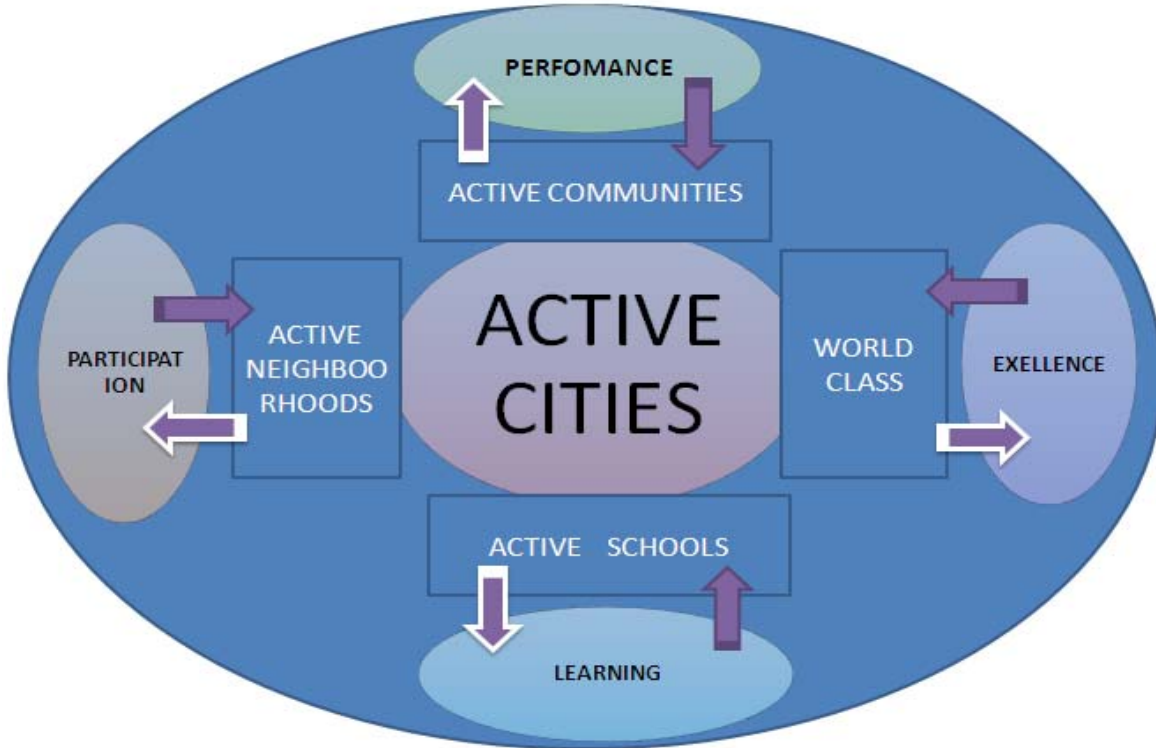
National Measles campaign in Zambia in June 2003, youths play sporting games focusing on the importance of immunization: (UNICEF 2005)

In the case of sports taking place in recreational parks, it is strongly argued that besides the latent promotion of body fitness, such areas make life healthier and happier by producing certain influences in the minds (through scenery observations and appreciation of nature), which tend to lift the mind from undesired moods and habits (Carr, et al., 1992, p. 318).

Lastly and from an international perspective, sport does not only bring pride to the individual and country, but is now seen as a potential solution to conflicts and to the attainment of the famous MDGs (Eekeren van, 2007). The global arguments could be summarised in what Koffi Annan, former UN Secretary General described and had this to say; *'Sports can play a role in improving the lives of individuals, not only individuals but the entire community. I am convinced that the time is now to build on that understanding to encourage governments, development agencies and communities to see how sports could be included more systematically in the development strategies if we have to achieve the much cherished global development agenda enshrined in the MDGs'* (UNICEF, 2005, p.37).

Generally therefore, the benefits to be realised from sports participation varies from place to place, much depending on the particular socio-economic attribute that the sports guiding policy intends to achieve. In the model below, schools, neighbourhoods, communities or sports icons are seen as breeding grounds for sportsmanship, usually depicted in form of regular performances, yielding such attributes as *active schools, active communities, world class sport or active cities generally*. Ideally such interplay results or fits within the objective of learning, participation, enhancing human performance and social integration or even leading to achievement of excellence in sports performance.

Fig.2.5. (b) Sports Benefits and Implication Model



(Author's own construct adapted from English Sports Council, 2000).

2.6. Arguments against sport participation

While the benefits of sport could be well established, there are opposing views particularly on the alleged contribution of sport in reducing negative social behaviours. For instance Lee (2007) argues that the empirical evidence available so far is not adequate to sustain the strong relationship between sports participation and development of good moral behaviour. The thrust in his argument, though largely linked to individual sport participants, is that quite often youths would hide in sports participation to create time to engage in such activities as drug abuse, beer drinking and sexual acts. This argument is equally supported by Faulth and others (2007) who, based on a research on adolescent in Chicago, observed a general rise in youth delinquency among sports participants (see also Cradock, et al, 2008). Even at competitive levels like the Olympics, World Cup sports tournaments; sports participants have often been linked to toxic substance intake, failing the *doping test* related to restricted enhancing or suppressing drugs.

The other obvious reservation of sports participation, especially if rules and other social control measures are not put in place or followed, could include fears of or actual injury arising from the use of physic, which emanate from the definition of sport itself. The fears can be instilled by parents, relatives or individually perceived by the participant. Alternatively, restraint can be based on the social norms and values of families and individuals. Sport participation can also alienate an individual from own society, through prolonged involvement in competitive sport away from own country or society.

Lastly others have taken a different dimension of this debate by arguing that sports yield noise and sometimes conflicts within the communities in which the facilities are located (Christchurch City Council, 2002), though in practice, acceptable noise levels are difficult to fix due to the exciting nature of most of the sports activities.

Having analysed both sides of the equation, perhaps the unavoidable question at this stage would be: *which side of the scale is the weight heavier, or is sport worth the bother? If so, then which sports and what accompanying facilities ought to be available to induce the preferred levels of sport participation, which is a conduit for the much desired health benefits and social integration?*

Evidently from the above arguments, and notwithstanding the fact that most of the bright and blared sides of sports participation could be qualitatively measured, it could still be prejudicially inferred that the benefits of sports participation far outweigh the reservations. Yet it is not clear still how these benefits are distributed across society and under what operational environment they are yielded, which explanation can only be enhanced with reference to particular theories in the discipline of sport.

2.7. Theories related to sport and sport participation

Theories are interrelated statements about reality, often in form of concepts or models appropriate to describe and explain a problem for purposes of proving policy guidance (Blauw, 2009). Every research requires enough background information to shape its scope of problem and possible findings, usually based on what has been done in line with the research subject. Such background information underlines the importance of theories in research.

Various theories have been developed in the field of sport and recreation, and in the recent past, researches have been conducted not only in line with these existing theories, but more importantly to identify areas in which existing theories are insufficient in explaining the sporting behaviours so as to improve on their policy guidance. So, what important theories exist, which can be related to sport?

2.7.1. The “Potential Environment and the Effective Environment” Theory

Herbert Gans (1972), in his book ‘People and Plans’, captures a debate under the theme “*The Potential Environment and the Effective Environment*”, a strong debate on how Planners and Social Scientists view society behaviour in relation to the environment. From the planners’ view, the physical environment (i.e. the natural environment and the artefacts that are placed within it) directly affect the behaviour of human beings. The argument is grounded in the assumption that supply will always create its own demand such that if, for example, a Planner designs and constructs football pitches, recreational halls, tennis courts, or volleyball courts (potential environment), the anticipation is that society will be enticed to start playing the associated games (effective environment). Whether or not such a society has capacity or motivation to play is a question which the Planner does not seem to answer. The Planner thus tends to equate the *potential* and the *effective* environment.

The social scientists' view to the contrary, is that supply should be a function of demand, which is in turn dictated by the social and cultural systems of the people planned for, and deemed crucial in determining the extent to which the perceived *potential environment* becomes an *effective environment*. Based on this debate, Carmona and others (2003) are in fact pondering (among other questions) whether the design of public places and urban spaces should be a preserve of architects and planners, focused on merely transforming the spatial arrangements and improving visual quality, or rather be more deeply rooted in striking a balance between society's social-cultural values and spaces. In short according to this theory, effectiveness is seen to be realised when most, if not all, of the components of the built environment are adopted by the intended users. The big questions that of course arise from both sides could be: how will a planner know which cultural values to incorporate into his plans? At what exact point is the effective environment achieved; is the behaviour of society consistent over time regardless of the age or social economic trait of the people? Or is social behaviour not also affected by external factors such as national and global policy changes? These are sensitive technical questions which normally should not attract risky answers. It suffices to cite however (and regardless of results elsewhere) that Santos and others (2008) in using this theory, found a positive relationship between sport participation and the availability of planned sport and recreation facilities among Portuguese adolescents.

As a compromise, this theory concedes that indeed the built environment has influence on societal behaviour, but rather shifts attention from the physical features that must be incorporated into the planner's schemes, to the cultural values of and meanings to the people that the plans ought to have (Gans, 1972). This theory concludes with three important messages; firstly that planning is important to control undesirable attribute arising from human interplay with the environmental. Secondly and from a professional comparative advantage, to identify and deal with attributes which remain hidden from society such as pollution and other societal wellbeing hazards. Lastly, that the mere availability of planned schemes may well result into change of human behaviour, the conclusiveness of which is an issue the author had to validate from the research.

2.7.2. Theory of Planned Behaviour (TPB)

An important theory in sport and recreation is the traditional *Theory of Planned Behaviour* (TPB), developed by Ajzen in 1991 meant to help in assessing and predicting sport participation. The theory postulates that 'the ultimate sport behaviour of an individual is determined by the *intention* and *perceived behavioral control*' (Ajzen 1991; Changiz, et al, 2008; Chatzisarantis et al, 2006). Explained simply, an individual must develop thoughts about participating in a particular sport and recreation activity. Secondly s/he must evaluate herself or himself on the potential personal capability to undertake such sport. However recent researches have disputed the predictive validity of this theory due to its limited scope of explaining sport behaviours, particularly on how to measure intentions. Specifically, Milne and others (2002), despite agreeing with the measurements related to the *perceived behaviour control* side, argue that measurements of the *intention side* are not fully accounted for under this theory. This limited scope of analysis is believed to be responsible for the poor outcome of its related interventions aimed at improving sports participation, thereby calling for inclusion or out-sourcing of additional variables particularly from socio-economic angles. Consequently, this theory though

methodologically sound, offers little explanatory factors for sports participation or non participation.

2.7.3. The Achievement Goal Theory (AGT) and the Reversal Theory (RT)

The AGT sees sports participation from two angles, the *desired achievement* and the *ego* and thus postulates that ‘the sport behaviour of an individual is linked to the intrinsic (direct) motives such as fun, fitness, and skill build-up and achievement, while the ego pursuits are determined by the extrinsic (indirect) motives such as status, popularity etc. These motives or factors are well captured in the Participatory Motivation Inventory (PMI) developed by Gill and others in 1983 (see Cindy & Koenraad, 2004; Gill et al., 1983) and also by the Apter Motivation Style Profile (AMSP) developed by Apter and others (1998).

An expanded version of the AGT is the RT (Apter, 1998), which identifies eight push factors to explain sporting behaviour, and contends that ‘human beings possess certain values and have additional needs to explain their sporting behaviour beyond the achievement realm’. Recent researches have even added an extra factor to make them Nine (Cecchini et al, 2002; see also section 2.7.3.1. and <http://redalyc.uaemex.mx/redalyc/pdf/727/72714303.pdf>). Generally though, the two theories are compatible with each other and both theories seek to explain motivation factors associated with sporting behaviour, but the RT appears to be a more useful theory as it explains a broader scope of motivation factors in sporting behaviour, which explanation is limited in the AGT. It should be noted at this point, and as part of recuperation, that while the theory of *planned behaviour* and the theory of *environment and behaviour* both did not specify particular key factors of sport participation, the RT attempts to discuss the important broad factors. Equally important, the two theories (RT and AGT) give clues as to the critical questions that need to be incorporated in the design of questionnaire for sport related research.

2.7.3.1. Additional Factors affecting Sports Participation

Implicitly the perceived benefits and negative consequences will always have a bearing on the individual’s intention to participate in sport activities. But whether the motive for participation is inclined to the negative factors or the positive factors it must be clarified that there are additional predictive variables that are known to influence individual participation in sport activities. Most of these, though listed on the Participatory Motivation Inventory (PMI) developed by Gill and others in 1983, have been categorized into 9 broad themes which Cecchini and others (2002) describe as all embracing and in tune with the existing theories in sport. These are discussed below together with other predictive factors of sports participation outside Cecchini’s categorization.

Physical appearance: The body appearance including the latent objective of whether to keep fit, slim, or control weight are an important set of factors influencing participation. Also appearance in terms of dressing can influence whether one will participate or not. While the *haves* would want to show off their best sports gear, the *haves not* feel embarrassed by wearing inferior outfit and would react by shunning participation. **(PMI factor 1).**

Heterosexuality: Intention to participant for purposes of establishing relations with opposite sex. **(PMI factor 2).**

Team: A sense of desire to belong to a team, which is also enshrined in the definition of sport **(PMI factor 3).**

Fun and Friendship: A motive linked to realization of the intrinsic (direct) satisfaction from sport or recreation, emanating from the Achievement Goal Theory (**PMI factor 4**).

Ability-behaviour control: Though not exclusive, the perceived ability to undertake a particular sport will often dictate one's motives. For instance playing basket ball is often associated with taller people just as less fat people play football or participate in athletics because of the certain control attributes which are often deficient in the short and fat people respectively. This self assessment which also comes from the AGT will surely influence individuals' sport choices and ultimately sport behaviour (**PMI factor 5**).

Winning: This is one of the motivations which seek to ascertain one's ability to perform more than other or to improve the existing skills. And this could also be the reason why participation is sometimes measured in terms of the number of competitive sporting activities involved in (**PMI factor 6**).

Relaxation: Sport is one of the popular ways of diffusing mental and social pressures, regardless of the resultant consequences (**PMI factor 7**).

Health: This is the most established and most published incentive for sport participation. However, like with other factors, it can also be dictated by other complimentary catalysts such as availability of infrastructure, education levels and income characteristics of individuals (see Larsen & Manderson, 2008) (**PMI factor 8**).

Social approval: This is one of the extrinsic (indirect) motives that the AGT postulates. Most sport persons particularly in organized sporting activities want to attract some form of social recognition (attaining celebrity status) for the achievement and higher performance levels. In some cases, while such achievements accrue to an individual, they create impetus for other non participant to pursue the sporting route or to have interest in watching sport. For instance, a study of Taiwanese sporting behaviour in Chicago found that Taiwanese involvement in sport was related to the excellence achievement of a Taiwanese sportsman Pitcher Chien-Ming Wang (Chen & Myers, 2008; Chen & Lin, 2008) (**PMI factor 9**).

Degree of social cohesion: Whereas many studies have linked social cohesion as emerging from high levels of sport participation (see Kawachi & Beckman, 2000), the reverse scenario is also possible. For instance (Cradock, et al, 2008) found high Sport participation levels in neighbourhoods in which individuals had strong reliance on and trust for each other (social cohesion), compared to those fairing low on social cohesion. Perhaps the reasoning is that people feel comfortable to go out for sport activities on the understanding that neighbours will oversee their children and property.

Age: As indicated earlier, individual participation in sport tends to increase in adolescent age and subsequently declines in adulthood.

Quality of sports infrastructure: As if measuring quality is easy, Tucker and others (2008) argue that it's not the availability of sport infrastructure that matters, but whether such infrastructure has adequate quality to induce sport participation. Put differently and while conceding that quality measurement is not easy, Blauw (1993) points out that the design of infrastructure should be of quality, enough to evoke associated sporting behaviour, preferably diverse behaviour. This is a subjective debate which the author will not attempt to quench, for reasons that definition of quality varies from place to place much depending on the exposure

levels and the capacity to do more. For instance what might be quality sports infrastructure in Kalulushi (Zambia), could be far below the quality definition in Rotterdam (the Netherlands). But generally it could also be added that such areas besides a good architectural touch, should induce some sense of safety within users, through such attribute as mutual visibility in which people can see and be seen.

Sex: Though no conclusive positions have been reached by sports researchers (including the author), a few researches suggest that women are less likely to participate in sports activities due to a number of factors which include cultural beliefs and norms. For instance, a study of Turkish and Moroccan women participation in sports conducted in the Netherlands revealed less sport participation among women with less acculturation (Turkish) due to the deeply rooted beliefs than Moroccans with more acculturation (Hosper, et al, 2008). Part of the justification is that in some cultures including most parts of Africa, the sport dress, where much of the body parts are exposed, is not in tune with the cultural beliefs. This is even more pronounced if such women are married, most likely, for fears of emergency of heterosexual activity cited above which might destabilize marriages. Though this argument is passive on the adolescents, generally in most part of Africa, the bulky of household chores are placed on the girl child and the mother, a situation which takes most of their time and therefore limiting further the extent to which they could participate in sport.

Proximity and distribution: The frequency with which sport and recreational facilities are used is argued to be related to the spatial distribution and distance of the facilities from place of stay, the closer the facilities the more intensely used they tend to be (Huat, et al, 1992, p. 6), though other studies suggest that this co-relationship is more applicable to females than males (see Santos et al, 2008).

Income: People with consistent or high income are more likely to participate in sporting activities regularly than those with low incomes because they can easily overcome the challenges of uneven distribution of facilities e.g., by affording transport costs to places where their favourite sport is situated. They generally also tend to have capacity to pay user fees if it is a requirement for participation (see Blauw, 1993). To the contrary while those with a higher or regular income would not struggle to meet the income requirements for basic needs, those with low income struggle to make ends meet, which might push their sports participation out of their preoccupation, worse even if user fees are attached to participation in a particular sport, or information on available sports and facilities is inadequate.

Education levels: Whether in school or out of school, education level is also closely related to sport participation, on the premise that educated people are more aware of the health benefits of sport and would thus regularly participate in sport if not impeded by factors beyond their control. There is also the likelihood that such perceived values would be passed on to their children. (See ARPA, 2006; Cradock et al, 2008).

Occupation: Usually people in regular formal employment may have very limited time to participate in sporting activities, particularly for sports activities during the working days or where the sporting activities are too limited in the evenings, off course notwithstanding the education levels, sport prioritisation and income capacities, which are additional compelling factors. On the other hand, the informally employed could have more time to participate in sport

if they are not constrained by factors such as user fees, household roles and the other specific factors discussed above.

Information technology: As observed by Owen (2007) and Blauw (1993), the emergence of competitive technology, particularly the computer age, provides serious challenges to public sport participation, as many youths and adults alike are now spending more time to play computer games and watching television (see also Puska, 2009).

2.7.4. Theoretical Synthesis

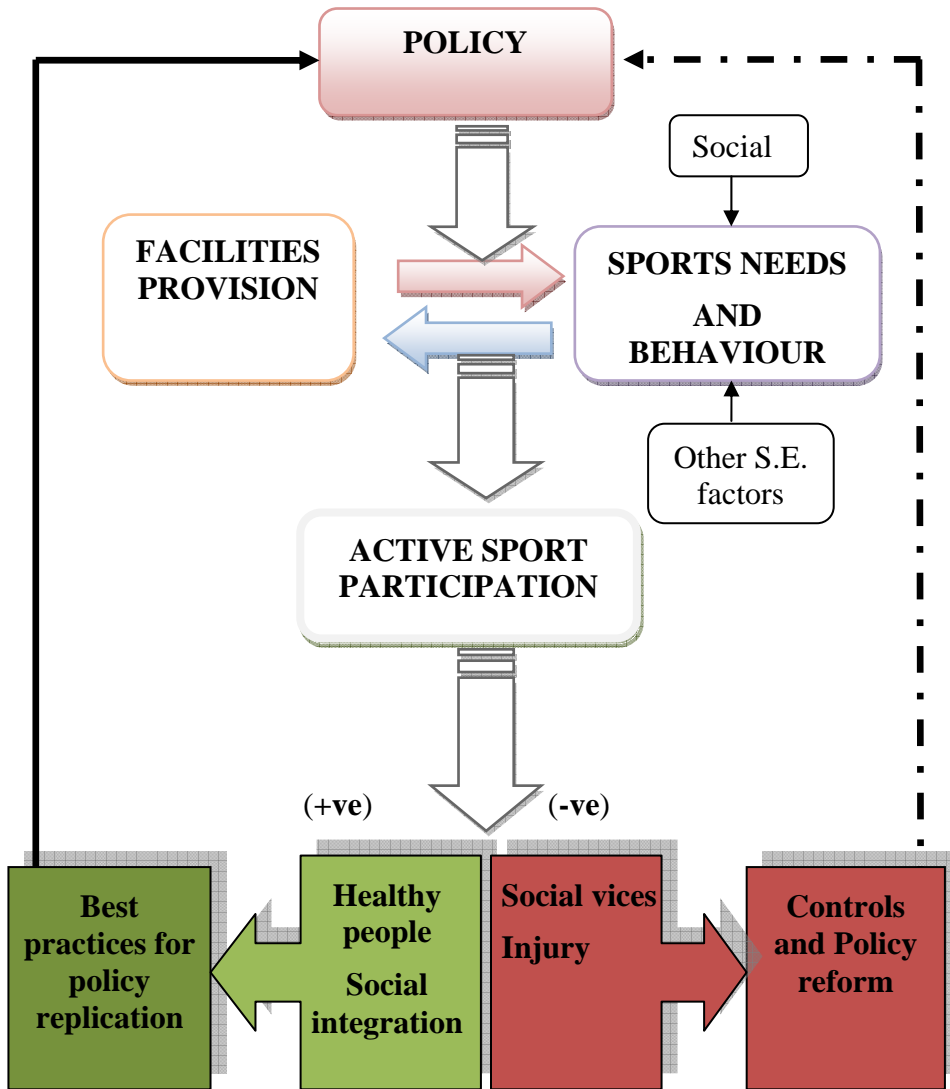
The theory of *Potential and the Effective Environment* helped to identify the two important perspectives which technocrats must always appreciate- the *professional ethics* and *social complexities* of the environment. This theory thus seeks to reduce the often mistaken assumptions that planners have, that (through design) they can manipulate society according to the tune of their professional ethics. To the contrary this theory revealed the importance of social and cultural values, and therefore opened up possibilities to explain part of the observed phenomena-*low sporting activity* in Kalulushi Municipality assumed to have emanated from the deteriorating infrastructure. From this theory it is not enough to merely provide infrastructure if such infrastructure does not reflect, in some way, the cultural values and norms of the people.

The second theory, (*Theory of Planned Behaviour*) though analytically limited, gave direction as to the scope of reasons that could possibly explain what the author had observed as a problem. It therefore helped in properly defining the observed problem, its measurements and the type of variables and generally the structuring of the questions for effective measurement of the problem. The theory also had insights on the methodology and data analysis styles, but its analytical relevance seemed to have been consumed by the development of the AGT and RT. It was therefore not reflected in the main conceptual frame the researcher adopted.

The RT and the AGT though hypothesis based, discussed the important questions which should normally be included in an assessment of sport motivation factors, such as questions on age, sex, and socio-economic status, current and historical sporting behaviour of an individual. These twin theories further revealed the existence of an already developed instrument-*the Participation Motivation Inventory* developed from previous researches in the sports field, reference to which helped in coding the questions for easy analysis. Note also that the AGT was equally not reflected in the main conceptual framework for reasons already discussed in section 2.7.3 above.

In short, the different approaches and arguments from the above mentioned theories, revealed not only the complex nature of the observed problem, but also provided hints on the multi-faceted nature of solutions that were required to deal with both sporting behaviour and facility provision, thus giving the author enough justification to undertake the research. The author therefore adopted the theory of the “*Potential and the Effective Environment*” (in short: Environment-Behaviour Theory) and the “*Reversal Theory*” as the main theoretical bases for conducting the research because the two theories embraced the technical, professional, environmental and social dimension of the problems under study (see figure 2.7.4. below).

Figure: 2.7.4. Conceptual and Theoretical Framework



Environment -Behaviour Theory & Reversal Theory

(Author's own construct adapted from (Blauw, 2009; Gans 1972; Ajzen, 1991))

2.8. Conclusion

The preceding chapter reviewed the important theories and concepts that are linked to sport. Of particular importance was the definition of sport, its measurements and the researched arguments for and against sport participation. Additional predictive factors of participation were also reviewed to recast contemporary reasoning in explaining sporting behaviour of human beings away from the traditional models.

Most important the chapter discussed and established a theoretical predictive link between sporting behaviour and facilities provision from which the main theoretical and conceptual framework for the study was adopted. Implicitly and as also reflected in the theoretical model, the chapter suggested that in order to realise the assumed benefits of sport participation such as social integration and healthy living, a balance must be struck between the sporting needs and facility provision. This *needs-facility* balance, inevitably in this case, had to be preceded by a careful study and analysis of the social, economic, institutional and environmental characteristics of sports and accompanying facilities in the study area, which task was reserved for the proceeding chapters.

3.0. CHAPTER THREE

RESEARCH METHODOLOGY AND STRATEGY

3.1. Introduction

This chapter describes the methodology deployed in the research study aimed at exploring strategies to improve management of sport in Kalulushi Municipality. Apart from providing a brief description of the study area, this chapter generally defines the nature of the research, describes the research procedures used in collecting data and how such data has been presented and analyses to arrive at the research conclusions and recommendations. The chapter concludes with a research design as a methodological model on how this research fitted into other sport and recreation planning cycles.

3.2. Study Area

Kalulushi district lies in the Copperbelt Province of Zambia and is found 15KM to the West of the City of Kitwe between longitudes 28 degrees east of the Greenwich Meridian and latitudes 13 degrees south of the Equator. The district borders Mufulira to the North-East, Kitwe to the East, Chingola to the North and Lufwanyama to the West. Before 1977 Kalulushi was under the jurisdiction of Kitwe. However, due to growth in population, Kalulushi attained district status in 1977 and subsequently became a Municipal Area in 1992. Since then Kalulushi has been a Planning Authority with statutory powers to undertake physical planning. Kalulushi District has one Constituency with twenty (22) Wards. Note from the table that two additional wards were, created prior to the 2006 National Tripartite Elections, from Chembe and Musakashi Wards into Chankalamo and Twaiteka respectively.

Kalulushi district is divided into three (3) main urban areas namely; Kalulushi Central (Research Study Area), Chibuluma and Chambishi. Kalulushi Central is the main administrative centre of the entire municipality and covers seven wards which are Ngweshi, Kafue, Luapula Dongwe, Kalungwishi, Lubuto and Kalanga. There are also several peripheral areas which include; Chati, Chembe, Lukoshi, Musakashi, Chisangwa and Ichimpe. Other areas named under the peri-urban and squatter settlement includes; Chibote, Zambia compound, Chamwanza and Kameme. Most of these settlements emerged as a result of charcoal burning activities in the forestry reserves as far back as the 1960s.

However much of the district population is concentrated in the main urban and sub-urban areas of Kalulushi Central, Chambishi and Chibuluma. Chibuluma is an area where most of the early retirees from ZCCM have settled. Chambishi has in recent times become a hive of the district major economic activities, as it is where most of the mining activities are located and is currently the hub of the district economy, due to massive investment mainly by the Chinese investors. After the closure of Chibuluma mines, very little mining activities, if any, has remained in Kalulushi Central.

Figure 3.2: Location of Copperbelt Province in Zambia

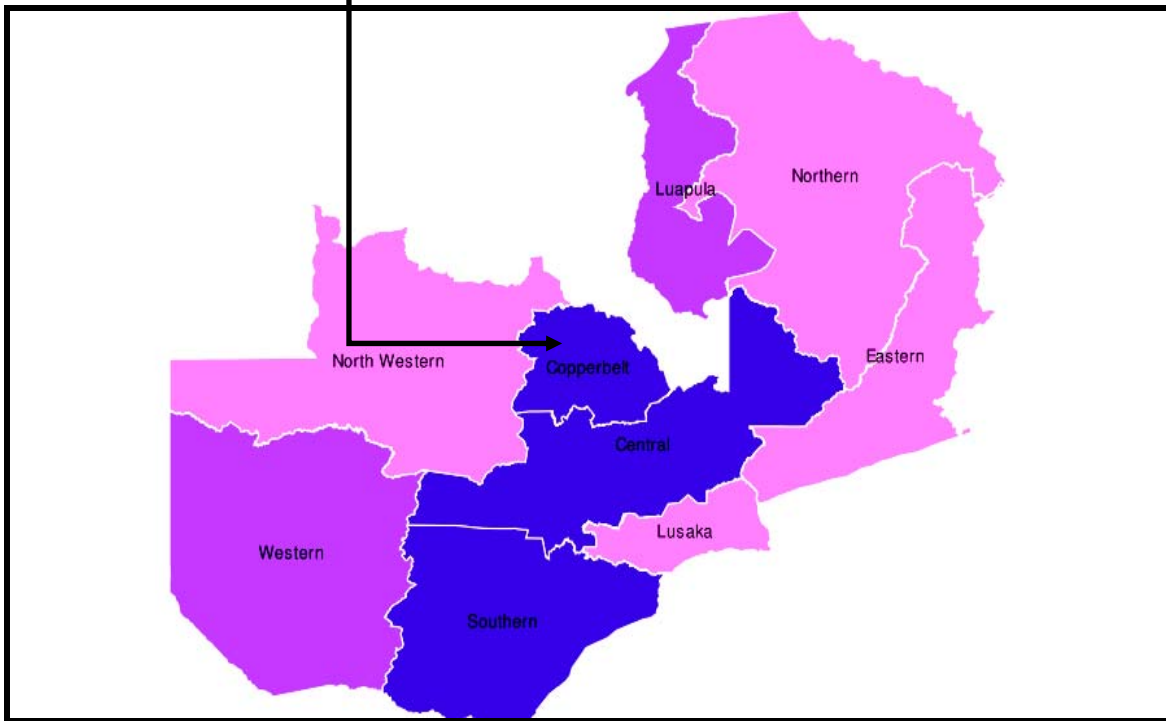


Figure 3.3: Location of Kalulushi on the Copperbelt Province

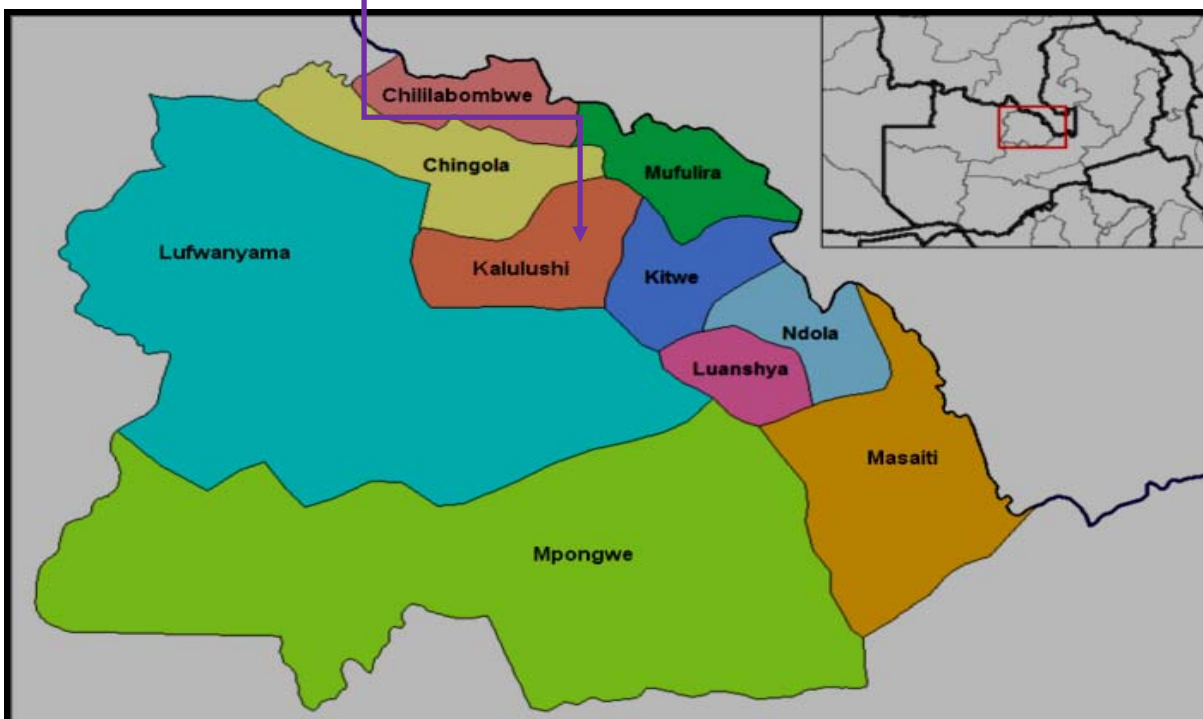
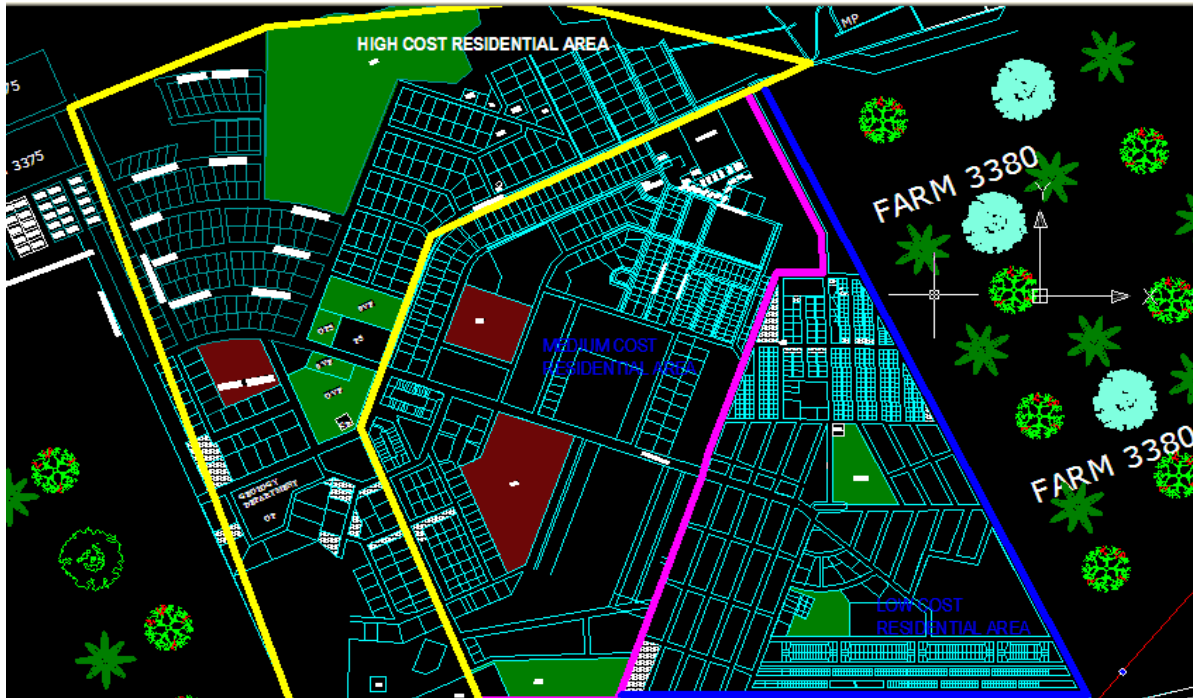


Figure: 3.4. Location of the study area in Kalulushi



Source: Kalulushi District Planning Unit

3.3. Demographic Characteristics

During the 2000 census of population and Housing, Kalulushi recorded a population of 75,806 people (C.S.O. 2000). Currently the Municipality has a projected population of 79,279 distributed over a total area of 725 square kilometres, with an average population density of 109.4 /km² (DPU, 2005).

Based on the 1990-2000 census comparison, the district exhibited a population distribution of 50.98% males and 49.02% females, and a population increase of 6209 over a period of ten (10) years (76,757-75, 806). The district has an annual growth rate of 0.9%, the second lowest on the Copperbelt.

However, classified growth rate for male (0.3%) and females (0.6%) over the same period clearly suggests that the female population was increasing faster than the male population. This could be attributed to the fact that after privatization of the mines, most male youth migrated to other districts in search of job opportunities. The trend continued until recently that more job opportunities have been re-created in the now expanded mining sector, which has attracted back more men in search for re-created jobs. And the projections made by the District Health Management Team in 2005, suggest that approximately 47.2% of the population is above the age of 15 years while 52.6% are below 15 years. This implies that Kalulushi will still have a youthful population in the next 10-15 years, entailing a high demand for social services such as schools, tertiary education and recreational facilities mainly in the major urban areas. From the same projections, 22% of the municipal population consists of women in the reproductive age. This

implies an expected growth in population in the next 20 years and thereby increasing pressure on social service delivery generally.

Table 3.3.1: Population, Annual Growth Rates by District, Province and Census Year

	1990 Population			2000 Population			Average Annual Growth Rate (percent)		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Central									
Chibombo	78,818	79,564	158,382	121,948	119,664	241,612	4.5	4.2	4.3
Kabwe	85,398	83,628	169,026	89,003	87,755	176,758	0.4	0.5	0.5
Kapiri Mposhi	55,503	55,259	110,762	98,558	96,194	194,752	5.9	5.7	5.8
Mkushi	38,863	37,884	76,747	54,628	52,810	107,438	3.5	3.4	3.4
Mumbwa	73,467	75,460	148,927	79,795	79,066	158,861	0.8	0.5	0.7
Serenje	53,181	54,793	107,974	66,569	66,267	132,836	2.3	1.9	2.1
Total	385,230	386,588	771,818	510,501	501,756	1,012,257	2.9	2.6	2.8
Copperbelt									
Chililabombwe	33,202	32,016	65,218	34,391	33,142	67,533	0.4	0.4	0.4
Chingola	85,642	83,357	168,999	86,928	85,098	172,026	0.2	0.2	0.2
Kalulushi	35,622	33,975	69,597	38,786	37,020	75,806	0.9	0.9	0.9
Kitwe	175,812	171,212	347,024	189,650	186,474	376,124	0.8	0.9	0.8
Luanshya	74,166	70,649	144,815	74,963	72,945	147,908	0.1	0.3	0.2
Lufwanyama	26,725	25,020	51,745	32,198	30,987	63,185	1.9	2.2	2.0
Masaiti	42,309	42,522	84,831	48,892	46,689	95,581	1.5	0.9	1.2
Mpongwe	19,578	19,140	38,718	32,846	31,525	64,371	5.3	5.1	5.2
Mufulira	77,067	75,668	152,735	72,526	71,404	143,930	-0.6	-0.6	-0.6
Ndola	169,396	165,381	334,777	188,222	186,535	374,757	1.1	1.2	1.1
Total	739,519	718,940	1,458,459	799,402	781,819	1,581,221	0.8	0.8	0.8

Source: Central Statistics Office, 2000

Table 3.3.2: Population Projections by Age and Important Sex Data

CATEGORY	NUMBERS BY YEAR					
	%	1998	1999	2000	2002	2005
Children 0-11 months	4	3412	3558	2911	2940	3171
Children 5 years	16	17061	17794	11,642	11,759	12685
Children 5-14 years	48.8	41628	43418	35509	35866	38688
Women 15-45 years	22	18767	19574	16008	16169	17441

Source: DPU/DHMT Kalulushi, 2005

Table 3.3.3: Kalulushi Projected Population Distribution by Wards-2005

WARD NAME		TOTAL POPULATION	MALE POPULATION	FEMALE POPULATION	NUMBER OF HOUSEHOLDS
REMMY CHISUPA		3989	2010	1979	914
KANKONSHI		1281	571	710	232
BUSEKO		2683	1275	1408	540
CHIBULUMA		2010	944	1066	495
KALENGWA		1946	936	1010	332
S T U D Y A R E A	NGWESHI	2134	1055	1079	393
	KAFUE	5266	2637	2629	905
	LUAPULA	2780	1416	1364	415
	DONGWE	1615	820	795	245
	KALUNGWISHI	3171	1638	1533	461
	LUBUTO	3280	1606	1674	462
	KALANGA	5493	2841	2652	937
	SUB- TOTAL	<u>23 739</u>	12 013	11 726	3 818
ICHIMPE		3764	2023	1741	749
MWAMBASHI		4483	2356	2127	1100
LUKOSHI		1178	648	530	278
LULAMBA		3319	1737	1582	638
CHAMBISHI		6639	3418	3221	1133
MUSAKASHI		11962	617 1	5791	2377
CHEMBE		7883	4131	3752	1443
CHATI		4403	2180	2223	798
KALULUSHI		79279	40413	38866	14847

Source: DPU, 2005

3.4. Administration Ethnicity and Governance System

Administratively, the district is run via a dual decentralised governance system with the District Commissioner on one hand coordinating the functions of central government under the government departments present in the district. On the other hand, an autonomous Kalulushi Municipality created under the Local Government Act CAP 283 of the Laws of Zambia, is in charge of local government and municipal functions, which in some cases tend to overlap with some of the government departmental functions.

Though situated on traditional Lamba land, Kalulushi District has no Chiefs since no land falls within the boundaries of any traditional ruler. Hence the whole district land is *State Lands*, administered by the Council on behalf of the Commissioner of Lands.

Ethnically, and arising from its historical development and migration by people in search of farmland and employment in the mines, Kalulushi district consists of different tribes from different parts of Zambia. The predominant languages spoken in the district are English, Bemba and Lamba. Other languages especially in the major farming areas include Lunda, Chokwe and Luvale. The majority of people in the district are Christians with a minority (9%) being Muslims.

With the typical British Colonial town planning system, Kalulushi is characterised by segregated neighbourhoods, with major social services concentrated in the main urban areas, declining in both quantity and quality further away from the urban areas. The district is accessible both by road and by air and is well connected to the rest of the country and has fairly good energy and telecommunication facilities.

3.5. Research Objectives and Questions

Arising from the research background discussed in Chapter one, this research sought to explore strategies to improve management of sport in Kalulushi. The specific aspects that the research addressed included an understanding on;

- What sport activities people in Kalulushi do engage in and where such activities are being conducted?
- What sport activities people in Kalulushi need?
- What factors influence community participation in sport?
- What factors influence the provision of sports facilities?
- What differences exist between sporting and facilities provision currently and in the ZCCM era?

From this assessment, the research had to ultimately conclude by identifying the strategic options that could be recommended for managing sport in Kalulushi.

3.5.1. Research Type and Strategy

The author undertook an **exploratory single case study embedded** research in one central area of Kalulushi, comprising seven wards with a combined population of **23,739** (see table above). In simple terms, a case study could be defined as an intensive description and analysis of group or individual behaviour (Kombo & Tromp, 2006, p. 72). A case study was used because it is one of the methods which allows for exploration of solutions to complex or rare phenomena and issues, besides the opportunity it provides for application of new knowledge and research skills. It is an ideal method to use in challenging theoretical assertions and assumptions, thereby opening chances for further innovation. And as it was not possible to study the sporting behaviour of all the people in Kalulushi, (within the assigned time frame), a case study was specially resorted to. The case study was *embedded* because within the study area, different groups were studied to generate a triangulated set of data.

3.5.2. Data Collection and Sampling Methods

Primary data was collected from a sample of **248** selected through a combination of random and purposive sampling methods in schools, among private sports providers, central and local government officials, new mining companies and former ZCCM employees who at least served in middle or top management levels.

From three High Schools within the study Area, a combined sample of **85** in fairly balanced proportions of girls and boys was drawn, each school supplying respondents randomly picked from each of the selected grades (10, 11, and 12). Schools were specially selected as target areas because there is wide scope of literature that attributes the sporting behaviour of society to schools and their curricular activities (see Christchurch City Council, 2002, p. 17; UNICEF, 2005).

A total sample of **150** was systematic and randomly drawn from the general resident population above the age of 10 years, at least to cover each of the age categories; *10-19 years*, *20-35 years* and *above 35 years*. The sample was during analysis segregated into important variable categories such as age, gender, residential location and marital status to capture any analyzable variations in sports needs and participation behaviour. The category *10-19 years* was designed to allow for comparison of sport participation outside schools with sports participation in schools, since in Zambia the average age of a grade 12 pupil is 19 years. The second category *20-35* was included as it is believed to be the most active youth cohort, and therefore suited for study of sporting behaviour. The last age group was designed to provide information with which to test the assertions of declining sporting activity with increasing age as suggested by literature (see section 2.3 in Chapter 2).

Purposive sampling was used particularly to interview former ZCCM management employees to establish how sport was being management, the new mining companies, and private sport providers and also on central government and local government officials to assess trends in facility supply, management and coordination processes.

The main instruments used were structured interviews, observations, questionnaires and digital pictures.

Secondary data: This was mainly in form of documentary review, and major sources include books, lecture notes and readers, news papers, policy documents, internet and other publications. These were used mainly to gather knowledge on theories, concepts, variables, data collection methods and instruments, data analysis and contemporary practices in sport systems and facility management.

Table 3.5.2: Data Collection Strategy

Target Population	Number of Respondents	Instrument/ Methods of data capture	Data Type	Sampling Method
General Residents	150 (Drawn from three residential Neighbourhoods)	Questionnaire	Primary	Systematic, Stratified and Random
Former ZCCM Management Employees	4	Self-administered questionnaires/Interview	Primary/Secondary	Purposive
Schools	85 (Drawn from 3 schools)	Questionnaire	Primary	Systematic, Stratified and Random (grades 10-12)
Central Government	2	Self-administered questionnaires/Interview	Primary/Secondary	Purposive
Local Government Officials	3	Self-administered questionnaires/Interview	Primary/Secondary	Purposive
Private Sports Providers	3	Self-administered questionnaires	Primary	Purposive
New Mining Companies	1	Self-administered questionnaires	Primary/Secondary	Purposive
Total	248	-	-	-

3.6. Validity

Validity refers to the extent to which measurable variables reflect what they are intended to measure (Hair et al., 2006, p. 776; Golafshani, 2003). Data validity was enhanced through appropriate design of instruments (e.g. questionnaires) and use of the already established measuring criteria for the different aspects of sport participation such as those reflected in the Participatory Motivation Index (*construct validity*), and also through the use of predictive variables like factors influencing participation (Motl, et al 2000, p.111). These variables were in some cases tested statistically using the standardized and acceptable loading estimates to establish the extent to which they shared some analyzable commonalities (convergent validity) or

the degree to which the variables were distinct from one another (discriminant/divergent validity) as inferred by Chen (2008) and Hair et al. (2006).

Table: 3.6.1. Research Variables and Operationalization

RESEARCH QUESTION	MEASURING VARIABLE	INDICATORS
<p>What sport activities do people in Kalulushi participate in and where are such activities being conducted? (Demand)</p>	<p>Sport participation (Dependent)</p>	<ul style="list-style-type: none"> ○ Participation in sport by type (open-ended) ○ Frequency of sporting (2 times per week is active participation) ○ Average duration (30 minutes per session/occasion is normal) ○ Place of activity (private/public/own venues)
<p>What sport activities do people in Kalulushi need? (Demand)</p>	<p>Sports package (Independent)</p>	<ul style="list-style-type: none"> ○ Sport currently participating in ○ Competitive sport participated in during past 12 months ○ Favourite sport ○ Comments on appropriateness of sport and facilities
<p>What factors influence participation in sport in Kalulushi (Demand)</p>	<p>Factors influencing participation (Independent)</p>	<ul style="list-style-type: none"> ○ Source of sporting influence ○ Motivation factors ○ De-motivation factors ○ Leisure time expenditure (Time watching TV/ or in competitor entertainment or recreational activities) ○ Other socio-economic factors ○ Specific comments on -Sport diversity

		-Appropriateness of sport facilities
What are the influencing factors in the provision of sport facilities (Supply)	Sports and recreation policy Budget trends in past 10 years Type of facilities available (Independent)	<ul style="list-style-type: none"> ○ Availability and content ○ Budgeted amount vs. actual ○ Comments on <ul style="list-style-type: none"> -State of infrastructure -sport participation -System management -sport diversity ○ Current use of facilities
What differences exist in sport management now and during the ZCCM era? (Demand/Supply)	Sports and recreation policy Financing arrangement in ZCCM era and currently (Independent)	<ul style="list-style-type: none"> ○ Availability and content ○ Sample of annual sports budget /Explanation ○ Comment on systems management

3.7. Reliability

Reliability refers to the degree of consistency between two measurements of the same thing. Firstly, the research instruments such as the questionnaires were pre-tested on few (4 people) before being administered to the targeted respondents. The researcher also had to train the assistants in interpreting and translating the questionnaire into local language. The reliability of the data was further enhanced by design of triangulated question to ensure consistency of responses. In some cases, observed *variable* and *construct* relationships were tested statistically for significance to ensure that they were within acceptable and standard thresholds, before being deployed for further analysis (see Chen, 2008, p. 4). The stratification methods of samples used and triangulation (age groups, gender and institutional categorization) not only generated an analyzable pattern data on sport behaviour and facilities provisions, but also ensure that the results can easily be independently verified for consistency at a later stage (see Black, 1993, p. 61-73).

3.8. Data Presentation and Analysis

Qualitative and **quantitative** methods were used to present and analyse the research findings. Quantitative data was presented and analysed mainly using, charts, pie charts, tables and also using descriptive, inferential and co-relational analysis. Frequencies, means and percentages for coded variables were extensively used to describe and analyse the characteristics of the sample

using some statistical analytical software (Statistical Package for Social Scientists-SPSS version 17.0) on which most of the quantitative conclusions were based.

Qualitative data was synthesized and or grouped into consistent themes and formed part of the *trend, cause-effect, co-relationships and implication analysis* from which the author based most of the research conclusions and recommendations on the supply side of the research.

3.9. Resources

These included the financial resources required to fly to and from Zambia to conduct research, stationery, computer and internet facilities and personnel to help conduct the research. Time, attitude and mental skill were very cardinal to the research. Other resources included support from fellow students, family members and most important, continued guidance from supervisors.

3.10. Time scale

Research field work was conducted over a period of approximately one month i.e. from 26th June to 31st July 2009. The final thesis was due for submission on 14th September and was defended on 21st September 2009 (see Activity schedule below).

Table 3.10: Research Activity Schedule

TIME AND ACTIVITY	FEBRUARY- MAY	JUNE	JULY	AUGUST	SEPTEMBER
Preparation, refining & presentation 1 st draft proposal					
Submission of 1 st and final research proposal					
Training research assistants					
Data collection					
Preliminary analysis					
Preliminary presentation of findings					
Continuation of data analysis					
Presentation of 1 st draft thesis					
Refining final thesis document					
Submission of final thesis					
Thesis presentation and defense					

3.11. Research constraints and limitations

The short time assigned for field work presented limitation on the number of people that the researcher had to reach out to. Proper assimilation of questions and provision of answers in English posed some research challenges, as not everyone in Zambia can speak English well. The research questionnaires had to be interpreted in local language in some cases. Besides, financial resources were inadequate to meet the different costs of the research such as, movements, personnel recruitment, reproduction and printing of documents and general coordination of the research. The additional resource requirement had to be met from the researcher's own sources.

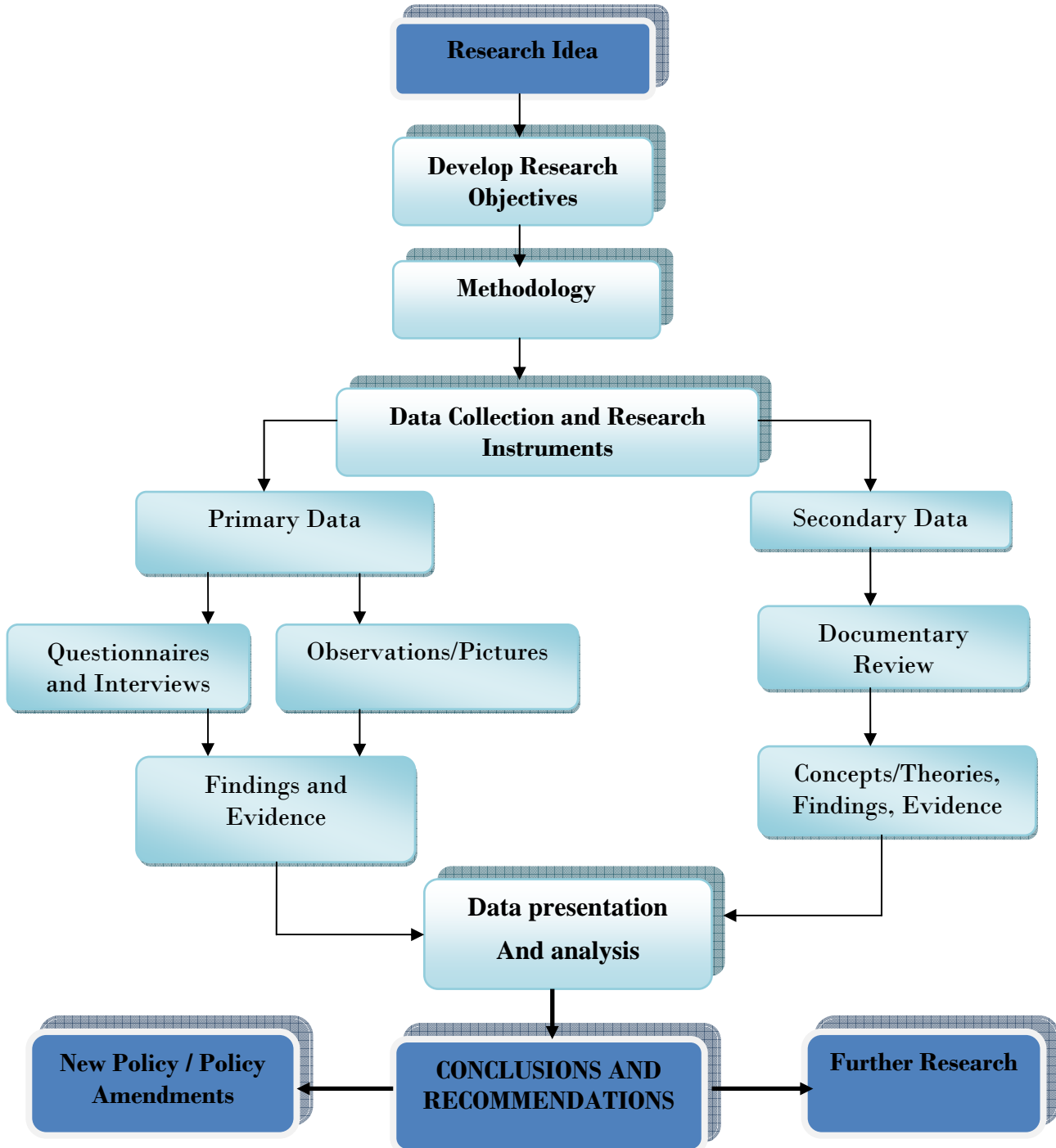
There was (and still is) very limited documentation on the subject in Kalulushi. Most of the sport related literature is much generalized for Zambia and Copperbelt Province. Therefore most of the materials used were based on researches done elsewhere which might pose challenges to strategy applicability and adaptation. There were also some delays in responses from some target groups and general apathy from some respondents especially adults.

3.12. Conclusion

Chapter one reviewed and discussed the historical and circumstantial background to the observed research problem, with problem statement, research objectives and research questions clearly defined. Chapter two reviewed the important concepts and theories related to the research topic, particularly the measurement criteria and the adoption of the main theoretical and conceptual framework within which the study was conducted. In order to investigate further the observed problem and the implications it had on the future socio-economic and environmental set-up in the study area, research was necessary.

This chapter therefore introduced the study area and discussed the research methodologies and research instruments used to generate the research findings. The chapter also discussed the research strategy adopted to collect the required data, with sample targets, sampling methods, research instruments and variables defined. Data collection and analysis methods have also been indicated, with reliability and validity of results assured. Research time frames and resources required for conduction the study were discussed with limitations of the study also spelt out. The chapter concluded with a pictorial summary of the study.

Figure: 3.12. Research Design and Structure



(Author's own construct, 2009)

4.0. CHAPTER FOUR

DATA PRESENTATION AND ANALYSIS

4.1. Introduction

The following section seeks to present the research findings and an analysis of the findings as they relate to the objectives of the study, each case preceded by a recap of the research objectives or questions and the measuring criteria used to arrive at the findings.

Using quantitative methods and based on responses from the Residents and Schools categories, variables were computed into the SPSS version 17.0 to aid the data analysis, 26 variables from the *Residents category* and 26 variables from the *Schools category*. Additional variables were generated automatically in special cases to further explore the sample characteristics. Responses from the other sample targets were more qualitative and thus analyzed without the use of a computer programme. In establishing sporting behaviour, needs and factors influencing participation, selective comparisons have been made between residents and schools sample.

4.2. Sample Characteristics

Details of sample characteristics are presented in the tables below;

Table: 4.2.1. Age of Respondents in Years

Residents Category			Schools Category		
N	Valid	150	N	Valid	85
Missing	-	0	Missing	-	0
Mean	-	25.88	Mean	-	16.44
Median	-	21.00	Median	-	16.00
Mode	-	17	Mode	-	16
Range	-	55	Range	-	6
Minimum	-	10	Minimum	-	14
Maximum	-	65	Maximum	-	20

Table: 4.2.2. Sex of Respondent- Residents Category

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	76	50.7	50.7	50.7
	Female	74	49.3	49.3	100.0
	Total	150	100.0	100.0	

Source: SPSS Output

Table: 4.2.3. Residential Location- Residents Category

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Low Cost Neighbourhood	52	34.7	34.7	34.7
	Medium Cost Neighbourhood	56	37.3	37.3	72.0
	High Cost Neighbourhood	42	28.0	28.0	100.0
	Total	150	100.0	100.0	

Source: SPSS Output

Table: 4.2.4. Age Category of Respondent- Residents Category

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1-19 Years	59	39.3	39.3	39.3
	20-35 Years	62	41.3	41.3	80.7
	36-100 Years	29	19.3	19.3	100.0
	Total	150	100.0	100.0	

Table: 4.2.5. Name of the school respondent sampled from * Grade from which respondent was sampled Cross tabulation

		Grade from which respondent was sampled			Total
		Grade 10	Grade 11	Grade 12	
Name of the school respondent sampled from	Kalulushi Trust School	9	10	10	29
	Chavuma High School	9	9	10	28
	Kalulushi High School	9	9	10	28
Total		27	28	30	85

Table: 4.2.6. Name of the school respondent sampled from * residential location respondent was sampled Cross tabulation

	Residential Location			Total
	Low Cost Neighbourhood	Medium Cost Neighbourhood	High Cost Neighbourhood	
Name of the school respondent sampled from				
Kalulushi Trust School	0	4	25	29
Chavuma High School	13	13	2	28
Kalulushi High School	15	10	3	28
Total	28	27	30	85

4.3. Research Findings

4.3.1. Sporting behaviour

Various approaches were used to assess the current sporting behaviour and sports needs, but mainly included; the determination of the current sports the people engage in, the frequency, duration, place of activity, their participation in any competitive sporting event and whether they had a favourite sport other than the sports they were then participating in.

Research results revealed that 72 % of the *residents'* respondents recorded their participation in one sporting activity or another, while 28% of the respondents were not participating in any sporting activity. The findings also revealed that generally there was more sport participation (82.89 %) in males than females (60.81%), suggesting a possible influence gender might have on sport participation. This revelation was further tested for significance using the *Qui-Square*

Figure: 4.3.1. (a) Sport Participation

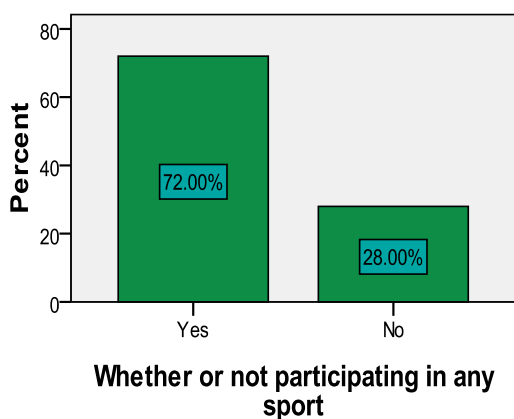
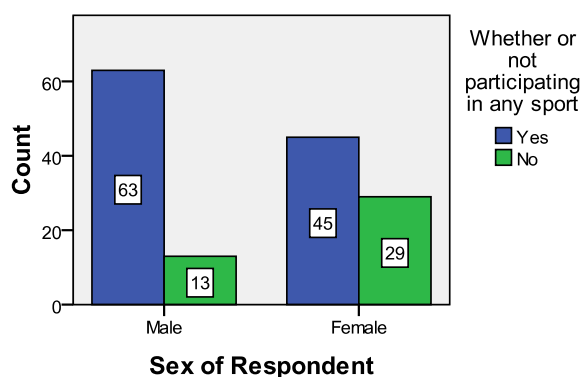


Fig: 4.3.1. (b) Sport Participation by sex



Sport participation was highest among respondents in the 10-19 years age group (81.35%), followed by the 20-35 age group (70.96%) and least among the adults above the age of 35 years (55.17%). Also respondents who are single recorded the highest sport participation (78.50 %) compared to the married (57.89 %) and other marital categories, again depicting a possible relationship or *influence* marital status might have on sport engagement. Like in Gender, *marital status, age and residential location* were further tested for significance of variations in sporting behaviours to establish any possible influence on sport participation (see section 4.3.2.below).

Figure: 4.3.1. (c) Sport Participation by Age group

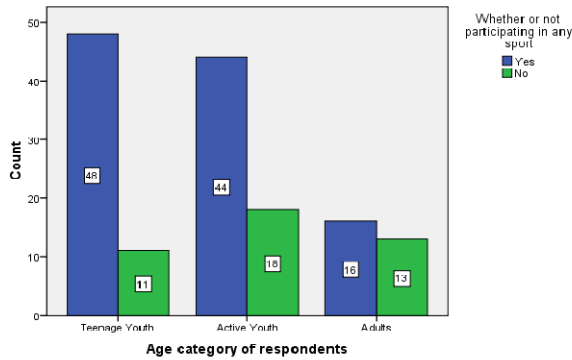
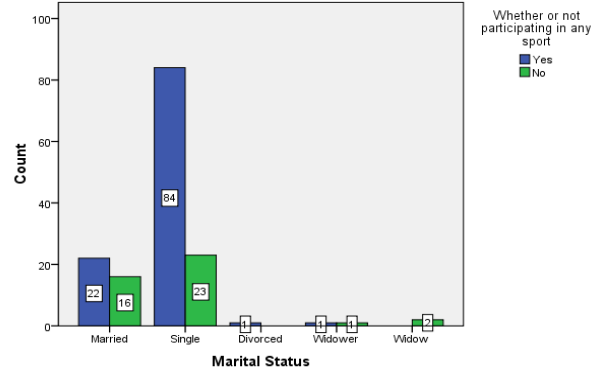


Figure: 4.3.1. (d) Sport Participation by Marital Status



In terms of residential location, respondents in the Medium Cost recorded the highest sport participation (87.50%), though very few sports facilities are situated in that Neighbourhood. Ironically sport participation was least (61.90%) in the High Cost area where most sports facilities are situated (*See facility distribution map below*). At first glance, and while overlooking quality variations, this finding would pose interesting contradiction with existing literature which often links increased facility patronage with reduced proximity (see Huat, et al, 1992, p. 6). Arising from this, a cross tabulation was invoked from SPSS to establish the sporting venues where most of the sporting activities are conducted across the three locations. The results revealed that generally most of the sporting activities are conducted in facilities or make-shift facilities in **public** spaces and **school** premises, accounting for 32.67% and 27.33% respectively of the total responses. These findings therefore eliminate the proximity component and remain independent, but dependent on existence and quality of infrastructure.

Figure: 4.3.1. (e) Sport Participation by Residential Location

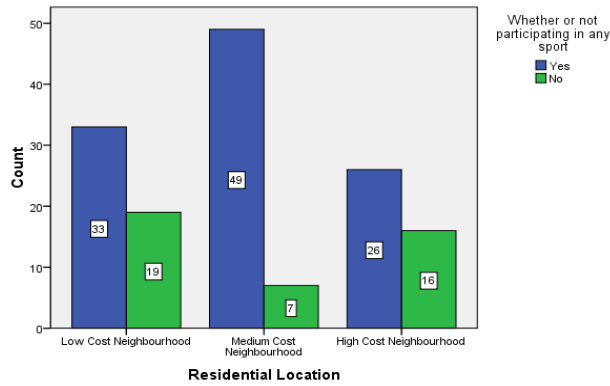
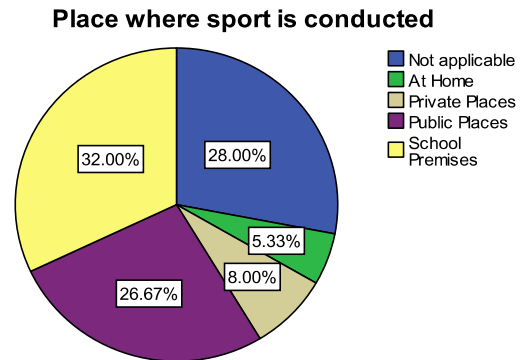
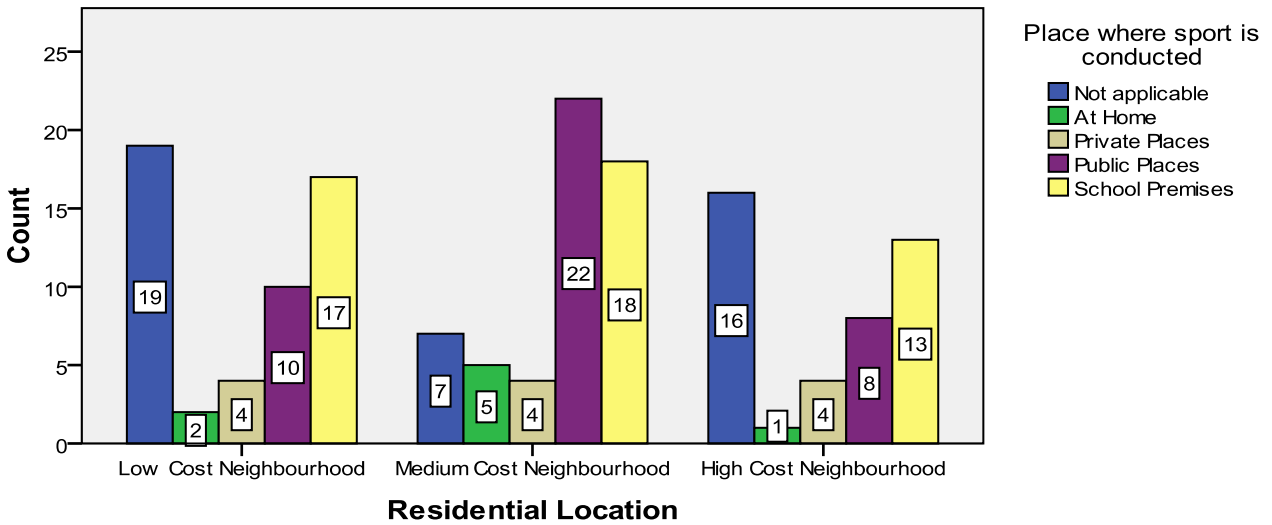


Figure: 4.3.1. (f) Sport Participation by Place of Activity



By specific residential locations, the analysis again revealed a heavy reliance across all the residential locations on school premises and open public spaces for sporting activities, on one hand depicting the limitation in venue choice and on the other hand presenting an implicit suggestion on areas of improvements in terms of facility expansion and quality of the facilities.

Figure: 4.3.1. (g) Sport Participation - Residential Location by Place of Activity



Football, Volleyball, Netball Basketball and Athletics were recorded as the most participated in sports, and generally remained the most *favourite* and *competitively* participated in sports regardless of gender and age, though only Football and Netball remained as predominant sports among the adults. This behaviour pattern provides indications on the sporting choices and needs. The findings also reveal more females having recorded participation in football than males that

recorded participation in Netball, suggesting a growing interest among females for women football/soccer.

Figure: 4.3.1. (h). Sport Participation –Sport currently engaged in

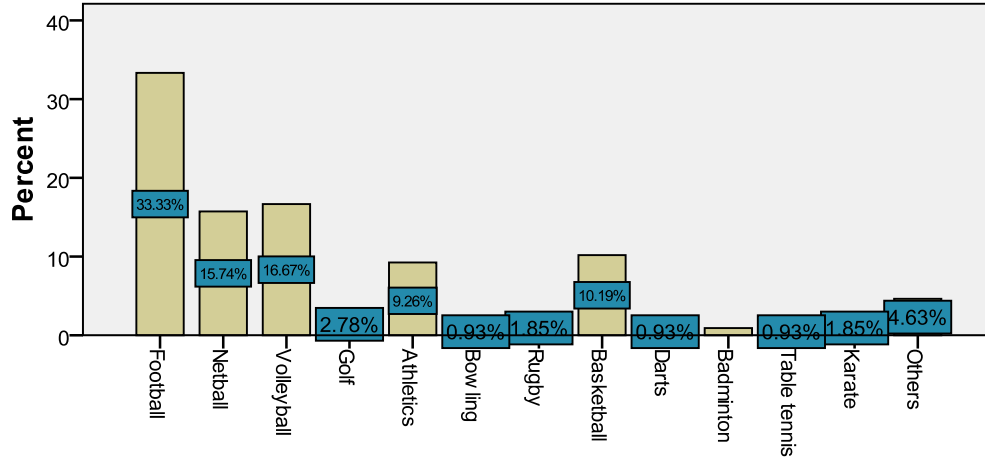


Figure: 4.3.1. (i) Type of Sport by Sex of Respondent

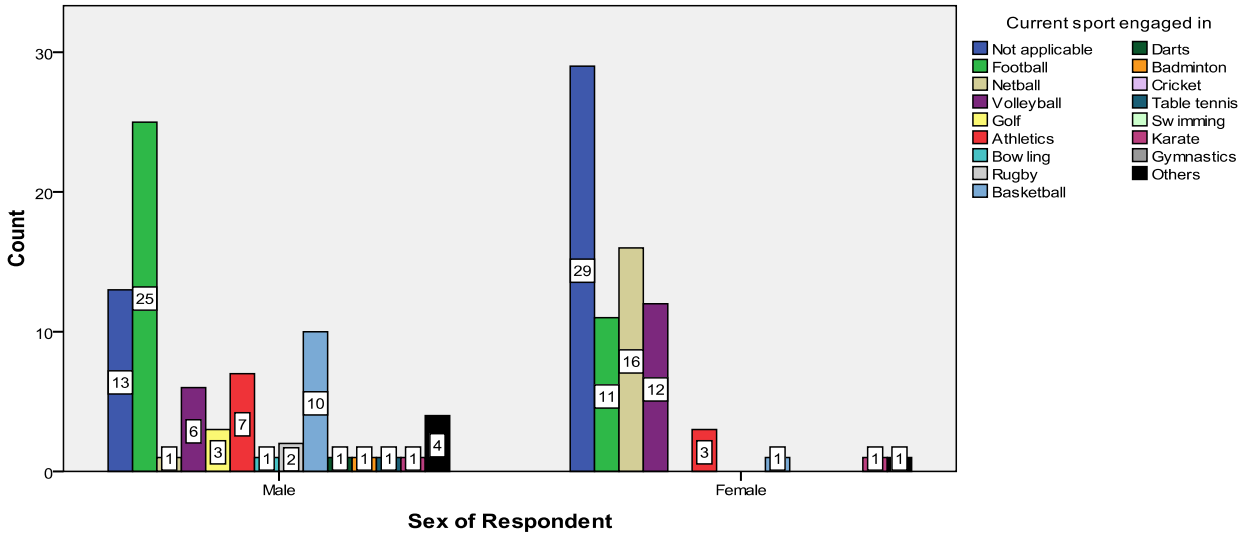


Figure: 4.3.1. (j) Sport Participation -Type of Sport by Age Category

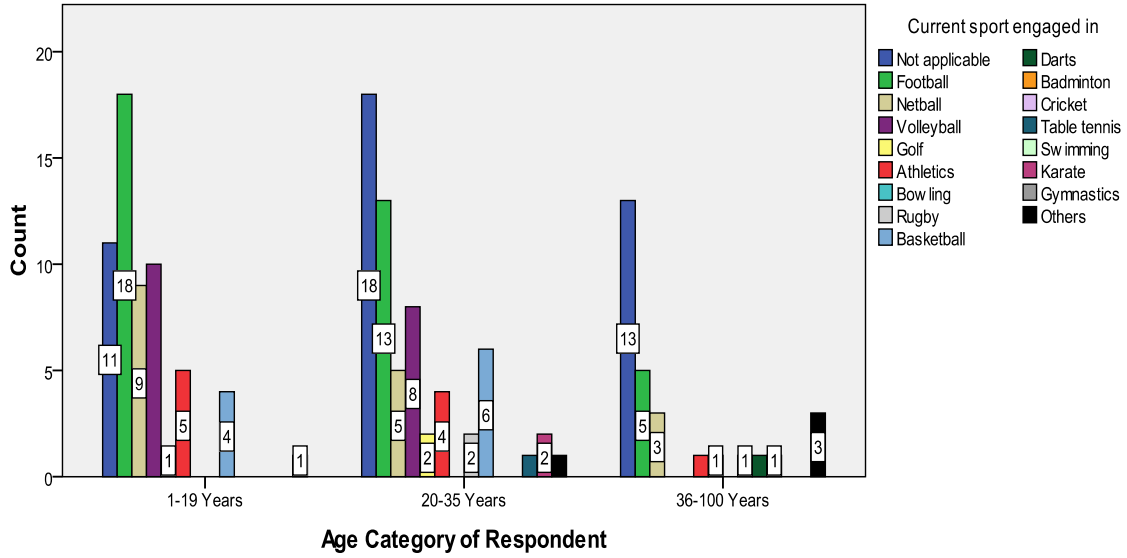


Table: 4.3.1. (a). Number of times in sport per week

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Not applicable or missing	43	28.7	28.7	28.7
Once	31	20.7	20.7	49.3
Twice	36	24.0	24.0	73.3
Three Times	13	8.7	8.7	82.0
Four Times	7	4.7	4.7	86.7
Daily	20	13.3	13.3	100.0
Total	150	100.0	100.0	

Table: 4.3.1. (b). Average time in hours each occasion

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not applicable	42	28.0	28.0	28.0
	Less than half hour	11	7.3	7.3	35.3
	Half -1hour	43	28.7	28.7	64.0
	1-2 hours	34	22.7	22.7	86.7
	2-3 hours	19	12.7	12.7	99.3
	Over 4 hours	1	.7	.7	100.0
	Total	150	100.0	100.0	

Sport participation *frequencies* and *durations* were well above the thresholds for active sport participation as defined in literature review. The majority (71%) of applicable responses (*representing 51 % of all respondents*) recorded participation frequencies of over **twice per week**, and 89.80% (*representing 65 % of all respondents*) recorded participation periods well above the minimum recommended **30 minutes** thresholds for a healthy living or necessary to maximise the health benefits of sporting.

A similar analysis was conducted on the schools' sample to assess the sporting behaviour in and out of school. An extended analysis was performed to capture any possible variation in sporting behaviour across the sampled schools. However due to age variations, the results were only compared to one age group in the residents' category, i.e. 10-19 years which tallied with the age range for the sampled grades.

The results reveal 87.1% of the school respondents recorded their participation in one sport activity or another, while 12.9 % did not record any participation. Outside school, the findings reveal a percentage drop in sport participation to 82.4% and an increase in non participation to 17.6 %.

1

Table: 4.3.1. (c). Whether or not participating in any sport at school

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	74	87.1	87.1	87.1
	No	11	12.9	12.9	100.0
	Total	85	100.0	100.0	

¹ Sport *durations* and *frequencies* were only applicable to those who recorded participation in sport

Table: 4.3.1. (d). Whether or not participating in any sport outside school time

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	70	82.4	82.4	82.4
	No	15	17.6	17.6	100.0
	Total	85	100.0	100.0	

In order to fully understand the causalities, an analysis was performed on sport de-motivation outside school and on the leisure time expenditures of these school pupils. The results suggest that poor infrastructure and engagement in other leisure activities such as Chess, computer games and watching TV were responsible for much of the observed drop in sport participation outside school time, though arguably parental emphasis on studying could also contribute to the drop in sporting behaviour.

Figure: 4.3.1. (k) Sport De-motivation Outside School

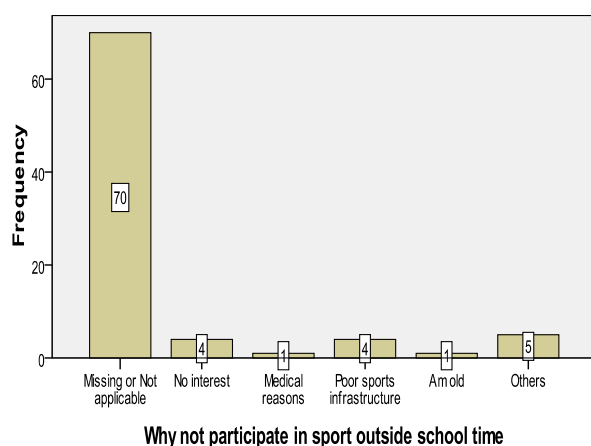
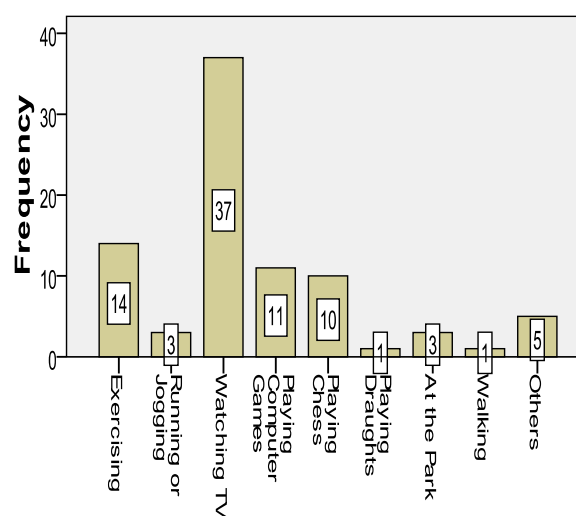


Figure: 4.3.1. (l) Activity engaged in during Leisure Time



Across the three schools, and while taking into account variations in sample sizes, sport participation was slightly higher at Kalulushi Trust School compared to Kalulushi High and Chavuma, which did not show much difference. This sporting behaviour trend was consistent even outside school time (see figure below).

Figure: 4.3.1. (m) Sport Participation at School by Name of School

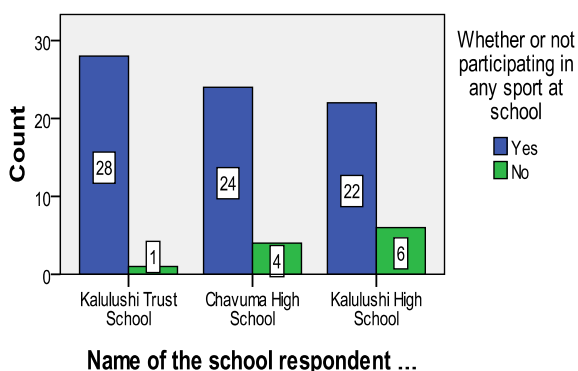
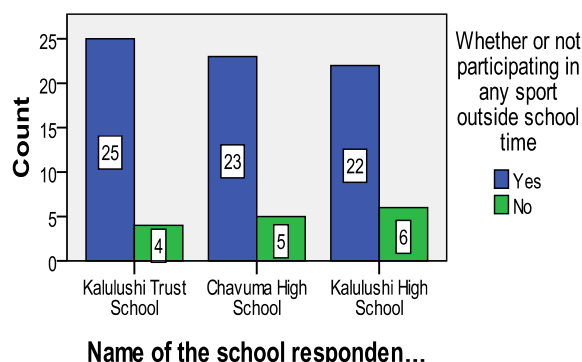


Figure: 4.3.1. (n) Sport Participation Outside School by Name of School



The cross- analysis further reveals that Football, Volleyball, Basketball, Athletics and Netball were the most consistently participated in sports, in and out of school. Swimming, though reflected outside school, was never reported in regular school, presumably because most teenage youth would not be culturally free to wear swimming consumes even if swimming facilities were up to date in schools. However, from the researcher’s own Knowledge, swimming activities have been promoted regularly at Kalulushi Trust School, though admittedly mostly among children in the lower grades than those studied in this research.

Figure: 4.3.1. (o) Type of sport at School

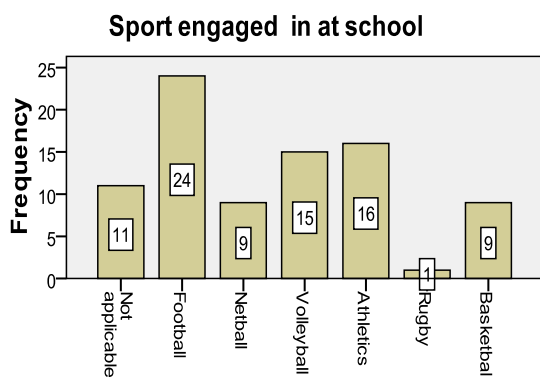
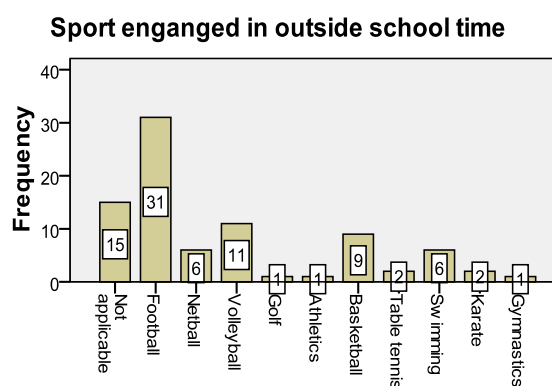


Figure: 4.3.1. (p) Type of sport outside School



The last component of the sporting behaviour assessment was to determine any difference in sporting behaviour between the *Schools* and *Residents* respondents. Ignoring the possible difference in sporting frequencies, durations, favourite sports and competitive sports, the comparison generally reveal a higher sport participation rate (87.1%) among *School* respondents in school and 82.4% outside school compared to the identical age group in the *Residents* category (81.35%). This finding compliments existing literature and further confirms the

documented influence that schools have on society’s sporting behaviour (refer to Figure: 4.3.1. (c), Table 4.3.1. (c) & Table 4.3.1. (d)). In fact, with the massive education campaign in Zambia, it is also possible that the majority of the respondents in the *Residents* category could already have been attending school.

4.3.2. Sports needs

Sports needs were assessed from three fronts. Firstly, the kinds of sport currently participated in were extracted from the first analysis of sporting behaviour (see Figure 4.3.1. (h)). Secondly, tabulations were also made to unveil competitive and favourite sports that respondents in both categories had recorded (refer to charts below). The results did not show much differences from those recorded in the sporting behaviour assessment. However the tabulations still revealed other seemingly minor sports, which though insignificant by frequencies, constituted the sports package or sports needs. These included Bowling, Darts, Swimming, Karate, Rugby, Golf, tennis. Other sports qualitatively assessed under (“*others category*”) included Pool, Cycling, Gymnastics, Cricket and Squash. Interestingly still, Football, Basketball, Volleyball, Netball and Athletics remained the most competitive and favourite sports, thereby assuming the priority positions within the sports package, and also intimating on the possible sports priorities that the district might have to embark on.

Figure: 4.3.2(a) Competitive sports-Residents

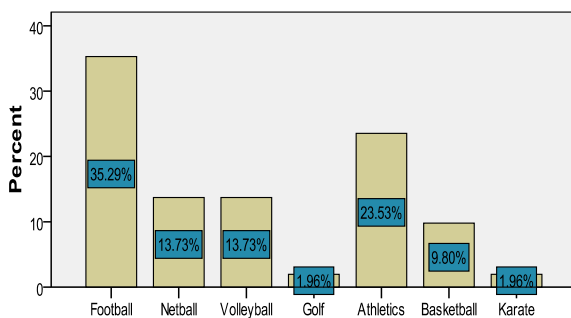


Figure: 4.3.2(b) Competitive sports Schools

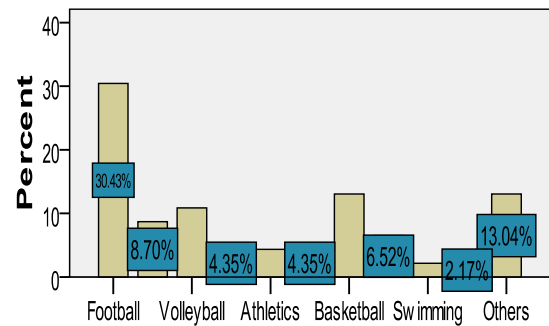


Figure: 4.3.2(c) Favourite sport-Residents

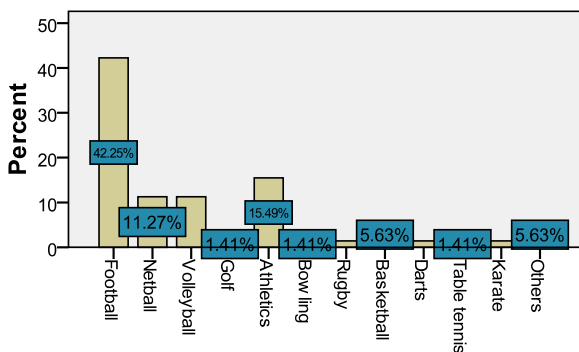
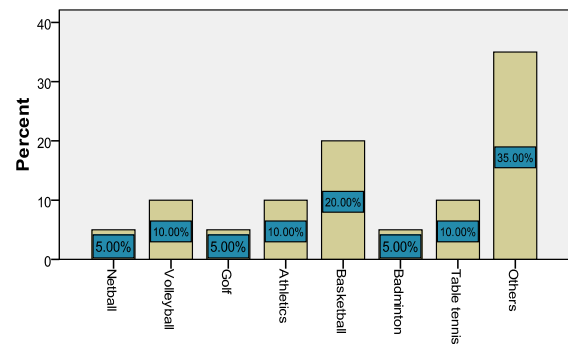


Figure: 4.3.2 (d) Favourite Sport -Schools



4.3.3. Factors influencing sport participation

This question was assessed from six different angles. Firstly, the source of influence for both *schools* and *residents* respondent was noted. Secondly, for those who recorded participation in sport, a probe question was posed as to the main motivation for their participation in sport. Non-sport participants were also asked to disclose their de-motivation factors. In the *schools category*, the de-motivation factors were examined both during and out of school time. An open ended question was slotted on each questionnaire to assess respondents' general comments on sport and facility provision. The respondent was, in addition, asked to disclose how they spend most of their leisure time. Lastly, other socio-economic traits such as age, sex, residential location, marital status etc were cross examined using the SPSS Cross-Tabulation function to depict any possible relationship with individual sporting behaviours, the significances of which were further tested statistically using the Chi-square, the Independent Sample Test and the One Way ANOVA.

The research findings revealed that “Friends” and “Cultural Beliefs” (like, sex, marital status perceptions in relation to sport), had far the greatest influence on the sporting behaviour of the *Residents* respondents, accounting for 36 % and 30.67% respectively. In the *Schools* category, in as much as 32.94% did not receive any external influence, the results unveiled reasonable parental influence on the respondents' sporting behaviour (18.82%), with ‘Friends’ again accounting for most of the sporting influence.

Figure: 4.3.3.1. Source of influence-Residents

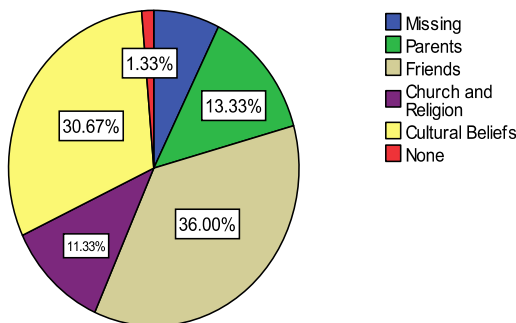
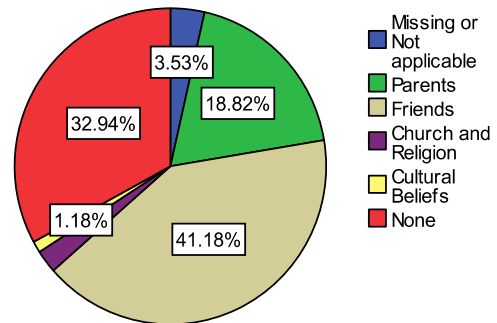


Figure: 4.3.3.2. Source of influence-Schools



Main motivation for sport participation were, the desire to gain fitness, social interaction, for fun and to become a sports icon, which findings tallied, to a greater extent, with the focus of this research (group sport) and also with postulates of the Achievement Goal Theory on the *Intrinsic* and *Extrinsic* factors of sports motivation (see section 2.7.3.) In the schools category, the desire for *fitness* and to *learn new ideas and skills* were the main factors of sport participation, further justifying the growing interest globally to use sport as an alternative means of teaching (see also United Nations, 2003; UNICEF, 2005).

Table: 4.3.3.1. Why participate in sport- Residents Category

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Not applicable	42	28.0	28.0	28.0
Gain physical fitness	44	29.3	29.3	57.3
For fun or entertainment	15	10.0	10.0	67.3
To interact with others	29	19.3	19.3	86.7
To become a sports icon	13	8.7	8.7	95.3
To share and learn new ideas and skills	2	1.3	1.3	96.7
Because of available infrastructure	2	1.3	1.3	98.0
For employment	2	1.3	1.3	99.3
Others	1	.7	.7	100.0
Total	150	100.0	100.0	

Table: 4.3.3.2. Why participating in sport-Schools Category

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Missing or Not applicable	9	10.6	10.6	10.6
Gain physical fitness	36	42.4	42.4	52.9
For fun or entertainment	9	10.6	10.6	63.5
To interact with others	3	3.5	3.5	67.1
To become a sports icon	6	7.1	7.1	74.1
To share and learn new ideas and skills	22	25.9	25.9	100.0
Total	85	100.0	100.0	

Lack of interest, poor infrastructure, old age and medical reasons were the major reasons for non participation in sport among residents' respondents, while in the schools category, lack of interest and poor sports facilities were the two major reasons for non participation in sport, which trend remained identical in and out of school. As pupils have reasonably free-will outside school as opposed to the school environment where sport is almost compulsory, the observed lack of interest could be as a result of the poor sports facilities outside the school catchment compared with the school infrastructure.

Figure: 4.3.3.3. Why not participate in sport-Residents

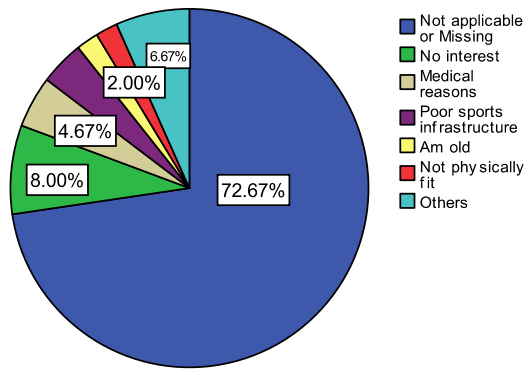
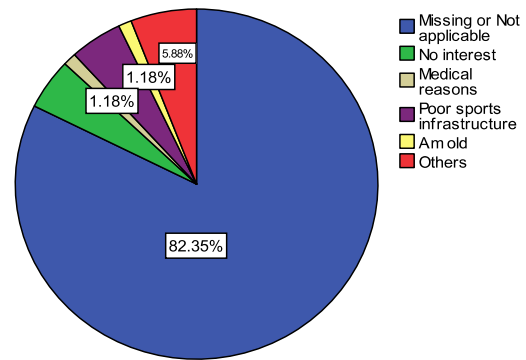


Figure: 4.3.3.4. Why not participate in sport-Schools



A diverse range of activities are engaged in during leisure time most of which are related to sporting. However, watching Television was the modal activity in both categories, accounting for 28% in the *Residents category* and 45.53% in the *Schools category*. As no duration estimates were assessed in all leisure activities, the research could not validate nor dispute fears advanced by Owen (2007) on the possible influence of information technology on sporting behaviour.

In both categories however, the results reveal high engagement in mental leisure activities, such as Draughts, Chess and computer games, more especially among the teenage youths.

Figure: 4.3.3.5. Leisure time activity-Residents

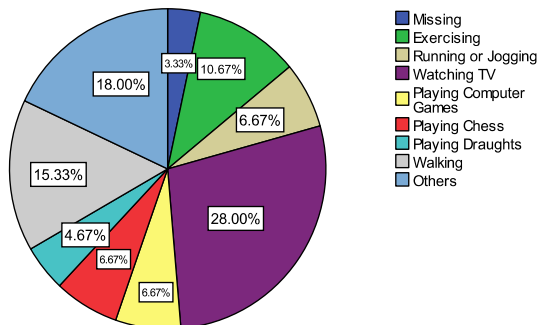
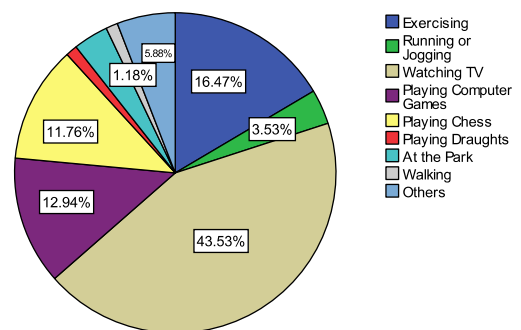


Figure: 4.3.3.6. Leisure time activity-Schools



Before winding up this section, it was important to reflect on the important trends observed in sporting behaviour. Specifically, *was it expected that there would be less women sport participants, or that those who were single or from the medium cost area, or from the teenage youth would participate more in sport? And can this be expected in any other sample drawn from the same study area at any other time?*

In order to answer these questions, the author performed statistical test to validate or refute the significance of the observed trends in sporting behaviour across the following variables; *Sex, Age, Residential Location* and *Marital Status*.

Significance test of probable more male sports participation than females

For sex, a chi-square test was used as the variable had a nominal measure, e.g. *Yes or No, Male or Female* and no order was required. For a relationship or observation to be significant, the output significance values should statistically produce a probability of ‘wrong’ of less than **0.05** ($p < 0.05$) or the probability of right must be more than **95% (0.95)**.

The output for *sex test* produced a significance value of 0.003, which is below 0.05 and therefore confirming the significance of the observed trend in sporting behaviour between males and females (see tables below). This suggests that similar samples drawn from the community would reveal more male participation in sport than females. The results also imply the need to promote sports among female groups and to set up facilities that would encourage further female participation in sport.

Though the comparison for *Means* also revealed that males had a superior average of 2.84 times per week and 2.64 hours per occasion compared to 2.09 times and 2.51 hours for females, the **Independent Sample Test** for significance for the two selected sporting characteristics, revealed no significant variations in frequencies and durations between males and females, with sig values of 0.086 for *sport frequency* and 0.642 for *sport durations*, in both cases well above the statistical threshold of 0.05. This suggests that generally females are as active as males in sport.

Table: 4.3.3.3. Whether or not participating in any sport * Sex of Respondent

		Sex of Respondent		
		Male	Female	Total
Whether or not participating in any sport	Yes	63	45	108
	No	13	29	42
	Total	76	74	150

Table: 4.3.3.4. Chi-Square Tests- sex

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	9,070 ^a	1	,003		
Continuity Correction ^b	8,008	1	,005		
Likelihood Ratio	9,239	1	,002		
Fisher's Exact Test				,003	,002
Linear-by-Linear Association	9,010	1	,003		
N of Valid Cases	150				

Test for Significance of behavioural variations-Age Groups

Across the age groups, tests were performed for means and significance, again using the key indicators of *frequency* and *durations*. Although the earlier finding revealed more participation among respondents in the teenage age group (10-19 years), the actual mean comparison revealed that in fact the adults (36-100 years) had the highest average frequency of 3.13 times per week, but with the least duration of 1.45hours per occasion, presumably because of being mindful of other preoccupations and family responsibilities. The overall sporting frequencies were 2.52 times and 1.87hours, which from the set benchmarks, further confirmed active sporting among all the respondents.

However, the ANOVA test for significance produced output values of **0.101** and **0.120** for frequency and durations respectively, in both cases statistically confirming the absence of significant variations across the age groups in terms of their frequency and duration of sporting (see tables below).

Table: 4.3.3.5. Comparison of Sporting Means –Age Groups

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
					Lower Bound	Upper Bound
Number of times in sport per week						
1-19 Years	48	2,58	1,456	,210	2,16	3,01
20-35 Years	43	2,23	1,342	,205	1,82	2,65
36-100 Years	16	3,13	1,586	,397	2,28	3,97
Total	107	2,52	1,449	,140	2,25	2,80
Average time in hours each occasion						
1-19 Years	59	2,10	1,335	,174	1,75	2,45
20-35 Years	62	1,84	1,428	,181	1,48	2,20
36-100 Years	29	1,45	1,454	,270	,90	2,00
Total	150	1,87	1,408	,115	1,64	2,09

Source: SPSS Output

Table: 4.3.3.6. ANOVA Test for Significance of behavioural variations-Age Groups

		Sum of Squares	df	Mean Square	F	Sig.
Number of times in sport per week	Between Groups	9,601	2	4,800	2,343	,101
	Within Groups	213,091	104	2,049		
	Total	222,692	106			
Average time in hours each occasion	Between Groups	8,384	2	4,192	2,147	,120
	Within Groups	286,949	147	1,952		
	Total	295,333	149			

Source: SPSS Output

Test for Significance of behavioural variations-Marital status

The test for behavioural variation among the different marital categories required the regrouping of the categories into two major groups-*Married* and *Single*. All responses from the *widow, widower and divorced* groups were reclassified as *Single* and a test performed. Although earlier findings revealed more participation among respondents who are single, the mean comparison in contrast revealed a better sporting frequency among the *married, with 2.77* times per week compared to the *singles* that averaged 2.46 times per week. But average duration per sporting occasion was still recorded higher among the *singles* (2.64 hours) compared to the *married* (2.43 hours), more likely because the married have far more marital responsibilities than the single and that at any other time, they might have to withdraw from sporting much earlier than the singles. However still, the Independent Test for significance did not reveal a significant variation in the two groups in as far as the two sporting variables were concerned, as evidenced from the output figures of 0.255 and 0.356, which put the probability of *Right* at 74.5% and 64.4 % for frequency and duration respectively, again way below the statistical threshold of 95% confidence level.

Table: 4.3.3.7. Independent Samples Test-Behavioural Variations-Marital Status

	Levene's Test for Equality of Variances		t-test for Equality of Means			
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference
Number of Equal variances times in sport assumed per week Equal variances not assumed	1,308	,255	,905	105	,368	,314
			,851	30,457	,401	,314
Average time Equal variances in hours each assumed occasion Equal variances not assumed	,860	,356	-,919	106	,360	-,201
			-,984	38,480	,331	-,201

Table: 4.3.3.8. Re-grouped statistics-Marital Status

married versus single	N	Mean	Std. Deviation	Std. Error Mean
Number of times in sport per week 1,00 2,00	22	2,77	1,572	,335
	85	2,46	1,419	,154
Average time in hours each occasion 1,00 2,00	23	2,43	,843	,176
	85	2,64	,949	,103

Test for Significance of behavioural variations-Residential Location

Having analyzed sex, age and marital status, the most appropriate test for residential location was to establish any variations in sport participation itself with respect to residential location of the respondent. A chi-square test was used and the summaries of the information are presented in the tables below.

The test revealed the existence of a significant relationship between sport participation and the residential location as confirmed by output values of 0.005, 0.003 which are both below the 0.05 benchmark required for confirming significance. However the linearity of this relationship was instantly disputed by output values of 0.963, which suggests that this established relationship cannot be used to predict sport participation either in the Low cost or High Cost neighbourhood. The author argues therefore that the relationship is more to do with the actual characteristics of the people in the neighbourhood, specifically their interest in sport, as opposed to the facility characteristics which often distinguish the residential neighbourhoods. This argument stems from the fact that the facilities distribution map shows far fewer facilities in the Medium Cost area (compared to the other neighbourhoods) and yet sport participation was recorded the highest. This finding does not seem to support previous research in which Santos et al (2008) found increased sport participation in neighbourhood with available sports facilities. This therefore confirms the author's argument on *interests* and further suggests cross-movements of people within all the three neighbourhoods in search of sporting places.

Table: 4.3.3.9. Whether or not participating in any sport by Residential Location

	Residential Location			
	Low Cost Neighbourhood	Medium Cost Neighbourhood	High Cost Neighbourhood	Total
Whether or not participating in any sport				
Yes	33	49	26	108
No	19	7	16	42
Total	52	56	42	150

Table: 4.3.3.10. Chi-Square Tests for significance of relationship

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	10,677 ^a	2	,005
Likelihood Ratio	11,596	2	,003
Linear-by-Linear Association	,002	1	,963
N of Valid Cases	150		

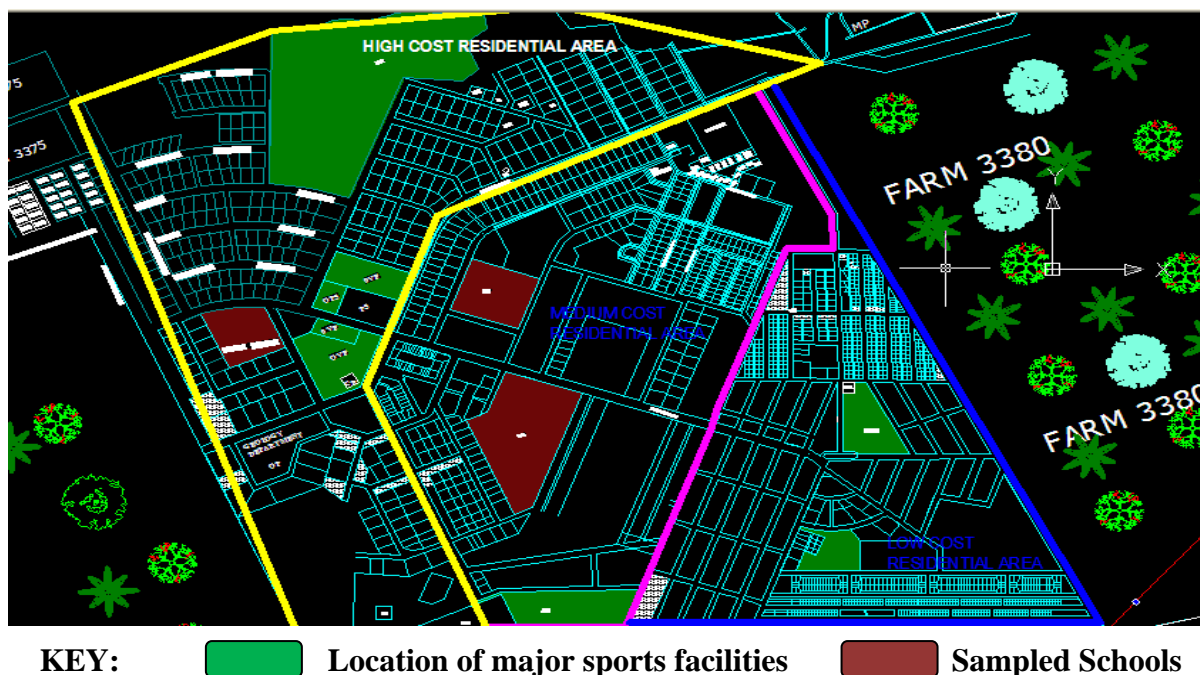
4.3.4. Factors influencing facilities provision

The question was assessed from responses from the local and central government officials, private sport providers and mining companies. This was further aided by spot visits and pictures of sport facilities in the study area.

Two broad criteria were used, i.e. the sports facilities provision trends and the major opportunities and challenges faced in provision of sport-related services.

From their responses to a structured questionnaire, both the Local and Central Government conceded that sport administration and facility provision is part of their responsibilities and actually rated sport importance highly. No policy exists at the local Authority. However, in the 2030 vision Government intends to make sport or physical education an examinable subject in schools. Government plans to support by providing funding for sport facility construction and maintenance and also to provide trained staff.

Figure: 4.3.4.1. Sports Facilities Distribution Map



Both local government and central government admitted that sport facilities had run down mainly due to poor funding from Central Government and limited financial resources at the Local Authority. A budget review at the Local Authority showed that each preceding year some amount of money had been budgeted towards rehabilitation of sports and recreation facilities, but low cash inflows often pushed sport out of priority. For instance, the Council budget for 2009 showed K12, 000,000.00 allocated for sport/recreation. By the time of the research, none of this amount had been committed yet.

Vandalism was also cited as contributing to the collapse of sports infrastructure. Other reasons included absence of user fees for most sports which make maintenance very difficult in the long term. However a cross check at the local Gym and Golf club ,where user fees of K7,500 (€1.00) per session and K1,500,000.00 (approx. €200) annually are charged, revealed a declining and a stagnated membership respectively, as only few people could afford the fees in exchange for sport.

With the district poverty levels estimated at 65%, payment for sports user fees is obviously luxury expenditure as can also be confirmed by the general low attendance at the local Gym at peak hours (17:30-19:300)

Figure: 4.3.4.2. Participants at the local gym



Resultantly, private sport providers generally face problems of limited resources to rehabilitate sports infrastructure or upgrade equipment, as very little is generated from user fees. Although private mining companies recognise support for sport and recreation activities as part of their Corporate Social Responsibilities, their commitment is often limited to locations within immediate proximity to their operations. And the absence of a sports policy has made it even more difficult to harness the private resources for infrastructure development.

Generally the research identifies poor funding, low prioritization and vandalism as the main influencing factors in facility provision. This is compounded by the absence of a guiding sport policy within the district.

4.3.5. Sport in ZCCM era compared to current situation

This component of the research was assessed based on the responses from a self administered questionnaire on three former ZCCM employees.

All the three respondents lamented the collapse of sports infrastructure most of which they claimed was well maintained under ZCCM (see pictures of current state of sports infrastructure).

In the ZCCM there was a Community Service Department that administered sport and recreation, always had a budget allocation specifically for construction and maintenance of sport facilities. Additional resources were available for sponsorship of a diverse range of sports activities including the football League-Chibuluma Football Club. ZCCM also used to organize annual sports festivals to boost community interest in sport.

Although a similar department exists under the Council, the deplorable state of infrastructure clearly suggests lack of maintenance of sports facilities by the Council, which (after privatization of the mines) automatically resumed service delivery responsibilities.

Box: 4.3.4.2. Sample of remnant sports infrastructure



Source: Author's own picture shooting

Box: 4.3.4.2. Sample of remnant sports infrastructure



Source: Author's own picture shooting

In terms of sports diversity, and while the other sports could have declined, the responses revealed the emergence of women soccer, which was not common in the ZCCM era. The respondents further claimed that sporting activity has declined now compared to the time of ZCCM, attributing it to poor infrastructure and lack of sponsorship.

Arguably, if we assume the absence of exaggerations on the sporting behaviour from the *resident respondents* and a possible bias on the part of the former ZCCM respondents themselves (*as all of them were in management positions*), this disclosure suggests sport participation was much higher than 72 % in ZCCM era, which argument, though deductively supported by pictures for current state of infrastructure, remains limited due to absence of data on sports participation levels in the ZCCM era.

The research found overwhelming consensus that facilities had run down compared to their state in the ZCCM era, as confirmed by near absence of sporting activities in the ‘poor and run down’ sports arenas. This facility neglect is attributed to low prioritization of sport and inadequate resources by both the public and private providers. As indicated earlier this is exacerbated by the absence of relevant policy, which makes it difficult to identify and properly plan for the sports needs, including tapping the mining companies’ contribution to the district recreation service provision or link the private sports activities to the public system.

Generally, and based on the consistency of responses from the target sample, it could be argued that ZCCM had a traceable system of managing sport and facilities, which is absent or scattered in the current system.

4.4. Summary

In concluding this chapter, it suffices to say that the author examined all the research questions and presented findings enough to make conclusions and generalized statements on sporting behaviour and facilities management in Kalulushi, which are now discussed in the next chapter.

5.0. CHAPTER FIVE

CONCLUSIONS AND RECOMMENDATIONS

5.1. Introduction

Zambia, renowned for its copper production, has suffered a socio-economic distortion after privatisation of the Copper Mines from state-parastatal (ZCCM) to private operation. The heaviest of this impact has been felt in municipal service delivery, particularly in towns on the Copperbelt Province, where services previously rendered by ZCCM have reduced both in quantity and quality under the currently Local Authority regime. Among the services that have deteriorated, is recreational sport. As noted by several scholars, even in places previously with the best sport facilities have either been abandoned or are in state of neglect.

Kalulushi has been no exception to this trend, a situation which prompted the undertaking of this exploratory case study research, whose objective was to explore strategies to improve management of sport in the post-privatisation era, through an assessment of the sporting behaviour and levels of facilities provision in the central area of Kalulushi. This chapter therefore gives summaries of research findings, with proposed solutions and recommendations for policy intervention and future research. The results and conclusion presented are based on five main questions which the research sought to answer; *What sports activities do people in Kalulushi engage in? , What sports do people need? What factors influence participation in sport? What factors influence facilities provision? What differences exist in sport management now and during the ZCCM era?*

5.2. Reliability of Methodology and Research Instrument

The case study was executed through administration of open and closed-ended questionnaires to residents drawn from the three neighbourhoods; Low Cost, Medium Cost and High Cost, which made the sample reasonably representative of the entire population in Kalulushi Central. Other units of analysis were private sports providers, new mining companies, local government officials, central government officials and school pupils. Research was conducted within the framework of most sports-related researches and extensively took into account the valid measurements of sport and facilities provision. Data was analysed both qualitatively and quantitatively, with the quantitative part being aided using the SPSS version 17.0 programme. With the extensive use of the already established measuring criteria in sport and facilities provision, the internal reliability can be guaranteed, the research relied upon and the results generalised to a much wider area

5.3. Research Justification and Contribution to Body of Knowledge

With the growing global emphasis in using sport as a tool or solution to social problems, the research was not only justified and timely, but will ultimately add to the body of Knowledge in sport by providing baseline data (for future research in sport) on sport participation levels, methodologies and glimpses on contemporary practices in sports management in Zambia and most parts of Africa, which data has remained limited for a long time. And with the apparent reduced health service delivery in the study area after privatisation, sport can play a vital role to

body fitness and health care cost reduction by retarding incidences or severity of illness while contributing to a better interactive and integrated society.

5.4. Theoretical Link of the Research Findings

Generally, though the existence of infrastructure and its state has a theoretical influence on sporting behaviour (Gans,1972), the observed poor state and distribution of infrastructure, largely attributed to absence of policy, did not completely hinder residents from engaging in sports activities, as evidenced by 72 % general sport participation and higher participation levels from residents with limited facilities.

This finding is reflective of the high appetite or hang-over for sporting, which could be a general characteristic of residents in the study area. However, whereas Santos et al (2008) found a positive relationship between sport participation and the availability of planned sport and recreation facilities among Portuguese adolescents, with infrastructure existence leading to higher sport participation; the current findings do not fully support Santos' findings from two angles. Firstly the 72 % sports participation in the current research represents a drop in participation (though not empirically proven, but according to the research respondents) contrasting with his findings which saw an increase. Secondly, even if the linearity of the established relationship between sports participation and residential location was disputed by the significant tests, the highest sport participation recorded in a Residential Neighbourhood with fewer facilities is still paradoxical.

This strange finding can only be explained under the *Reversal Theory* which postulates that '*human beings possess certain values and have additional needs to explain their sporting behaviour beyond the ego and achievement realm*' explained under the *Achievement Goal Theory* (Cindy & Koenraad, 2004). And these additional needs and values are often related to their latent motives such as fun, fitness, and skill build-up etc (intrinsic factors) and status, popularity etc (extrinsic factors), which sometimes may prevail over factors of location and facilities distribution, as was observed in the current research.

However, the research has still established a valid relationship between facility provision and sporting behaviour (or more operationalised-*sport participation*), in line with the adopted research model and also more specifically in line with the Theory of *Potential and the Effective Environment* in which Gans (1972) predicts that availability of planned schemes results, in this case, into change of human sporting behaviour. In the current case though, this relationship appear to be more sensitive to quality as opposed to mere existence of sports facilities. This was evidenced by desertion or non utilization of run down facilities in preference for improvised facilities at home or in other public places. In this case therefore the abandonment of infrastructure is a reflection of the values and meanings that people attach to the infrastructure, which aspect Gans(1972), warns must be taken into account if the *potential environment* has to become *the effective environment*. This observation parallels existing literature which links increased participation and evoked sporting behaviour with improved quality of sports facilities (see Blauw, 1993; Tucker, et al, 2008)).

Of special interest also, the research has further uncovered the Social-cultural relationships between sport participation and gender, age and marital status. For example our results found more sport participation among the teenage and least among the adult, which result tallies with

assertions which predicts reduced sporting with increased age (Cradock et al, 2008; Changiz et al, 2008). Our findings also showed more sport participation from males and the singles compared to females and the married. This again is theoretically supported by sociological arguments forwarded by Hosper and others (2008) in a study of sporting behaviour of Moroccan and Turkish women in the Netherlands. Possible explanations, in the case of Zambia and based on author's knowledge, is that the traditional settings place huge household responsibilities on females which not only limit their time of participation in sport, but also and much more often push sporting out of their main preoccupation. Though some of these relationships failed the statistical significance tests, they may need to be investigated further to fully establish the scope of their influence and to aid the redress and mitigation measures.

Generally therefore, most of the research findings parallel existing literature, which adds to the validity and reliability of the data and replicability of the results and the adopted research model for future studies in sport.

5.5. Research Conclusions

5.5.1. Sport behaviour and sports needs

Specifically, the research reveals that people participate in sports (72%), much of which sporting activities take place in school premises and other public spaces in improvised settings due to poor state in designated places. Other sporting activities take place at home, which besides being difficult to measure, is also unsuitable for tapping the much desired sport benefits of social interaction and integration.

Football, Basketball, Volleyball, Netball and Athletics are the most participated in sports across all age groups and also in school and out of school, though among the adults, participation is more limited to Football and Netball, tending to be less in other sports. They also remained the most competitive and favourite sports, thereby assuming the priority positions within the sports package, which included all the sports in which participation was recorded. While infrastructure for Golf and Rugby is reasonably intact, the two sports are not within the favourite category and their participation is limited to the privileged few due to user fees, which based on district and country poverty statistics, are beyond affordability levels for the majority of would be aspirants.

The research analysis reveal strong participation in sporting activities which require open-door arrangements, e.g. Football, Basketball, Athletics, Netball, which indirectly depicts a latent interest, not only to participate for the *intrinsic* motives such as desire for fitness, but also for *extrinsic* motives like social interaction which in part, is the focus of the research as also reflected in the theoretical model. Sport participation is generally higher in schools (87.1%) compared to the general residents (72%), presumably because of the mandatory physical education in all schools country-wide, though arguably even in schools, sports facilities are inadequate and in poor shape. Sporting frequencies and durations, as recorded, in this research, are well above thresholds necessary to yield the health benefits of sports.

5.5.2. Factors influencing sport participation

The research identified “having a sporting friend” and “parental guidance”, as important sources of influence for participation in sport, complimented by the individual desires to become

physically fit and to interact with others. Among the schools, the main motivation was to learn and share new ideas and skills. Notably also and in line with motivation factors discussed in chapter two, the research indentified a sensitive relationship of sport participation with age, sex, marital status, in which females, the adults and the married participate less in sport, which the author attributes more to perception problems as opposed to physiological problems. This finding further depicts the strong influence cultural beliefs (such as gender, marriage norms, religion, age-sport perceptions, etc) have and may continue to have on peoples' sporting behaviour, which from our theoretical framework, and also based on the *Reversal Theory* and the *Environment-Behaviour Theory*, are known to have possible impacts on sporting behaviour (see section 2.7.3.).

The main de-motivating factors were poor infrastructure (external factor) and mere lack of interests among respondents (internal factor).Evidently also the emergency of the information technology, TV and computer games jointly share the bulk of the leisure time expenditure which, if not controlled, might have long term negative implications on physical activity in the study area.

5.5.3. Factors influencing facilities provisions

The research concludes that absence of sports policy, (reflected in low prioritization and non committal of resources, by both the private and public), is main cause of facilities neglect. This has made it difficult to identify and properly plan for the sports needs, infrastructure requirements or realize possibility of tapping the private sector's (mining companies) contribution to the district recreation service provision. The research notes that, in response and without losing their sporting behaviour, people have adapted by creating alternative means either by improvising facilities in public open spaces or squeezing into school infrastructure. Vandalism of sports facilities by the communities has also been identified as a contributing cause to the poor state of infrastructure, as most of the public sport infrastructure remains unmanned.

5.5.4. Sport in ZCCM era compared to the current situation

Based on data consistency and deductive analysis from pictures for current state of infrastructure, the author concludes that sport participation levels in the ZCCM era were truly higher than 72 %, attributed to a well organized system of sport management and infrastructure maintenance both of which are conspicuously missing in the current system of service provision. Although there is a similar department responsible for sport and recreation within the Council (as existed in ZCCM era), it has evidently done little to address the deplorable state of infrastructure, on one hand confirming the low prioritisation of sport and perpetuating the deterioration of the handed-over infrastructure, while on the other hand, contributing to the deduced decline in sport participation and diversity.

And where as ZCCM promoted a diverse range of sporting activities, and promoted sporting through regular sports festivals and sponsorship, implementation of such approaches have been minimal or never attempted in the current regime except in schools where regular sports competition among schools are held.

The research findings generally suggest that sports activities and facilities were better managed in ZCCM period compared to the current situation, which assertion is justified from both pictures of remnant infrastructure and the testified declined in sport participation and sport diversity.

The combined effect has been the continuation of deterioration in infrastructures and distortions to the zoning regulations as people desert the designated areas for self made arenas and an ever increasing burden on the Municipality in terms of costs of deferred rehabilitation. Though participation levels are relatively still high, the current deplorable state of infrastructure poses a limitation not only on sport diversity but also on sporting places. It is thus feared that if not abated or redressed, community motivation in sport will decline putting the district at a risky of breeding a physically inactive and lowly integrated society.

5.6. Recommendations

Arising from the above conclusions, the author recommends as follows;

- Formulation of a sub-policy within the district strategic plan, to guide the periodic identification of sports needs, construction of new facilities and maintenance of existing facilities so as to reactivate further the community sporting behaviour. This calls for commitment to not only assign monetary figures to sport, but actual execution of the budgets.
- Massive sensitisation in the community on the importance of sport and its contribution to better health and social integration and the consequential need to protect facilities against vandalism. This entails formation of sports committees to facilitate the sensitisation and help in sub-administration of sports activities and identification of sports needs.
- Improve communication and information dissemination on availability and programming of sports activities, so as to widen sporting choices of individuals. This also requires linking private sport provision to the public machinery and creation of a data base for activities and facilities.
- Revamp the periodic sports festivals with prizes to motivate community to regularly participate in sport particularly the youths. Special attention to be paid to the aged, the married and other sub groups to address the observed inequalities in regular sport participation.
- Immediate rehabilitation of the dilapidated sports facilities (especially the out-door) and supply of appropriate equipment, e.g. for Volleyball, Basketball, Netball and Football which are the current popular sports to the majority. This will help make the facilities attractive and sporting itself more enjoyable to outweigh the influence from the current rival recreation activities like TV watching.
- Recruitment of qualified sports personnel to coordinate and supervise sports activities throughout the district and oversee the security and safety of sports facilities.
- Lobby for partnership in big sports infrastructure construction and rehabilitation programmes.
- Periodic funding to schools to improve sporting infrastructure and strengthen physical education provision.

- Introduce tax incentive to the new private mining companies to woo their participation in the district recreation improvement programmes.
- Central government must commit funds to districts for sports improvements as intimated in the 2030 vision.

5.7. Areas for further research

- Cultural and gender perceptions of sport among adult population
- Sustainable financing of sport and recreation services
- Low cost -Multi-facilities sports designs
- Impact of sporting on youth delinquency

REFERENCES

- Ajzen, I. 1991, "The theory of planned behaviour", *Organisational Behaviour and Human Decision Processes*, 50, pp. 170-210.
- Albertan Recreation and Parks Association, 2006, *Investing in Healthy People through Recreation and Parks Infrastructure: A position paper*, ARPA, Canada.
- Apter, M. J., Mallows, R., & Williams, S. 1998, "The development of the motivation style profile", *Personality and Individual Differences*, 24, pp. 8-17.
- Black, T.R., 1993, *Evaluating Social Science Research: An introduction*, Sage Publications, London.
- Blauw, Wim, 1993, "The Meaning and Use of Public Space", in: Ernesto Arias (ed.), *The Meaning and Use of Housing: International Perspectives, Approaches and their Applications*, pp. 239-252, Aldershot: Avebury.
- Blauw, Wim, 2009, *Urban Social Studies: Urban Living and Recreation in the City: Student Reader*, Erasmus University, Rotterdam.
- Carmona Mathew, Lim Heath, Taner Oc & Steve Tiesdell, 2003, *Public Places, Urban Spaces: The Dimensions of Urban Design*, Architectural Press|.
- Carr Steven, Andrew, M. Stone & Leanne G. Rivlin, 1992, *Public Space: Design Guidelines for Public Space*, (2nd ed.), Cambridge University Press|, London|.
- Cecchini Jose, A., Antonio Mendez & Jose Muniz, 2002, "Motives for participating in sport in Spanish school children", *Psicothema*, vol.14. No.3, pp. 523-531, University of Oviedo.
- Central Statistics Office, 2000, *Census of Population and Housing: Census Analytical Report*, Vol.10, CSO, Lusaka.
- Central Statistics Office, 2003, *Living Conditions Monitoring Survey*, CSO, Lusaka.
- Central Statistics Office, 2006, *Living Conditions Monitoring Survey*, CSO, Lusaka
- Changiz, M., Regina, P. & Stephanie, B. 2008, "The role of emotion in bridging the intention-behaviour gap: The case of sports participation", *Psychology of Sport and Exercise*, 10, pp. 226-234.
- Chatzisarantis Nikos, L.D., Martin S. Hagger, Brett Smith & Luke D. Sage, 2006, "The influence of motivation on execution of social behaviour within the theory of planned behaviour", *European Journal of Social Psychology*, no. 36, pp. 229-237.
- Chenga Charity, Freek Crounje & Johann van Wyk, 2008, *Corporate Social Responsibility in the Zambian Mining Industry: SADC Research Report*, The Bench Mark Foundation|, South Africa|.

- Chen-Yuen Chen & Yi-Hsiu Lin, 2008, “Does Theory of Planned Behaviour Explain Taiwan Teens’ Viewing of Televised NY Games with Pitcher Chien-Ming Wang”, *America’s Sports Journal*, National Chung Cheng University, Taiwan.
- Christchurch City Council (2002), *Physical Recreation and Sport Strategy*, Christ Church City Council, New Zealand.
- Cindy, H. P. Sit & Koenraad Lindner J. 2005, “Motivation orientations in youth sport participation: Using Achievement Goal Theory and Reversal Theory”, *Personality and Individual Differences*, 38, pp. 605-618.
- Cradock, L. Angie, Ichiro Kawachi, Graham, A. Colditz, Steven L. Gortmaker & Steven L. Buka, 2008, “Neighborhood social cohesion and youth participation in physical activity in Chicago”, *Social Science and Medicine*, Vol. 68, pp. 427-435.
- District Planning Unit, 2005, *Kalulushi District Situation Analysis*, DPU|, Kalulushi|.
- Dzierzak, Lou, 2008, “The Power of Play”, SGB Inform Global, November 2008, p.4.
- Edinburgh City Council, 2000, *A Sport and Physical Recreation Strategy for Edinburgh: A Capital Commitment to Sport*, Edinburgh City Council, Scotland.
- Eekeren Frank Van, 2007, *Mega Sports Events: Catalysts for Structural Social Interventions: A response to sports initiatives for the socially deprived youths in Flanders-Belgium*, Utrecht University, Netherlands.
- Faulth, R.C., Roth, J.L. & Brooks-Gunn, J. 2007, “Does the neighbourhood context alter the link between youth’s after-school time activities and developmental outcomes? A multilevel analysis”, *Developmental Psychology*, Vol. 43,no.3, pp. 760-777.
- Fraser, A., & Lungu, J. 2006, “For whom the windfall?” *Winners and losers in Zambia’s privatisation of copper mines*, CSTNZ/CCJDP, Lusaka.
- Gans, Herbert, J., 1972, “The potential environment and the effective environment”, in *People and Plans*, Harmondsworth, Penguin Press, 1972, pp. 4-13.
- Gill, D. L., Gross, J. B., & Huddleston, S. 1983, “Participation motivation in youth sports”, *International Journal of Sport Psychology*, 14, pp. 1-13.
- Golafshani Nahid, 2003, “Understanding Reliability and Validity in Qualitative Research” *The Qualitative Report Vol. 8 no. 4*, pp. 597-607.
- Hair, J.F., Black, W.C., Babin, B.J., Anderson, R.E., & Tathan R.L. 2006, *Multivariate data analysis*, 6th edn, Upper Saddle River, Prentice Hall.
- Hosper, Karen, Vera Nierkens, Ireen van Valkengoed & Karien Stronks, 2008, “Motivational factors mediating the association between acculturation and participation in sport among Turkish and Moroccan women in the Netherlands”, *Journal of Preventive Medicine*, no 47, pp. 95-100.
- Huat Beng & Edwards Norman, 1992, *Public Space, Design Use and Management*, National University of Singapore|, Singapore|.

- Kangwa, J., 2001, “*Mining and Society*”, *Privatisation and social management*, African Institute of Corporate Citizenship.
- Kawachi, I., & Berkman, L. 2000, “Social cohesion, social capital, and health”, *Social Epidemiology*, pp. 174-190, Oxford University Press.
- Knaap, G., 2006, ‘Real estate economics and metropolitan spatial structure’, In: *Planning in the Context of Market Forces*, Mimeo|, USA|.
- Kombo, K. Donald & Delno, L.A. Tromp, 2006, *Proposal and Thesis Writing: An Introduction*, Paulines Publications Africa, Kenya.
- Larsen Eva Ladekjaer & Lenore Manderson, 2008, “A good sport: Health promotion discourse, healthy cities and heterogeneity in contemporary Denmark”, *Health & Place*, Vol. 15, pp. 606-613.
- Lee, J. Martin, Jean Whitehead & Nikos Ntoumanis, 2007, “Development of Attitudes to Moral Decision-making in Youth Sport Questionnaire”, *Psychology of Sport and Exercise*, Vol. 8, pp. 369-392.
- Milne, S., Orbell, S., & Sheeran, P. 2002, “Combining motivation and volitional intervention to promote exercise participation”, *British Journal of Health Psychology*, 7, pp. 165-184.
- Mirecki, Gerald, 2008, *Investing in communities through parks and recreation*, Canadian Parks and Recreation Association, Canada.
- N’gombe, A., 2008, *The role of grassroots organisations in fostering local communities’ access to land, lessons from the Copperbelt and North Western Provinces of Zambia*, Oxford Brookers University, UK.
- Ndeke Feliaty, T.J., Andrew Chitembo & Rolf P.A. Dauskardt, 1999, *Widening the Resource Base for Kitwe City Council*, IHS-SINIPA, Rotterdam, Netherlands.
- Northwest Territories Municipal Council, 2003, *Sport Recreation and Physical Activity System*, Northwest Territories Municipal Council, Australia.
- Northwest Territories Municipal Council, 2003, *Recreation and Sports Contributions: Policy paper*, Northwest Territories Municipal Council, Australia.
- Obara, Louise & Heledd Jenkins, 2006, *Land use disputes in Ghana’s mining communities: Developing sustainable strategies*, Centre for Business Relations, Accountability, Sustainability and Society: Working Paper Series no. 36, Economic and Social Research Council.
- Owen, Christopher, 2007, *Sport and physical activity participation and sedentarism: factors associated with the completion of compulsory education: Phd Research paper*, University of Gloucestershire|[Online]. Available: <http://www.activegloucestershire.org/>
- Puska, Pekke , 2009, Commentary on Active Living: From Research to Practice, *American Journal of Preventive Medicine*, Vol. 36. No. 2S.

- Robert, W. Motl, Rod K. Dishman, Ruth Saunders, Marsha Dowda, Gwen Felton & Russel R. Pate, 2001, "Measuring Physical Activity in Adolescent Girls", *American Journal of Preventive Medicine*, Vol. 21. No. 2.
- Santos, Maria Paula, Angie S. Page, Ashley R. Cooper, Jose Carlos Ribeiro & Jorge Mota, 2008, "Perception of the built environment in relation to physical activity in Portuguese adolescents", *Health & Place*, Vol. 15, pp. 548-552.
- Simuntanya, N., 2008, *Copper mining in Zambia, the development legacy of privatisation*, ISS Paper No. 165, p. 9, Institute for Security Studies.
- Stratcorp Consulting, 2006, *G21 Regional Sport & Recreation: Infrastructure Strategy Report*, Surf Coast Shire Municipality, Australia.
- Tucker, Patricia, Jeninfer, D. Irwin, Jason Gilliland, Meizi He, Kristian Larsen & Paul Hess, 2008, "Environmental influences on physical activity levels in youth", *Health & Place*, no. 15, pp. 357-363.
- UN, 2003, *Sport for Development and Peace: Towards Achieving the Millenium Development Goals*, UN. [Online]. Available: <http://www.unicef.org/sports/reportE.pdf>
- UNICEF, 2005, *Sport Recreation and Play: Conference Report*, NICEF|Geneva|.
- Van Den Berg, Leo, 2003, *The student city: strategic planning for students communities in EU cities*, Euricur, Rotterdam.
- Yin-Fen Chen & Myers Bettye, 2008, *Factors influencing Taiwanese Americans to attend professional sporting events: Conference proceedings*, North American Society for Sports Management|, May 29 2008, Toronto|.
- ZANA, 2005, "Chibuluma Mines Warned against stripping Mine Assets", *ZANA Weekly News*, ZANA, Lusaka.
- ZCCM-IH, 2003, *Copperbelt Environmental Management Plan*, ZCCM-IH, Kitwe, Zambia.

IMPORTANT WEBSITES

- <http://www.psicothema.com/psicothema.asp?id=760>
- http://www.esu.fi/papers/4_Janice_Byrne.pdf
- <http://www.amazon.com/phrase/youth-sports>
- <http://edweb6.educ.msu.edu/kin866/Research/resstudy.htm>
- <http://edweb6.educ.msu.edu/kin866/menuresearch.htm>
- <http://psicodeporte.net/cuadernos2007vol7n2.pdf>
- <http://www.the-sportjournal.org/>
- http://www.bench-marks.org.za/research/desktop_zambia.pdf
- http://www.unicef.org/sports/pa_un_resolution_en.pdf

www.zamstats.gov.zm/lcm.php#2

<http://www.beyondsportzambia.org/index.html>

ANNEXURE 1

QUESTIONNAIRE FOR GENERAL RESIDENTS

General note: *This questionnaire is strictly for research purposes to generate knowledge on sports behaviour and sports facility provision in Kalulushi. All the information to be captured shall be kept confidential, only to be used in this research: Researcher's address; Mr. Joseph Chamoto, Kalulushi Municipal Council, Box 260400, Kalulushi, Zambia.*

Instructions: *[Please tick from the options given or provide written answers on the spaces provided or on any other piece of paper]*

1. Name of respondent
2. Address..... Age.....
3. Sex of respondent Male Female
4. Marital status Married Single Divorced Widower Widow
5. Type of employment Formal Self/informal employment N/A
6. What is the highest education level you attained?
 Primary education Basic education Secondary Tertiary
7. What is the highest education level your parent (head of household) attained?
 Primary education Basic education Secondary Tertiary
8. How do you evaluate the importance of sport in your daily life?
 Very high High Medium Low Very low
9. How would you describe your confidence of participating in sport?
 Very high High Medium Low Very low
10. Do you participate in any sports? Yes No

If yes explain why you participate in sport.....
11. If **Yes**, which of the under listed sports activities do you participate in most?
 Football Netball Volleyball Golf Athletics
 Bowling, Rugby Basketball Darts Badminton
 Cricket Table tennis Swimming Karate Gymnastics
 Others please specify.....
12. Where? At home Private places Public places School

Others(specify)

13. Nature of premises where sport is conducted In- door Out-door
14. How often per week Once Twice Thrice Four times Daily
15. For how long on average (hours) do you engage in sport each time you participate?
- Less than 30 minutes 30min-1 hr 1-2hrs 2-3hrs Over 4hrs
16. Have you participated in a competitive sporting event in the past one year? Yes No
17. If yes specify in which sport
18. How would you rate your participation?
- Very high High Medium Low very low
19. Do you intend to participate again in the same sport in the next one year
- Yes No
20. Do you have favourite sports other than those in which you are currently participating?
- Yes No
21. If **Yes**, are you satisfied with infrastructure provision for such sport? Explain.
22. If answer to **question 11** is **No**, explain why you don't participate in sport?
23. How do you spend **most** of your leisure time?
- Exercising Running/jogging Watching TV Playing computer games
- Playing chess Playing Draughts At the park Walking
- Others (specify).....
24. Which of the following would you say has the greatest influence on your sporting behaviour? (Tick only one factor)
- Parents Friends Church/religion Cultural beliefs None
25. Give your general comment on sports in Kalulushi today.....
26. Give your general comment on sports infrastructure.....
27. What would you recommend for sport generally and based on your answers in this questionnaire?.....

THANK YOU VERY MUCH FOR VALUABLE TIME!!!

ANNEXURE 2

RESEARCH ON SPORTS IN KALULUSHI

QUESTIONNAIRE /INTERVIEW GUIDE FOR PRIVATE SPORTS PROVIDERSs

General note: This questionnaire is strictly for research purposes to generate knowledge on sports behaviour and sports facility provision in Kalulushi. All the information to be captured shall be kept confidential, only to be used in this research: Researcher's address; Mr. Joseph Chamoto, Kalulushi Municipal Council, Box 260400, Kalulushi, Zambia.

Instructions:

*[Please **tick** from the options given or provide written answers on the spaces provided or on any other piece of paper]*

1. Name of sport/Recreation provider/Or Organization name.....
2. Address
3. When did you start providing sport/recreation activities
4. What type of sports/Recreation activities do you offer?.....
5. Do you charge any user/ participation fees Yes No
6. If **Yes**, give price range
.....
7. Do you think these fees are affordable to the majority of your clients? Explain.
8. If **No user fees** are charged, explain why
9. Has your clientele membership been **increasing** or **decreasing** from the time you started?
 Increasing Decreasing Remained the same
a. Explain causes of your situation if possible.....
10. Who are the majority of your clients? Adults Youths Children
11. Which category best describes your clients?
 Mostly men Mostly women No difference
12. Do you own the premise from where you are providing the named sport/recreation activities?
 Yes No

- a. If **Yes**, how did you acquire the property?.....
 - b. If **No** what are the conditions associated with the use of these premises?.....
 - c. Are you required to have a permit in order to provide the sporting activities?..
 - Yes No I don't know
13. What are your main Challenge s in the providing sport/recreation activities here in Kalulushi?

14. What are your motivations for providing sports facilities and /or sport itself?

15. Give your general comment on sport and recreation in Kalulushi today.....

16. Give your general comment on sports and recreation infrastructure.....
17. What would you recommend for sport and recreation generally and based on your answers

THANK YOU VERY MUCH FOR YOUR VALUABLE TIME!!

ANNEXURE 3

RESEARCH ON SPORT MANAGEMENT IN KALULUSHI QUESTIONNAIRE FOR SCHOOLS

***General note:** This questionnaire is strictly for research purposes to generate knowledge on sports behaviour and sports facility provision in Kalulushi. All the information to be captured shall be kept confidential, only to be used in this research: Researcher's address; Mr. Joseph Chamoto, Kalulushi Municipal Council, Box 260400, Kalulushi, Zambia.*

Instructions:

*[Please **tick** from the options given or provide written answers on the spaces provided or on any other piece of paper]*

1. Name of pupil respondent
.....
2. Name of school.....Grade.....
3. Residential address of respondent.....
4. Age.....
5. Sex of respondent Male Female
6. Marital status Married Single Divorced Widower Widow
7. What is the highest education level your parent (head of household) attained?
 Primary education Basic education Secondary Tertiary
8. How do you evaluate the importance of sport in your daily life?
 Very high High Medium Low Very low
9. How would you describe your confidence of participating in sport?
 Very high High Medium Low Very low
10. **At School**, do you participate in any sports? Yes No
11. If **Yes**, which of the under listed sports activities do you participate in most?
 Football Netball Volleyball Golf Athletics
 Bowling, Rugby Basketball Darts Badminton

- Cricket Table tennis Swimming Karate Gymnastics
- Others (please specify).....

12. If **No**, explain why you don't participate in sport at school

13. **Outside school time**, do you participate in any sports? Yes No

14. If **Yes**, which of the under listed sports activities do you participate in most?

- Football Netball Volleyball Golf Athletics
- Bowling, Rugby Basketball Darts Badminton
- Cricket Table tennis Swimming Karate Gymnastics
- Others please specify.....

15. Where? At home Private places Public places School

Others (specify)

16. Nature of premises where sport is conducted In- door Out-door

17. How often per week Once Twice Thrice Four times Daily

18. For how long on average (hours) do you engage in sport each time you participate?

- Less than 30 minutes 30min-1 hr 1-2hrs 2-3hrs Over 4hrs

19. Have you participated in a competitive sporting event in the past one year? Yes No

20. If **Yes**, which of the under listed sports activities do you participate in most?

- Football Netball Volleyball Golf Athletics
- Bowling, Rugby Basketball Darts Badminton
- Cricket Table tennis Swimming Karate Gymnastics
- Others please specify.....

21. How would you rate your participation?

- Very high High Medium Low Very low

22. Do you intend to participate again in the same sport in the next one year?

- Yes No

23. Do you have favourite sports other than those in which you are currently participating?

- Yes No

24. If **Yes**, are you satisfied with infrastructure provision for such sport? Explain.

25. If answer to **question 13** is **No**, explain why you don't participate in sport outside school time?

26. If answer to question 10 and 13 is Yes, Which of the following best describes why participate in sport?
- To gain physical fitness For fun To interact with others To be a sports icon
- To share and learn new ideas Because of available infrastructure
- Others (specify).....
27. Which of the following would you say has the greatest influence the on your sporting behaviour? (Tick only one factor)
- Parents Friends Church/religion Cultural beliefs None
28. How do you spend **most** of your leisure time?
- Exercising Running/jogging Watching TV Playing computer games
- Playing chess Playing Draughts At the park Walking
- Others
 (specify).....

29. Give your general comment on sports in Kalulushi today.....
30. Give your general comment on sports infrastructure.....

31. What would you recommend for sport or recreation generally and based on your answers in this questionnaire?.....

THANK YOU VERY MUCH!!!

ANNEXURE 4

RESEARCH ON SPORT MANAGEMENT IN KALULUSHI INTERVIEW GUIDE FOR GOVERNMENT AND LOCAL GOVERNEMENT AUTHORITIES

***General note:** This questionnaire is strictly for research purposes to generate knowledge on sports behaviour and sports facility provision in Kalulushi. All the information to be captured shall be kept confidential, only to be used in this research: Researcher's address; Mr. Joseph Chamoto, Kalulushi Municipal Council, Box 260400, Kalulushi, Zambia.*

Instructions:

*[Please **tick** from the options given or provide written answers on the spaces provided or on any other piece of paper]*

1. Organisation name.....
2. Designation of respondent.....
3. How do you evaluate the importance of sport in people's daily lives?
 Very high High Medium Low Very low
4. How would you describe the state of sport and infrastructure in the district?
.....
5. Is sport provision part of your mandates? Yes No
 - a. If **Yes**, explain scope of your mandates.....
 - b. How have you have fared in the provision or management of sport in the past 10 years?.....
 - c. What are your current plans for sports?.....
 - d. What are your future plans for sports?.....
 - e. What sports activities are you currently administering?.....
 - f. Is participation open to the gneral public? Yes No
 - g. What are your operating hours.....
 - h. Are there any user fees charged to participants? Yes No
 - i. How much?.....

- j. Why do you or don't you charge user fees?.....
 - k. Is there a policy on sport or recreation within your organisation? Yes No
 - l. Is there somebody within your organisation in charge of teaching, training or supervising
 - Sports activities? Yes No
 - m. If Yes, describe the scope of that person's duties.....
 - n. What challenges do you face in administering sport?.....
6. If answer to **question 5** is **No**, who do you think should be in charge of sport?.....
7. How much do you spent on sport and sport infrastructure annually (Budget range or criteria)
.....
8. How is the budget decided?
9. How would you want sports and the associated infrastructure to be managed in the district?

Explain in terms of;

- a) Construction and maintenance.....
- b) Organisation.
.....
- c) General financing.
- d) Public access.....
- e) Other mechanisms.....

THANK YOU VERY MUCH FOR YOUR VALUABLE TIME!!!

ANNEXURE 5

**RESEARCH ON SPORT MANAGEMENT IN KALULUSHI
QUESTIONNAIRE/INTERVIEW GUIDE FOR FORMER ZCCM EMPLOYEES**

General note: This questionnaire is strictly for research purposes to generate knowledge on sports behaviour and sports facility provision in Kalulushi. All the information to be captured shall be kept confidential, only to be used in this research: Researcher's address; Mr. Joseph Chamoto, Kalulushi Municipal Council, Box 260400, Kalulushi, Zambia.

Instructions:

[Please tick from the options given or provide written answers on the spaces provided or on any other piece of paper]

1. Name of respondent.....
2. Age (Optional).....
3. Position last held in ZCCM (**optional**)
 Management Middle Management Others category
4. How do you evaluate the importance of sport in your daily life?
 Very high High Medium Low Very low
5. How would you describe the state of sporting in Kalulushi today? Explain in terms of;
a) Infrastructure.....
b) Sport itself
c) Other (if applicable).....
6. Which sports activities do you think have declined most?
.....
7. Which sports activities have improved much?.....
8. Which new sports have emerged (if any)?.....
9. Compared with time of ZCCM, do you think sport participation has increased or decreased?.....
10. Why?.....
11. How was sport organized in the ZCCM period? Explain in terms of;
a) Policy (*if applicable*).....

- b) Construction and maintenance of infrastructure.....
 - c) General financing (*annual allocation or criteria*).....
 - d) Public access.....
 - e) User fees
12. Was there a unit responsible for coordinating sports activities? Yes No
 If **Yes**, Briefly describe its operation.....

13. What would you recommend for sports and recreation generally and based on your answers in
 this questionnaire?

THANK YOU VERY MUCH FOR YOUR VALUABLE TIME!!!

ANNEXURE 6

**RESEARCH ON SPORT MANAGEMENT IN KALULUSHI
INTERVIEW GUIDE FOR PRIVATE MINING COMPANIES**

General note: This questionnaire is strictly for research purposes to generate knowledge on sports behaviour and sports facility provision in Kalulushi. All the information to be captured shall be kept confidential, only to be used in this research: Researcher's address; Mr. Joseph Chamoto, Kalulushi Municipal Council, Box 260400, Kalulushi, Zambia.

Instructions:

[Please tick from the options given or provide written answers on the spaces provided or on any other piece of paper]

1. Name of company
2. Designation of respondent.....
3. Length of existence in Kalulushi.....
4. Area of specialization in business.....
5. How do you evaluate the importance of sport in people's daily lives?
 Very high High Medium Low Very low
6. Do you consider sport promotion and/or sport infra-s provision as part of your Corporate Social Responsibility? Yes No
7. Is your company involved in any of the following?
 Donations for sports/ recreation activities
 Sport facility provision
 Organizing sport-related activities
 Others (describe)
8. How much money do you commit for sport related undertakings annually?
 - a. Amount range or allocation criteria.....
 - b. Do you see your support as a short term or long term measure?
.....

9. If answer to **question 6 above** is **No**, explain why?.....
10. Who you think is responsible for sport activities and facility provision?.....

11. If you were requested to support sport/recreation, would you accept to support?
- Yes No
- a. If **Yes**, would you limit such support to the area in proximity to your operations, or the whole district of Kalulushi? Explain.....

- b. Would you see your support to sport as a short term or long term support?.....
- c. What would be your maximum financial limit of commitment annually? (*May give amount range or criteria instead of actual figure*).....
12. How do you describe the state of sport in Kalulushi generally in terms of ;
- a. Infrastructure.....
- b. Sport itself.....
- c. Community attitude.....
- d. Other description.....
12. How would you want sport to be managed in future?.....

THANK YOU VERY MUCH FOR YOUR VALUED TIME!!!