

**Urban regeneration and sustainability: conflicting or mutually
supportive agendas within contemporary cities.
A case study of Durban, KwaZulu-Natal.**

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Abstract

In the context of globalization and neo-liberal urban restructuring, cities have been attempting to reposition themselves within the competitive global landscape through focusing on their images and their enhancement since the 1970's. Rebuilding the city became the goal of urban policy through the process of urban regeneration, and large-scale, emblematic urban development projects or 'mega-projects' began to play a major role in this endeavour. However, in the current landscape of uncontained economic growth, social decline and ecological destruction, sustainability has become a critical concept, and the pursuit of a 'sustainable city' is a desirable goal. Urban policy consequently focuses on urban regeneration and sustainability as parallel agendas.

This study focuses on the South African city of Durban, KwaZulu-Natal, where regeneration has become particularly evident in recent years, with the focus intensifying when the country was awarded the bid for the 2010 FIFA World Cup, sparking the planning and construction of a number of mega-projects. Simultaneously sustainability has gained greater focus, as the need to develop within environmental limits has been recognized. Three particular mega-projects within the city are investigated: the Moses Mabhida Stadium, Warwick Junction Mall, and the Point Development; in order to explore the relationship between the two dominant agendas of contemporary urban policy.

This is achieved through the exploration of the urban policy and regeneration landscape of the city, and the particular role which mega-projects play. Subsequently, the three mega-projects are assessed in terms of sixteen sustainable city principles to determine the extent to which they incorporate sustainability, and thereby the extent to which sustainability is considered in the city's urban regeneration. The research findings reveal that although sustainability is present in the policy and planning rhetoric of the city, the mega-projects and urban regeneration do not include these principles to any meaningful extent. It is therefore concluded that these two policy strands are currently conflicting agendas within the planning and development landscape of Durban. There is a consequent need for sustainability to be practically incorporated to a greater extent in order to ensure a sustainable future for the city.

Preface

This thesis was completed at the University of KwaZulu-Natal, in the School of Environmental Sciences between April 2009 and November 2012 under the supervision of Catherine Sutherland.

The work contained in this thesis is my own, and where the work of other authors has been used, it has been acknowledged accordingly.

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Catherine Sutherland

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DECLARATION 1 - PLAGIARISM

I,, declare that

1. The research reported in this thesis, except where otherwise indicated, is my original research.
2. This thesis has not been submitted for any degree or examination at any other university.
3. This thesis does not contain other persons' data, pictures, graphs or other information, unless specifically acknowledged as being sourced from other persons.
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Signed

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List of Acronyms

CBD	-	Central Business District
CSDP	-	Central Spatial Development Plan
CSR	-	Central Spatial Region
EIA	-	Environmental Impact Assessment
EMM	-	Early Morning Market
FIFA	-	Fédération Internationale de Football Association
GEAR	-	Growth, Employment and Reconstruction
IDP	-	Integrated Development Plan
iTRUMP	-	inner Thekwini Regeneration and Urban Management Programme
LED	-	Local Economic Development
LTDF	-	Long Term Development Framework
NEMA	-	National Environmental Management Act
RDP	-	Reconstruction and Development Programme
SCH	-	Small craft harbour
SDF	-	Spatial Development Framework

Chapter 1

Introduction

Urban regeneration and sustainability have emerged as two dominant agendas within planning and development in the city of Durban, South Africa. As a result of the processes of globalization, and the consequent shift to neo-liberal urban restructuring, cities have needed to compete on the global stage, and urban regeneration therefore plays a significant role in the urban environment. The sustainability agenda emerged in parallel to this, as the need to sustain the urban environment in the long-term was realised. These two agendas thus both play a crucial role within the city, and it is consequently critical to determine whether they are competing or mutually reinforcing agendas.

One important urban regeneration strategy which has emerged both globally and in Durban, is the implementation of mega-projects. These large scale projects can be used to reflect broader processes of urban regeneration within the city, and three mega-projects which have played a significant role in the recent development of Durban have therefore been identified for this research. These projects will be used as a lens to explore the relationship between urban regeneration and sustainability in the city. They are the Moses Mabhida Stadium, the previously proposed Warwick Mall, and the Point Development.

1.1 Globalization, urban development and regeneration

Cities are regarded as engines of economic growth; vital centres of economic, political, and social innovation; and integral actors in the promotion and consolidation of international competitiveness (Jessop, 2002). They thus have a crucial role to play in the integration of countries such as South Africa into the global arena. They are also the sites of imagination, creativity, innovation, and the ever new and different, and thus provide a vast arena of new possibilities, as governments and economies seek out new means of revitalizing the urban fabric through the restructuring and transformation of their cities (Swyngedouw *et al*, 2002).

The most important impetus for the shift to the global organisation of production, and consequent processes of political and economic restructuring at the national level, as well as at local and regional levels, appeared in developments in the 1970's (Sykora, 1994). This neo-liberal restructuring occurred in part due to the influence of economic globalization, which had a direct impact on land

use and, more generally on the contents of urban planning policies. Within the process of globalization, cities and their local authorities began to become more independent units, and their goals were reformulated in ways that were consistent with the global economy. Cities thus entered into competition through restructuring their physical, social, and economic advantages, in order to attract global capital from investors in the global market (Diaz Orueta, 2007; Güzey, 2009).

Cities therefore focused their attention on their image and its enhancement, which would allow them to reposition themselves on the map of the competitive landscape. This involved the process of re-imagining and recreating urban space in the eyes of the outsider, the investor, the developer, the businessman, and the tourist (Swyngedouw *et al*, 2002; Güzey, 2009). Rebuilding the city became the goal of urban policy through the process of urban regeneration, and large-scale, emblematic urban development projects began to play a major role in this endeavour (Swyngedouw *et al*, 2002). It is this process that will be explored in this study.

1.2 The role of mega-projects

Planning through urban development projects has indeed emerged as the main strategy for stimulating economic growth and for organising innovation, resulting in large-scale projects being perceived as strategic instruments which are aimed at reshaping the city (Barber and Hall, 2008). The large mega-projects developed in Durban reflect this trend. Such projects are also designed to promote further new private investment in services and amenities in areas, and to create a new visual identity for cities which could consequently form the basis of a proactive place-marketing campaign (Barber and Hall, 2008).

Large-scale projects, or ‘mega-projects’ are viewed as providing a foundation for driving future growth and functional transformation of cities, and are defined as large-scale re-development projects composing of a mix of commercial, residential, retail, leisure, industrial, and infrastructure uses. Examples of such mega-projects include major seaport and airport developments, waterfronts and exhibition halls. The definition of mega-projects used in this study incorporates flagship projects, which are used to promote growth in specific areas of a city; and prestige projects, which are aimed at harnessing and creating economic growth through the attraction of investment and visitors (Loftman and Nevin, 1996; Swyngedouw *et al*, 2002; Engelbrecht, 2004; Hall, n.d.). Both of these are classified by Engelbrecht (2004) as urban renewal interventions. The three projects which are the

focus of this study are therefore defined as mega-projects as they meet these criteria. The definition of mega-projects is however contentious, and some may not agree with their categorisation.

This phenomenon of urban restructuring and regeneration has become the centre piece of urban policy in cities around the world, and there appears to be a trend towards its incorporation within the current development of South Africa. This has become particularly evident in the past few years as the country has begun to implement strategies which are focused on urban restructuring, regeneration and competitiveness. This focus intensified when the country was awarded the bid for the 2010 FIFA World Cup, sparking the planning and construction of a number of large scale urban development projects in various provinces, in preparation for the hosting of this prestigious event. This study will focus on the particular projects which are the current focus of development within the city of Durban¹ in KwaZulu-Natal, in a bid to investigate the urban policy and regeneration which is guiding change within this city, as well as the ways in which urban spaces are being re-organised.

These mega-projects provide a range of benefits for the cities within which they are implemented, however they also result in a number of associated costs and impacts which require effective management. There is thus a consequent need for the incorporation of sustainability into planning and policy within cities, to ensure that urban regeneration and development occur in a manner which can be sustained in the long term. The incorporation of a sustainability agenda is therefore a crucial component which is required in planning and development within Durban.

1.3 Sustainable development and sustainability

The last thirty years have heralded unprecedented advances in development and industrialisation, which have increasingly become recognised as activities which are detrimental to economic, environmental, and social aspects of society. This has raised concerns that the resulting damage to the earth's environment and the quality of life that will be transferred to future generations will be irreparable. The concept of sustainable development subsequently emerged as a vehicle to understand and combat such challenges (Lozano, 2008).

¹ The eThekweni Municipality is the administrative area of the city of Durban, and these two names are used synonymously. Durban will be used predominantly in this study, and eThekweni Municipality will be used when referring to the governance of the city, such as within the implementation of policy.

Sustainable development was defined in the 1987 Brundtland commission as “development that meets the needs of the current generation without compromising the ability of future generations to meet their own needs” (WCED, 1987; cited in Hermans and Knippenberg, 2006: 302). This novel concept became a global buzzword in association with many forms of development, and critical as an alternative to the dominant socio-economic paradigm, due to the acknowledgment that the current situation and trends in the ecological, social and economic environment do not appear to be viable in the long term (Swart *et al*, 2004; Gibson, 2006; Ugwu and Haupt, 2007; Scipioni *et al*, 2009).

The paths leading to sustainability will differ in each country or region, however the goal remains the same. The achievement of sustainability is thus integral to the success of any city or region in the long term (Goodland, 1995), and its incorporation in development within Durban is thus considered critical. The achievement of sustainability is however a particularly difficult task in developing countries, due to the wide range of priorities which need to be considered. There is an urgent need for large scale infrastructure projects which are aimed at stimulating economic growth; however there are competing priorities which also require implementation including poverty alleviation, institutional strengthening, capacity utilisation building and socio-cultural dimensions for sustaining harmony and co-existence; as well as the need for the protection of ecological integrity (Mog, 2004; Pope *et al*, 2005; Ugwu and Haupt, 2007). The challenge is thus to reconcile these differing objectives within planning and development to ensure economic growth, and more socially and ecologically sustainable futures.

Sustainability may be measured at a hierarchy of scales, and due to the importance of the local scale within the broader context of the regional and national scales, it is vital to assess sustainability at the local level, such as that of the city.

1.4 Sustainable cities

A ‘sustainable city’ has become the ultimate goal in city development, and Haughton and Hunter (1994) defined this as a city within which citizens and businesses attempt to improve the natural, built and cultural environments in such a way that contributes to sustainable development. It is important to investigate the way in which cities and their regeneration processes address and incorporate the ideas of a sustainable city, through institutions developed to drive growth and address sustainability goals. This study focuses on understanding the relationship between sustainability and

urban regeneration processes, using the case study of mega-projects as a lens within a particular city, that of Durban in KwaZulu-Natal.

1.5 Planning within the city of Durban

1.5.1 Durban

Durban lies on the east coast of South Africa, and is the largest city within KwaZulu-Natal. The city is the second largest metropolitan area in the country, being defined by its large and busy port. It is also a major city for tourism, being a leading coastal resort within the country (Møller, 2001; Popke and Ballard, 2004; Lemanski *et al*, 2008). It has a population of approximately 3.357 million people, and it is estimated that the population will increase to 3.429 million people by 2014 (eThekweni Municipality, 2009a; Sutherland *et al*, 2011). High levels of poverty and unemployment are evident within the city, with 33.1 percent of the population being classified as poor, and the official rate of unemployment being given as 20.6 percent (SACN, 2006; Breetzke, 2009; eThekweni Municipality, 2009a).

1.5.2 The planning context

Planning within Durban appears to be consistent with a pro-growth neo-liberal regime, and is focused by a range of policy and planning documents, including the city's Long Term Development Framework (LTDF) or Imagine Durban; the Integrated Development Plan (IDP); and the Spatial Development Framework (SDF), which incorporates four Spatial Development Plans. These are strategic framework documents which provide guidelines for the way in which development is undertaken in the city. A number of priorities have been identified in these documents as important areas to be addressed, including focusing on poverty and unemployment, the regeneration of existing developed areas, supporting and growing tourism and related industries, and maximizing the benefits of 2010 in order to establish Durban as a major international city (eThekweni Municipality, 2009).

This endeavour would require building on the city's potential as a financial, business, cultural, media and sporting centre (Loftman and Nevin, 1996); and in this regard the city has thus adopted the approach of mega-project implementation to drive development and growth within its boundaries (Albert, 2009). The eThekweni Municipality is thus currently undertaking the planning and construction of a number of large scale economic development projects, or mega-projects; three of which form the focus of this study. These are the Moses Mabhida stadium which was constructed for the 2010 FIFA World Cup, and the Warwick Mall which was proposed as a main aspect of the city's

regeneration strategies for 2010. This project was however delayed, and subsequently set aside in 2011, due to significant opposition from a variety of groups which resulted in legal disputes (Mbonambi, 2011). The third mega-project which is underway is the Point Development, which includes uShaka Marine World, a planned Small Craft Harbour (SCH), and a hotel and retail zone.

Each of these three projects is intended to play an important role in the regeneration of Durban as a competitive global city, with the potential for future growth and enhancement. They have however initiated waves of controversy, and many questions have been raised as to whether these projects will be able to provide the long lasting benefits which they promise, and whether the city is acting in the best interests of all of its citizens in the long term. The question therefore remains whether these mega-projects incorporate sustainability to a significant degree, or are merely neo-liberal vehicles of economic growth and financial gain that provide benefits for a select few in the context of urban regeneration.

1.6 Rationale for the study

In the current landscape of uncontained economic growth, social decline and ecological destruction, it is essential to explore whether the current urban policy and regeneration in the city of Durban is aligned with a path towards sustainability. A case study enables context-dependent knowledge to be gained in order to understand social change and decisions around policy-making (Bassett *et al*, 2002; Flyvbjerg, 2006); and the use of mega-projects occurring within Durban's boundaries as case studies of planning and development, will therefore provide a reflection on the nature of urban regeneration within the city.

The consequent evaluation of these projects in terms of sustainability in the city will thus allow a determination of the relationship between these two dominant agendas. This is of particular concern in the current global financial crisis, as it is crucial that the available funds are wisely spent; and that the well-being of a country's citizens is prioritised. This research will contribute to the production of knowledge concerning the nature of large scale economic developments within the city of Durban, as well as to the debate surrounding whether the city's pro-growth urban regeneration regime is contributing to its long term sustainability.

1.7 Aim and objectives

Aim

To use mega-projects within Durban as a lens through which to explore the relationship between urban regeneration, and the achievement of sustainability goals.

Objectives

1. To identify fundamental policy and planning goals and objectives within Durban that guide urban regeneration and sustainability.
2. To produce a set of sustainable city principles from the literature.
3. To explore the development and urban regeneration landscape of Durban.
4. To investigate the characteristics of three significant mega-projects within Durban.
5. To determine the extent to which urban regeneration of space within the city of Durban is concerned with the goals of sustainability, in relation to mega-projects.

1.8 Chapters of the study

The study is divided into eight chapters, which address various aspects of the research. Following this chapter, two theoretical framework chapters present the literature on urban regeneration, sustainability and mega-projects. Chapter two presents a literature review of the two main agendas which are being investigated within this study. The influence of globalization, and the consequent urban restructuring and regeneration which is occurring within contemporary cities due to the increasing need for cities to compete with each other for investment and tourism is examined. The policy and planning context within which urban regeneration occurs is discussed, and sustainability and sustainable development are explored as concepts which should be incorporated within planning and development of cities, with the goal of promoting a sustainable city.

Chapter three presents a number of strategies which cities have been employing to increase their competitiveness and create new images, including mega-events, the theming of cities, and the implementation of mega-projects. This chapter then focuses on mega-projects in greater detail, as the case study for this research; in terms of their characteristics, criticisms which have been directed at them, and development principles which can be incorporated in order to improve their potential for success. The chapter concludes with a presentation of theory concerning the three types of projects which are the focus of the study.

Chapter four provides the context for the study, through an exploration of restructuring and regeneration within South Africa and Durban, with a particular focus on mega-projects as an important urban regeneration strategy. The importance of the incorporation of sustainability and sustainable development within the city is recognised, and the policy context within which these two agendas are being promulgated is presented. Details of the three mega-projects which are at the core of this study; namely, the Moses Mabhida Stadium, the Warwick Junction Mall, and the Point Development are provided. The chapter concludes with a discussion of the debates which surround the development of mega-projects.

Chapter five presents the methodology which was employed in the research. The steps which were followed in the collection of the data, sampling, and data analysis are therefore explained, and the limitations of the study are discussed.

Two results chapters are included in the study, which address urban regeneration, and the incorporation of sustainability within the identified mega-projects. Chapter six is the first results chapter, and explores six themes which were identified through the research, surrounding the development and urban regeneration landscape of Durban. These themes focus on the planning and policy context of the city; the evidence of urban regeneration in the city's development; the particular role mega-projects play as an urban regeneration strategy, in terms of being locally strategic, entrepreneurial, or both; and the shift towards the incorporation of sustainability in the city.

Chapter seven provides sixteen core sustainable city principles which were developed from a review of the main literature on sustainability. The three identified mega-projects are subsequently examined in terms of their incorporation of these principles. This analysis consequently allows for a reflection of the inclusion of sustainability within the city's urban regeneration strategies; allowing for the determination of the relationship between these two agendas.

Chapter eight presents the conclusion of the study. The objectives of the study are discussed, in terms of the way in which they were achieved. The relationship between the two agendas of urban regeneration and sustainability within the city is subsequently explored, and what this means in terms of city development is discussed. The relevance of the study for the planning and development of the city is provided, and a number of suggestions for future studies are presented.

Chapter 2

Urban regeneration and sustainability in contemporary cities

The current era of post-modern urbanism has seen the increasing globalization of cities around the world, as well as the emergence of a neo-liberal agenda and the associated urban restructuring of cities. This has resulted in increased competition between cities, and the consequent need for cities to re-image themselves through urban regeneration and the implementation of entrepreneurial governance strategies. This adoption of a neo-liberal agenda has led to a conflict between the selection of pro-growth and pro-poor development strategies within planning in contemporary cities.

Sustainability has emerged as an important concept in recent decades, and its incorporation is particularly significant given this pro-poor/pro-growth conflict, as the need for economic growth, ecological preservation and social upliftment have been recognised. A sustainable city is one which is able to incorporate all of these elements, and is the goal which many cities strive for. These concepts of neo-liberal urban regeneration and sustainability provide the focus of this chapter.

2.1 Post-modernism

Post-modernism involves a shift from the "grand narratives" of modernism to a focus on specific local goals, and post-modern politics thus offers a way to theorise local situations as fluid and unpredictable, though influenced by global trends. Any and all action is seen as necessarily local, limited and partial, but nonetheless effective; hence the motto for post-modern politics might well be "think globally, act locally" (Murray, 2004; www.colorado.edu).

Post-modern urbanism also represents a distinct phase of urban growth and development, which is characterised by the shift from modernist-inspired 'city as panorama' to the 'city as spectacle'. It is thus characterised by new modes of culture and consumption, and is focused on the selling or promoting of place as the main strategy of current capital accumulation in the context of growing competition, at international or even global scales (Sykora, 1994; Boyer, 1998, cited in Murray, 2004). Local authorities and city managers in post-modern cities have thus adopted new modes of urban governance based on the ideals of neo-liberalism, with an emphasis on privatised planning, in the form of public-private partnerships, with municipal authorities experimenting with new regulatory mechanisms of urban governance; and the implementation of large scale urban renewal

projects (Murray, 2004). All of these elements have emerged in the context of increasing globalization.

2.2 Globalization and urban restructuring

2.2.1 Globalization

The contemporary city is shaped by a diverse range of forces (Marshall, 2003), one of the most dominant being that of globalization. The analysis of the concept of globalization therefore creates the potential to understand the conditions occurring within cities, as well as the forces which produce them. South Africa and its cities, such as Durban, have increasingly been subject to the impacts of globalization, particularly since the end of economic sanctions associated with apartheid, and the consequential opening up of the South African economy. These impacts have led to the current pattern of urban development, and it is therefore vital to understand their effects and consequences.

The globalization of capital and financial markets is the leading driver of change in the economy of cities worldwide, and involves modernisation, liberalisation, privatisation, and the opening of local markets to world competition (Roberts *et al*, 2009). The growth and development of cities is thus dominated by globalization and the interaction of global economic forces (Roberts *et al*, 2009). Globalization can therefore be understood as a process of change from a national to a global scale economy, which has a significant effect on the restructuring of the localities which are involved in the process, including regions and cities (Sykora, 1994). The performance of these localities thus becomes increasingly impacted upon, as well as constituted, by processes and forces which are external to their geographic locations, through the intensification of worldwide social, economic and political relations (Sykora, 1994). Durban, as a city influenced by globalization, is thus increasingly affected by forces and processes which are occurring in countries and cities around the globe.

This exposure of urban regions to global forces, as the nation state has become more open to capital and trade flows, represents both an opportunity and a threat for cities. An opportunity arises as cities are given more scope to develop their own competitiveness, and are able to access world markets, global labour and capital; gaining a better position in the global economy, and thus improving their growth and development. A threat develops in terms of the rapid changes in market and investment conditions which subject urban regions to possible negative economic impacts (Webster and Muller, 2000; Brenner and Theodore, 2002a; Hubbard *et al*, 2002, cited in Houghton, 2010; Thornley *et al*, 2005). Further aspects of concern are that as global competition intensifies, governments are forced

to take increasingly aggressive actions to maintain competitive positions, and cities begin to be evaluated based on extremely narrow economic criteria. There is a consequent reduction in the level of social protection, and other criteria such as quality of life, environmental concerns, social justice, or equity are side-lined within city development (Marshall, 2003). It is therefore important for a city such as Durban to utilise the opportunities which these processes provide, while ensuring it manages the associated negative impacts.

The global economy is therefore increasingly responsible for what is happening in cities, and this is resulting in a rapid restructuring at almost every level of urban systems in both developed and developing countries, including the urban spatial, socio-cultural and economic (Engelbrecht, 2004; Murray, 2004; Roberts *et al*, 2009). The urban hierarchy is thus being reshaped, with new structures of hubs and peripheries, and control and dependency occurring between cities and nations (Roberts *et al*, 2009). Such economic transitions within globalization are rarely straightforward, and are therefore instrumental in creating conflict and competition between cities and nations. Cities are thus under inevitable pressure to attempt to attract investment; improve infrastructure; and to dominate their localities through becoming more competitive (Jenkins and Wilkinson, 2002; Marshall, 2003; Roberts *et al*, 2009). These urban restructuring processes explain the paths of development occurring in many cities around the world in the past few decades, including the more recent development of South African cities, such as Durban, which is the focus of this study. A certain city model is favoured within the process of global urban restructuring, which can be viewed as neo-liberal urbanism. This is explored in the following section.

2.2.2 Neo-liberalism and urban restructuring

Neo-liberalism is the ideology by which the most recent phase of capitalism can be described. Neo-liberal urbanism is a model of urban development which is adapted to neo-liberal demands, with the state fulfilling a crucial role in creating the necessary legal, economic and political deployment conditions and promoting new forms of local government (Harvey, 2005, cited in Roberts *et al*, 2009; Diaz Orueta, 2007). This can be seen, from a critical perspective, as another arena for ideological hegemony and capital accumulation, and has had a powerful restructuring effect on the urban environment (Roberts *et al*, 2009).

Neo-liberalism encourages competition at a variety of spatial scales (Sheppard, 2000, cited in Houghton, 2010; Brenner and Theodore, 2002b; Barnett, 2005; Harvey, 2006), and has included the

restructuring of economic power and competitiveness away from the level of nation-states, and towards cities and city-regions, as well as the formation of the 'world city' or 'global city'. The local state is thus increasingly responsible for the promotion of economic growth and competition within cities; and as a result, service sector dominance has emerged, with an emphasis on the middle class focused 'creative city' and 'cultural economy', together with a trend towards major cultural and sporting events and initiatives. This occurs while political power might be shifting in the opposite direction, from local governments towards national and international bodies (Sykora, 1994; Peck, 2001; Peck and Tickell, 2002, cited in Houghton, 2010; Pieterse, 2008, cited in Houghton, 2010; Roberts *et al*, 2009).

The restructuring of local and urban governance, with a focus on enterprise, privatisation, and other partnerships with the private sector has also occurred; while urban infrastructure has been restructured towards deregulated and privatised operations. The neo-liberal governance of urban development has thus involved the convening of politicised and marketised relationships around financing, constructing, destroying and reconstructing the built environment (Weber, 2002). This has been occurring in order to access foreign investment and development finance, but results in the exclusion of large sections of the urban poor, thereby leading to increased poverty, marginalisation and increasing social and economic polarisation (Sykora, 1994; Brenner and Theodore, 2002b; Harvey, 2005, cited in Houghton, 2010; Pieterse, 2008, cited in Houghton, 2010; Roberts *et al*, 2009).

These urban restructuring processes consequently have an important impact on the geographical production of urban form, including the social and economic revitalisation of central cities, and the gentrification of inner-city neighbourhoods; while simultaneously having some negative social, economic and ecological consequences (Sykora, 1994). In a city such as Durban, it is crucial that the positive aspects of neo-liberalism are harnessed, while at the same time ensuring all people and the environment are included and protected. This study will therefore examine the impacts of neo-liberal restructuring in the city.

Many cities are also now focusing on a neo-liberalised urban environmental agenda, which involves cultivating a local green image which is intended to encourage investors, creative industries, high-value professionals, and attract global tourists. Roberts *et al* (2009) highlighted that behind this there is at times a 'fuzzy' aspiration for the achievement of sustainable cities, which often appears to be

flexible in such a way that it can be adapted to the agenda of the urban elite. In a country such as South Africa, this agenda does appear to offer many benefits, however it is imperative that sustainability is brought into the equation and is not simply manipulated to suit the urban elite. This study will explore the extent to which the concept of sustainability is incorporated into the neo-liberal planning agenda in the city of Durban.

It has therefore become evident that neo-liberalism has become a globally dominant discourse, and cities have become an important site for its implementation (Harvey, 2005, cited in Houghton, 2010; Robinson, 2006, cited in Houghton, 2010). As noted, neo-liberalism and urban restructuring have a number of social consequences, and cities must address these while navigating the neo-liberal agenda. Cities have therefore adopted strategies which are aimed at enhancing their ability to compete on the global stage, while attempting to address their local urban problems and improve the lives of their citizens (Jessop, 2002; Houghton, 2010).

2.3 Cities and urban competitiveness

Cities are nodes which sustain and extend global economic integration, as they offer opportunities for global economic activity (Madon and Sahay, 2001; Jenkins and Wilkinson, 2002), and have historically played a role as drivers of social, political and economic transformation (Beall and Fox, 2009). According to Beall and Fox (2009), they are considered nodes of regional and international communication and transportation, engines of economic growth, seats of political power, iconic cultural spaces and social melting pots. Cities such as Durban thus play a vital role in development within the national and global economy.

Cities are also considered as brooding places of imagination, creativity, innovation and the new and different; whilst hiding pervasive processes of social exclusion and marginalisation, and being rife with struggle and conflict in the midst of affluence and abundance (Swyngedouw *et al*, 2002; Beall and Fox, 2009). There are also numerous conflicts over the control of urban space around issues such as urban development plans, political influence, and the socio-spatial distribution of s within the city. In order to get the best from cities, sound planning and effective economic governance at both local and national levels is therefore required (Madon and Sahay, 2001; Freund and Padayachee, 2002; Swyngedouw *et al*, 2002; Beall and Fox, 2009). Durban thus requires effective planning and governance in order to address such challenges.

As discussed in the previous section, the cities of the world are becoming parts of a single global entity, which is resulting in the interdependence of cities. Their growth and development is being driven by their economic role and activity, which is determined in part by the current pattern of globalization which provides the context for the changing urban economic environment. Cities have thus transformed into networked-city regions within a global economy and society, and they are responsible for participating in the promotion and well-being of their local economies, both seeking investment and dealing with the social and employment consequences of economic restructuring (Nel *et al*, 2003; Roberts *et al*, 2009).

A main component of the new mode of socio-economic development in cities is the gradual shift away from distributive policies, welfare considerations, and direct service provision towards market-oriented and market-dependent approaches which focus on the pursuit of economic promotion and competitive restructuring. Urban revitalisation is thus presented as an opportunity for changing economic hierarchies and functions within the urban region, creating jobs and strengthening the cities position in the urban division of labour. The search for growth therefore turns urban renewal into a mediated objective, a necessary precondition for economic regeneration (Swyngedouw *et al*, 2002). One of the most crucial components of urban renewal involves the reshaping or re-imagining of a city.

2.3.1 Urban regeneration: reshaping and re-imagining of cities

Repositioning the city within the competitive landscape of the new global order involves re-shaping, re-imagining and recreating urban space in the eyes of both locals and outsiders, including investors, developers and tourists (Swyngedouw *et al*, 2002; Roberts *et al*, 2009). Cities are thus attempting to reposition themselves through the processes of environmental and urban regeneration (Marshall, 2001b; Marshall, 2003). This study will investigate urban regeneration within the city of Durban, using mega-projects as a lens.

Re-imagining of cities, and ‘place-marketing’ or ‘city-marketing’, is thus playing an increasing role in the competition between cities and regions for attracting new business and international elites, as well as playing a vital role in international tourism (Smith, 2005; Maennig and du Plessis, 2009; Roberts *et al*, 2009). Cities have thus begun to change their images, and they intentionally attempt to differentiate themselves from other cities through re-imagining strategies (McCarthy, 1998a). Re-imagining is defined by Smith (2005: 399) as “the deliberate (re)presentation and (re)configuration of a city’s image to accrue economic, cultural and political capital”; and plans for re-imagining are a crucial

aspect in the competitive landscape for business and tourism (Maennig and du Plessis, 2009). These strategies play a role in the enhancement of a city's urban competitiveness (Webster and Muller, 2000), and "competitive advantage has become the catch-cry of the modern era" (Marshall, 2001b: 51). Competitive advantage is a critical element of national, regional and local urban policy agendas, and thereby has a direct impact on the way in which cities are developing (Marshall, 2001b).

Glocalization and entrepreneurialism

Cities and regions have become increasingly critical agents of economic development, while the role of the nation state in affecting and regulating economic activities within its boundaries has declined. It has therefore been said that the nation state is becoming more 'glocalized'. This is due to part of its sovereignty being taken over by supra-national agencies, while it is also re-scaling towards the regional and local state levels to have a more direct role in regional economic development and urban development projects, and to ensure that the global competitiveness of major urban areas is promoted. The state, at a municipal or national level therefore sees the city as an engine for income creation in the competition to attract inward investment, and thus plays an important role in marketing the city (Jacobs, 2004; Pelkonen, 2005; Waley, 2007). These processes occur through regional and local institutions, and neo-liberal economic development policies which are globally-oriented, emphasising privatisation, global competitiveness and economic growth, and which include public-private partnerships and implementation of plans at the local scale (Pelkonen, 2005).

On the other hand, cities and important urban regions have been globalizing in terms of no longer being enclosed within national economies, but becoming more directly embedded within inter-urban networks. Due to the process of globalization, cities have therefore been moving from inwardly oriented urban government to outward-focused, corporate modes of urban governance, which involve the collaboration of local authorities with a much wider network of agencies and interested groups, including civil society (Bassett *et al*, 2002; Desfor and Jorgensen, 2004; Pelkonen, 2005; Roberts *et al*, 2009). This shift from government to governance is associated with new forms of co-operation and competition between city-regions, which poses major challenges for states in achieving both social cohesion and economic success (SEU, 1998, cited in Roberts *et al*, 2009; Desfor and Jorgensen, 2004; Roberts *et al*, 2009). These new governance mechanisms are characterised by the replacement of managerialist development strategies by entrepreneurialist approaches (Desfor and Jorgensen, 2004); and this shift from urban government to urban governance, and from a managerial

urban regime to an entrepreneurial one, lies at the centre of the discussion on urban change in the past few decades (Waley, 2007).

Cities thus have to compete for investment and affluent residents, and city governments cannot merely 'manage' development, but must actively pursue investments and publicity to survive in the increasing inter-urban competition (Jenkins and Wilkinson, 2002; Sairinen and Kumpulainen, 2006). More dynamic, assertive and entrepreneurial forms of governance therefore become dominant, with a focus on seeking new sources of economic development. An entrepreneurial city, which is orchestrated by the local state, is thus considered to pursue innovative strategies, which are aimed at the maintenance or enhancement of its economic competitiveness in relation to other cities and economic spaces (Waley, 2007), creating a new imaginary and a re-imagining of the city for investors and tourists (Brenner and Theodore, 2002a; Swyngedouw *et al*, 2002).

This has led to policies in many cities placing an emphasis on the need to compete for urban investment, and local authorities and planners therefore adopt a proactive and entrepreneurial approach which is aimed at the identification of market opportunities, and assisting private investors to take advantage (McCarthy, 1998a; Swyngedouw *et al*, 2002). This is evident in the city of Durban, where the municipality is pursuing an entrepreneurial path through attempts to market the city in order to make it more attractive to investment and to increase tourism; including through the development of mega-projects, which this study explores.

The quality of urban environments is increasingly understood to be highly influential in the competitiveness of places, and the investment flows and values of different parts of cities (Roberts *et al*, 2009); and the success of a city has thus become dependent on the availability and effectiveness of appropriate infrastructure rather than only on its location (Bruttomesso, 2001). Assets such as transportation links; the development of specialised economic spaces, from the central business district (CBD), to zones providing space for leisure, logistics and retail; the attractiveness of the city centre; and arts and cultural facilities have consequently become priorities at the local level (McCarthy, 1998a; Swyngedouw *et al*, 2002; Roberts *et al*, 2009).

Barber and Hall (2008) discuss a distinctive entrepreneurial model of urban economic development which evolved globally, and incorporates such changes within cities. These include investing in service-sector physical infrastructure, promoting creative industries, applying 'boosterist' marketing

campaigns for cities, developing up-market housing in the CBD, hosting large scale sporting and leisure-related events, and ‘themed’ neighbourhood regeneration. These types of interventions are intended to economically reinvigorate urban areas, and thus allow them to be more economically competitive within the global market, being branded as examples of ‘urban renaissance’ (Barber and Hall, 2008). This study focuses on mega-projects as a form of urban regeneration within the city of Durban, and therefore embodies elements of this model.

The discourse of an ‘urban renaissance’ within specific urban spaces has become so dominant that developments in city’s CBDs are used to claim economic and social transformation for the entire city. This is not however always reflected in terms of improved competitiveness or inclusion as expressed in positive social and economic outcomes (Barber and Hall, 2008). There are also concerns that redistributive development processes with socially-focused outcomes are not easily achieved through entrepreneurial agendas which rely on a trickle down of benefits to the marginalised through growth focused development (Lees, 2000; Acioly, 2001; Brenner and Theodore, 2002a; Swyngedouw *et al*, 2002; Thornley *et al*, 2005). A city such as Durban must therefore consider all areas of the city, and ensure that the strategies which they implement in reshaping the city enhance competitiveness, while providing positive outcomes for all citizens.

Cities have also been attempting to promote regional productive capacities using a variety of strategies which involve constructing strategic urban places for development, such as the creation of large shopping malls, the redevelopment of traditional urban markets to high value offices and the gentrification of former industrial areas, industrial and science parks, office parks, transport terminals and cultural facilities (Roberts *et al*, 2009). Social, political and cultural innovation have thus played a significant role in enhancing the competitiveness of cities (Pelkonen, 2005; Roberts *et al*, 2009), and many cities of the ‘North’ have already been transformed to knowledge-based and cultural centres. In conjunction with the competition for global investment, this highlights the culture of consumption where cities are comprised of clean waterfront environments and affluent shopping and leisure zones, which tends to polarise urban environments as desirable or undesirable (Roberts *et al*, 2009).

The developing world has lagged behind the cities of the ‘North’ in terms of such ideas, but local urban authorities in many developing urban regions have also experienced an increase in the range of competitiveness factors that are directly or indirectly within their purview, allowing these cities to

more effectively pursue urban restructuring and improve their competitiveness (Webster and Muller, 2000; Marshall, 2003). This results in cities in the ‘south’ incorporating elements which are found in cities in the ‘north’. This repositioning and re-development of cities has become an important strategy in the realm of urban competitiveness, and South African policy recognises the need to enhance its competitive advantage and become more competitive in the global economy through reshaping and re-imaging of cities, through strategies such as those reflected in Durban, including the implementation of large scale projects.

Although some of these interventions are able to provide funding for the social and ecological requirements of cities, they also lead to negative consequences, such as the displacement of heavy industries towards low income areas, and the eviction of local business and informal housing during high value sporting events such as the Olympic Games (Girard and Nijkamp, 2009, cited in Roberts *et al*, 2009; Roberts *et al*, 2009). It is therefore vital for a city such as Durban to implement innovative and creative strategies to allow it to compete effectively within the global economy, while managing the negative consequences of such processes.

The preceding discussion highlights the types of strategies which cities around the world are implementing in order to regenerate their urban environments, and thus become more competitive in the global arena. The following section provides some examples of what various cities are doing in this regard.

2.4 Urban regeneration: what are cities doing?

Various cities around the world have followed the path of urban regeneration in order to revitalise their cities through the promotion of their economic growth, attractiveness and global competitiveness (McCarthy, 1998a; Brenner and Theodore, 2002b; Pelkonen, 2005; Barber and Hall, 2008). Table 2.1 presents some of the urban regeneration strategies which particular cities have undertaken, thus providing the global context within which the city of Durban is implementing urban regeneration.

Table 2.1: Urban regeneration strategies in a variety of cities

City	Urban regeneration strategies
Birmingham	Proactive place-marketing campaigns: positing the CBD as a potential setting for attracting modern urban economic sectors and creating a more attractive image of the city Including flagship projects designed to move the city into international tourism and related leisure sectors (Barber and Hall, 2008).
Manchester	Re-inventing its image and economic role as a regional capital with world class music, sport and fashion (Peck and Ward, 2002, cited in Roberts <i>et al</i> , 2009). Combination of a cultural quarter, urban heritage park, international sporting complex, waterfront cultural complex, and a growing 'aerotropolis' (Roberts <i>et al</i> , 2009).
Helsinki	Conversion to business in new technologies through public-private partnerships, and attracting both local and foreign top professional Development of industrial districts, and agglomerations of high technology business and research (Pelkonen, 2005).
Madrid	Economic diversification and improved quality of infrastructure, the modernisation of infrastructure, architectural improvements of public spaces, and the creation of new facilities (Diaz Orueta, 2007).
Rotterdam	Physical reconstruction of central areas and re-imagining of cultural identity, while also pursuing social objectives for regeneration Construction of office and retail space, hotels and convention centres; while providing social benefits for local residents: linking the social and economic benefits of redevelopment projects (McCarthy, 1998a).
Asia-Pacific region (cities such as Sydney, Singapore, Seattle, Vancouver)	The reconstruction of inner city precincts. Building strategic urban transport capacity and communication, infrastructure and facilities; promoting cultural industries; and the implementation of urban mega-projects, such as seaports, airports and high-rise office precincts (Hutton, 2004).
Cape Town (South Africa)	Improved public transport and more activities: to convert the city centre into the premier business location, become recognised globally and make the central city a popular destination Striving to become a leading centre for knowledge, innovation, culture and creativity in Africa, and developing the central city on the basis of a high-quality sustainable urban environment (Boraine, 2010).

Many of the strategies which have been employed by these cities are also evident within the current urban regeneration of Durban. These include the improvement and modernisation of infrastructure

and facilities, enhancing the tourism economy of the city, and the particular implementation of urban mega-projects, such as the three which are the focus of this study.

This discussion also highlights the important role which urban policy plays in the implementation of cities' growth paths and strategies for urban restructuring and regeneration, as policy guides the way in which development occurs within any city. The following section therefore investigates the different policy approaches cities, including Durban, may take.

2.5 Urban Policy

In areas where there is rapid urban restructuring, there are a range of policies which are implemented to guide urban regeneration and development. The decisions behind the application of specific policies involve making choices between a commitment to economic growth or the advancement of social priorities (Roberts *et al*, 2009). South African cities, including Durban, are becoming increasingly active in the economic arena, while simultaneously needing to address social priorities and a legacy of inequality, and thus face this difficult choice (Cornelissen, 2008).

This dual requirement is evident in two differing policy approaches which cities tend to choose between. The first is a pro-growth approach to business development, which stresses market competitiveness and investment attraction; and the second is a pro-poor approach, which focuses on issues such as empowerment, participation and community development (Nel *et al*, 2003). South African policy, as well as policy in the city of Durban, suggests that there is a commitment to pursue both approaches (Nel *et al*, 2003; eThekweni Municipality, 2008; Houghton, 2010; eThekweni Municipality, 2011), and it is therefore important to consider the role of each of these agendas.

2.5.1 Pro-growth development

In the influential book *City Limits*, published in 1981, Peterson argues that one of the chief objectives of local government is improving the economic or market standing of their city, and that cities need to continually enhance their appeal as locales for economic activity and inward investment. It is further argued that in order for cities to survive in the changing global economy, they need to compete with other cities and attract capital to their local areas (Loftman and Nevin, 1996).

Consequently, as economic growth is assumed to be of benefit to all residents of a city, cities have a unitary interest in the adoption of policies which enhance and promote growth, and improve their

economic position. Pro-growth policies have thus been introduced into many countries, including South Africa. They are developmental policies which consist of local programs aimed at restructuring the urban fabric of cities; the diversification of the base of their respective local economies; the projection of new and dynamic city images in order to meet the new demands of capital; and the enhancement of a community's economic position through the promotion of their competitive advantage. This may be achieved through urban regeneration strategies such as technological innovation, infrastructure development, and the implementation of mega-projects, which are the focus of this study (Loftman and Nevin, 1996; Hutton, 2004; Roberts *et al*, 2009). Such policies are therefore directed at strengthening the local economy, enhancing the local tax base, and generating additional resources that can contribute to the welfare of the community (Loftman and Nevin, 1996).

According to Loftman and Nevin (1996), the validity and distributional consequences of growth-orientated economic development policies, and particularly property-led approaches to urban regeneration, have however been questioned by numerous commentators within the academic literature. Firstly, it is argued that as the broader economic forces and decisions which affect urban areas are increasingly operating at an international level in the contemporary global economy, local authorities have little influence or control over them. They are therefore unable to command their economic environment, and the impact on city residents' economic positions is thus limited when growth-orientated policies are pursued (Loftman and Nevin, 1996).

Another element which is surrounded by debate is the notion that pro-growth development provides associated 'trickle down' effects, such as the achievement of equity and quality of life. This is particularly evident in the justification of the implementation of urban regeneration strategies including mega-projects (Houghton, 2010), such as those which this study focuses on. These projects are viewed as being able to address the needs of global competitiveness, while also providing the opportunity to meet social needs through the trickle down of enhanced local economic benefits (McCarthy, 2007, cited in Houghton, 2010). The perceived impacts of these effects are however uncertain, particularly within mega-projects which are focused primarily on the redevelopment of spaces rather than on the welfare of citizens (Fainstein, 1996, cited in Houghton, 2010; Swyngedouw *et al*, 2002; Pacione, 2005, cited in Houghton, 2010).

A further criticism of such policies, noted by Loftman and Nevin (1996) is that whilst they are portrayed as being in the interests of the city as a whole, citizens do not all benefit equally from them; and where economic growth is achieved, the consequent benefits are not necessarily shared by residents of the city. Furthermore, it is argued that where excessive emphasis is placed on pro-growth, social equity objectives may be excluded from the local policy agenda (Loftman and Nevin, 1996).

The adoption of pro-growth development is thus able to provide a range of economic and competitive benefits for cities, as well as attempting to address inequality. However its implementation requires careful consideration due to the negative social consequences which it may incur, particularly in the developing context of a country such as South Africa where social aspects require prioritisation. This study will explore pro-growth development through the focus on mega-projects in Durban. The alternative policy strategy which cities may employ is pro-poor development.

2.5.2 Pro-poor development

Pro-poor development is considered by Houghton (2010: 36) as a “significant counterpoint to neo-liberalism”, and provides an intervention which affords direct benefits to citizens, rather than the indirect ‘trickle down’ benefits associated with pro-growth development (Houghton, 2010). It focuses on issues such as empowerment, participation and community development; and is also associated with a decrease in inequality, where the poor are the ones who benefit to a large extent from development (Page, 2006; Parnell and Robinson, 2006; Cornelissen, 2008; Robinson, 2008). Such interventions thus incorporate practices which support urban livelihoods and reduce vulnerability of citizens through the provision of housing, the supply and maintenance of basic services infrastructure, and initiatives which address the broad range of survival, equity and environmental concerns across a city (Rakodi-Lloyd-Jones, 2002, cited in Houghton, 2010; Kramer, 2006, cited in Houghton, 2010; Stevens *et al*, 2006, cited in Houghton, 2010; Robinson, 2008).

The state is the main driver of such pro-poor initiatives; however with the shift from government to the currently predominant mechanism of governance, public-private partnerships are increasingly playing a role in their implementation (Rogerson, 2003; Rogerson, 2006b; Houghton, 2010). The state therefore invests funds into pro-poor initiatives, and socially redistributive development practices feature prominently in municipal plans and budgets (Pieterse, 2008, cited in Houghton, 2010).

Pro-poor development initiatives therefore co-exist and often compete with pro-growth development, and there are consequently trade-offs which have to be made between development strategies that are pro-poor and those that are pro-growth, due to the fiscal constraints which local governments encounter (Page, 2006; Pieterse, 2008, cited in Houghton, 2010). Thus in many cities, particularly those of the developing world, governance is confronted with choices surrounding prosperity, equity and quality of life (Sellers, 2002, cited in Houghton, 2010). Decision-making therefore often results in a directly pro-poor agenda being relinquished in order to pursue the dominant global economic approach (Squires, 1996, cited in Houghton, 2010; Pieterse, 2008, cited in Houghton, 2010). This study will explore the dominance of the pro-growth development agenda in the city of Durban, through the examination of the proliferation of mega-projects.

The context of such decisions is thus vitally important, and each city or country must carefully consider which strategies are the most suitable and the most necessary for their long term development. It is consequently critical to cautiously consider both sets of development paths within the context of a country such as South Africa in order to determine the best way forward, particularly in consideration of the country's unique history. Such policies are implemented through planning within the city, and it is thus important to investigate the role of planning within contemporary cities.

2.6 Urban planning

Urban planning is concerned with the design and regulation of urban spaces, and is an important element in urban restructuring, regeneration and the competitiveness of cities (Beall and Fox, 2009). Urban planning is an inherently normative process, and the quality of it can be distinguished by the ethical basis on which agendas are formed, who makes decisions regarding priorities and on whose behalf, as well as the processes which are used in decision-making (Beall and Fox, 2009).

The planning discipline encompasses three main goals, that of environmental protection, economic development and social equity. However nothing inherent within the discipline steers planners towards one specific goal, and planners therefore work within the tension generated among these three primary aims. Campbell (1996) refers to this collectively as the 'planner's triangle'. Planners are thus confronted with difficult decisions about their position in relation to protecting the green city, promoting the economically growing city and advocating social justice (Campbell, 1996). Figure 2.1 presents the 'planner's triangle', which consists of these three core planning goals.

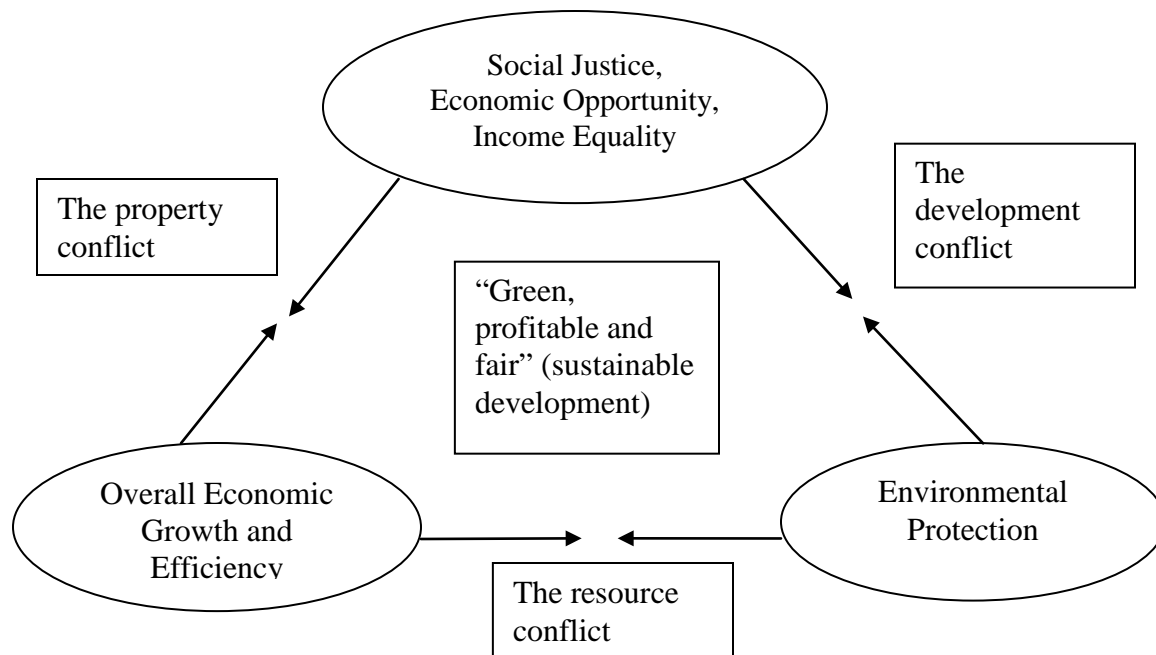


Figure 2.1: The 'Planner's triangle' (Campbell, 1996).

Planners must thus attempt to reconcile three conflicting interests within planning and development: to grow the economy, distribute this growth fairly, and prevent harm to the earth's ecosystems. Conflicts however arise between these goals, illustrated by the property conflict, the resource conflict and the development conflict; and planners often ultimately represent one particular goal, consequently neglecting the other two (Campbell, 1996). The centre of the triangle represents a balance of the three goals, and perhaps the most important issue spatial planning seeks to address in contemporary cities: sustainable development, and the transition to sustainability (Rees, 1995; Campbell, 1996; Jepson, 2004; McCarthy, 2004; Conroy, 2006). There is now a need to promote proactive, flexible and inclusive planning processes to ensure inclusive, productive and sustainable futures for cities (Beall and Fox, 2009). The following section outlines the main concepts of sustainable development and sustainability, which will be investigated in this study through the exploration of mega-projects and urban regeneration in Durban.

2.7 Sustainable development and sustainability

It has been suggested that a contemporary definition of urban regeneration should incorporate sustainable development as a major component; and that principles of urban regeneration should include a long-term and inclusive approach (McCarthy, 2004). Sustainable development provides a guiding principle to allow the integration of economic development and the environment within

policies and strategies, and thus urges the expansion of the economic calculus to include both development and sustainability, requiring that particular attention be paid to the health of nature and the well-being of people and the environment (Gibbs *et al*, 1998; Meadows, 1998; Omann and Spangenberg, 2002; Hopwood *et al*, 2005). Sustainable development thus reflects a concern to promote development that applies the principles of intra-generational and inter-generational equity, and policies towards it require the integration of economic, social, environmental and institutional objectives into a coherent strategy protecting the core interests of each (Omann and Spangenberg, 2002; McCarthy, 2004). This concept has the “potential to address fundamental challenges for humanity, now and into the future” (Hopwood *et al*, 2005: 38), and is incorporated within the planning and policy of cities around the world (Couch and Dennemann, 2000), including Durban.

Three imperatives of sustainable development can be identified as the environmental imperative of living within ecological means, thus protecting and restoring the environment; the economic imperative of meeting basic material needs, and improving economic efficiency; and the social imperative of meeting basic social needs and cultural sustainability, thereby enhancing social well-being (Holling *et al*, 1998; Schwabe, 2002; Hopwood *et al*, 2005; Gończ *et al*, 2007). The overall systems that must be made desirable, and so maintained, are thus not simply ecosystems, but socio-ecological systems. Sustainable development must therefore aim to promote and preserve socio-ecological systems at all levels that are dynamic, adaptable, satisfying, resilient, and therefore durable in the long term (Gibson, 2006). It consequently suggests a type of development which requires a transformation of both people-to-nature and people-to-people relationships on the local to global scale (Rees, 1995).

Sustainable development is related to the concept of sustainability, as social, environmental and economic sustainability should be integrated in order to begin to make development more sustainable (Clark, 1995; Goodland, 1995). Sustainability is an innovative normative concept, which Berkes *et al* (2003) defines as the maintenance of the capacity of ecological systems to support social and economic systems. Focusing on sustainability thus implies avoiding practices which appear to be acceptable in the short term, but which, in reality, undermine future possibilities (McGranahan *et al*, 1996; Folke *et al*, 2003). This study will explore the extent to which the city of Durban incorporates sustainability within its urban regeneration strategies.

2.7.1 The four dimensions of sustainability

Sustainability is defined as having four dimensions: the social, environmental, economic and institutional (Spangenberg *et al*, 2002). The environmental dimension of sustainability has simply been defined as the sum of all bio-geological processes and their elements; and ecological sustainability involves the long-term viability, protection and maintenance of natural systems, both as providers of inputs and 'sinks' for wastes, as well as for their intrinsic value (Goodland, 1995; Swilling, 2003; Jepson, 2004; Conroy, 2006; Roberts *et al*, 2009).

The social dimension of sustainability focuses on a number of elements, including individual human beings, their skills, their dedication, experiences and resulting behaviour; and has therefore been somewhat more difficult to define (Valentin and Spangenberg, 2000; Spangenberg *et al*, 2002). Social sustainability involves the long-term viability of social systems, which incorporate aspects such as the cohesion of communities, cultural identity, diversity, equity, tolerance, fellowship, and commonly accepted standards of honesty, laws and discipline. Social sustainability can only be achieved through systematic community participation and strong civil society, and requires shared values, equal rights, and community, religious and cultural interactions (Goodland, 1995; Schwabe, 2002; Swilling, 2003; Jepson, 2004; Conroy, 2006).

The economic dimension of sustainability relates to aspects such as the role of human-made capital, the maintenance of capital, the efficient use of resources, the promotion of competitiveness and the viability of various sectors. It also encompasses the promotion of economic growth and development, and the diversification of income sources within the carrying capacity of the environment (Goodland, 1995; European Commission, 2001; Jepson, 2004; Conroy, 2006).

The fourth dimension of sustainability is institutions, which are understood as being the achievements which arise from human interaction, including formal and informal organisations; as well as the systems of rules, or codes of conduct, which are created to govern interactions amongst members of a society through defining practices and assigning roles (Valentin and Spangenberg, 2000; Spangenberg *et al*, 2002; Berkes *et al*, 2003; Colding *et al*, 2003; Gunderson, 2003). These aspects are important in terms of governing within sustainability, which includes strong leadership and democratic governance (Schwabe, 2002; Gibson, 2006), which is required to manage the enhancement of the other elements of sustainability. Each of these dimensions will be incorporated

within the exploration of the relationship between urban regeneration and sustainability, which is the focus of this study.

2.7.2 The complex nature of sustainability

Sustainability is a multi-faceted concept, which is inherently dynamic, as a result of constantly striving for balance amid varying background conditions; indefinite, as it is based on abstract, context-specific and long-term goals; and contested, due to the array of human values, perceptions and competing political interests which the concept evokes. It is understood differently by various groups of people; and a common definition is therefore difficult to construct, posing a challenge when attempting to reach consensus on the best way in which sustainability may be achieved (Dalal *et al*, 2003; Mog, 2004; Faber *et al*, 2005).

A critical consideration in cities in developing countries is whether it is possible to tackle historically unprecedented rates of urban poverty while stimulating sustainable economic development (Beall and Fox, 2009). There must therefore be a focus on the interface and trade-offs between the objectives of economic and social development, and environmental protection (Lehtonen, 2004; Hermans and Knippenberg, 2006). This is a crucial consideration in a city such as Durban, as the city has included sustainability as a fundamental objective within its policy framework and development rhetoric. The following section examines the types of sustainability, which are determined by the choices and trade-offs that are made by cities.

2.7.3 Weak and strong sustainability

It becomes crucial to distinguish between different types of sustainability, as each represents a paradigm shift of differing proportions; and the two main categories which emerge are that of weak sustainability and strong sustainability. As stated by Ekins *et al* (2003), a description of weak environmental sustainability derives from the idea that welfare is not normally dependent on a specific form of capital, and can be maintained by substituting manufactured or human-made capital for natural capital. The underlying assumption of weak sustainability is therefore that there is no critical difference between different forms of capital, or between the kinds of welfare which they generate. A weak sustainability view gives greater weight to environmental considerations, while maintaining that they must be balanced against the benefits of economic development, and trade-offs are therefore still possible (Owens, 1994; Gibbs *et al*, 1998; Ekins *et al*, 2003; Gończ *et al*, 2007).

Strong sustainability challenges the view that all forms of capital are substitutable, and advocates that the substitutability of manufactured or human-made capital for natural capital is seriously limited by environmental characteristics such as irreversibility, uncertainty and the existence of ‘critical’ components of natural capital, which are viewed as being essential to human well-being, and are therefore irreplaceable. Many also regard natural capital as a complement to manufactured or human-made capital in many instances, and thus great importance is placed on it. Within strong sustainability, environmental capacities are regarded as ultimately placing constraints on economic activity (Owens, 1994; Ekins *et al*, 2003). Socio-political systems and the economy are seen as embedded within ecosystem services; and good governance is responsible for regulating the relationship between these components, as well as the integrity of these relationships (Gibson *et al*, 2008).

The decisions that are made concerning which of these sustainability paths will be followed affect the long term viability and prosperity of any entity undertaking such a transition. The ultimate goal is global sustainability, with the ideal being based on the vision of strong sustainability. However the environment cannot be managed successfully at the global level without first achieving progress towards sustainability at the local level. It is therefore essential to focus on sustainability at the local level as a gateway, with cities providing a unique opportunity for the move towards sustainability to be explored, and the most appropriate platform for the delivery of sustainable development policies and initiatives (Satterthwaite, 1997; Gibbs *et al*, 1998; Agyeman and Evans, 2003). This study therefore focuses on the implementation of sustainability at a city level, through the investigation of mega-projects in Durban.

In the South African context, the future city has been imagined in a particular way that reflects modernism or a western perspective on urban development. Pieterse, a leading urban philosopher, suggested that the future of these cities needs to be re-imagined via a set of lenses on the ‘non-western city’, which include a number of possible futures, such as the “democratic city”, “educational/learning city”, “productive city”, “inclusive city”, “cultural city”, and the “sustainable city” (Swilling, 2003). The following sections discuss sustainable cities, and the principles which define them.

2.8 Sustainable cities

2.8.1 Cities and sustainable development

Cities are characterised by an assembly of people and economic activities within space, which facilitate the circulation of goods, people, knowledge and ideas. They utilise large amounts of resources, and are thus seen as centres of pure consumption in ecological terms; however they have the potential to maintain low levels of resource-use, energy consumption, and wastes, while simultaneously providing their citizens with healthy and safe living conditions. They also face many social disparities and tensions which have to be addressed; while being regarded as the centres of social discourse; the living repositories of human cultural achievement; the engines of national economic growth; and have the ability to provide their citizens with culturally rich and enjoyable lifestyles. Therefore while cities face many obstacles in the pursuit of sustainability independent of their immense and scattered global hinterland, it is within cities that the greatest opportunity exists to make the changes required for sustainability, both locally and globally (Rees, 1995; UN Centre for Human Settlements, 1996; Engelbrecht, 2004; Beall and Fox, 2009; Girardet, n.d.).

The current competitive world market poses considerable challenges for city authorities in terms of reconciling the need to attract or retain new investment, with a commitment to the full range of sustainable development goals within their own locality. This occurs as in order for a city to progress towards the achievement of sustainability goals, their performance must improve not only in terms of improved environmental quality within their own boundaries, but also in the reduction of the transfer of environmental costs to other people, other ecosystems or into the future (Satterthwaite, 1997).

Local governments, with their many and varied roles, are however in a strong position to strive towards sustainability within cities through planning and redevelopment, which may be in the form of creating municipal infrastructure, through investments, or by the implementation of regulatory policies. Much of the success of urban environmental improvement policies depends upon the manner in which policies are planned, implemented, co-ordinated and monitored (Haughton and Hunter, 1994; Satterthwaite, 1997), and the role of city authorities in investment, planning and management of their cities is consequently fundamental (World Health Organisation, 1996).

It is evident that alternatives to the conventional economic model and environmentally damaging growth path of the city do exist; and the many kinds of economic, social and environmental

alternatives are generally grouped under the umbrella term 'sustainable cities' (Roelofs, 1996; Roberts *et al*, 2009; Girardet, n.d.).

2.8.2 What are sustainable cities?

The idea of a 'sustainable city' is constructed around a loose assemblage of problems, analytic fields and data which indicate that the present organisation of cities is not sustainable in the long term, but can be made sustainable through the implementation of the correct steps. A successful metaphor such as the 'sustainable city' describes and prescribes, organising meaning and action across discursive modes and institutional and social contexts; and by introducing the future and risks into consideration, a moral imperative to take action is conveyed (Myllylä and Kuvaja, 2005; Brand, 2007). This notion of a sustainable city means different things to various people, but the idea revolves around a better balance between cities, their physical demands and environmental conditions at all levels, including the local, regional and global levels. This must be closely linked with economic development, social welfare and human justice, and is crucial for the future of cities (Roberts *et al*, 2009).

A sustainable city is one which acknowledges sustainability as the planning paradigm or framework; and can therefore be defined as a city that follows a development path which allows for integral and long-term development; and works in such a way that allows all of its citizens to meet their own goals without compromising the well-being of the local, national or global natural world, or the living conditions of present or future citizens (Rees, 1995; Haughton, 1999; Swilling, 2003; Hutton, 2004; Myllylä and Kuvaja, 2005; Girardet n.d.; www.rec.org). The citizens and businesses in a sustainable city continuously strive to improve their natural, built and cultural environments at both neighbourhood and regional levels, whilst doing so in such a way that creates efficient and equitable city-regions, and continues to support the ultimate goal of sustainable development (Haughton and Hunter, 1994; Hutton, 2004). A sustainable city therefore emphasises locally defined development agendas rather than global agendas, and is grounded on local resources and challenges (Myllylä and Kuvaja, 2005).

The pursuit of a sustainable city is however a challenge which is not easily achieved, particularly due to the tension between local and global issues, wherein the well-being and development of a city is intricately linked to the global economy, and is dependent on international trade and investment. Cities must therefore attempt to reconcile sustainable development with the growth of their economy.

A further difficulty arises from the ambiguity concerning what ‘sustainable cities’ means, as this allows for claims that sustainable development of cities is being promoted through growth, while sustainable development goals are not being effectively met (AtKisson, 1996; Satterthwaite, 1997). This is an important consideration regarding the incorporation of sustainability in Durban.

It is discussed in Roberts *et al* (2009) that the scientific knowledge and technical means which will allow for the establishment of sustainable cities and communities does exist. The challenge however is that there is a lack of political will and social determination in many nations and cities, to deliver the necessary changes in terms of approach and practice. One of the most common challenges in cities is the effective conversion of the knowledge related to creating sustainable urban environments into effective implementation strategies (Roberts *et al*, 2009). The extent to which this occurs will determine the level to which a city can become sustainable, and consequently varies between cities.

A spectrum of sustainable cities

Ravetz (1996) outlined a spectrum of sustainability for urban areas, which is useful as a method to evaluate the degree of commitment a city has to sustainability. At the lowest level the ‘sustainable city’ is concerned with surface appearances, such as land reclamation and tree planting. The next level focuses upon less tangible or visible problems in the local environment, such as air quality and waste disposal. A third stage looks at the functioning of the urban system as a total metabolism, with internal and external effects. The system is taken to include all aspects of urban infrastructure which predetermine the patterns and impacts of production and consumption. A further stage includes all human activity within the urban system, such as production, consumption, and indirect linkages such as overseas trading (Ravetz, 1996). This study will evaluate what level of sustainability Durban has been able to achieve in terms of its urban regeneration strategies.

In order to determine the commitment of a city to sustainability, it is important to explore principles upon which sustainable cities are founded, as they are crucial to understanding which development paths and actions are necessary to achieve such a state. The following section will present a number of these principles.

2.8.3 Sustainable city principles

Principles which contribute to creating sustainable cities involve an array of aspects, which include the components of a sustainable city and the elements of its management, elements of sustainable

communities, aspects of sustainable urban design, as well as principles for the sustainable development of infrastructure. This section presents a variety of principles from international literature which contribute to sustainable cities. Table 2.2 provides some of the main principles upon which sustainable cities may be judged.

Table 2.2: Principles contributing to a sustainable city

Good air quality	High quality education and good housing
Adequate employment	A vibrant culture
The sharing of wealth	Safety in public places
Supportive partnerships	Opportunities and freedom of expression
Diversity and vitality	Respect for the environment and human health
Conservation of resources	Accessibility for all groups
Creation of a place for socializing, education, politics, and commerce can take place	Cultural development, as centres of education, creativity, and communication
Social justice: reduction of environmental hazards; attending to those citizens who face the greatest risk; the inclusion of marginalised populations	Achievement of a high quality city environment for all of its citizens; ensuring every person has sufficient area and quality of space
The provision of facilities that make city environments more pleasant, safe and valued by inhabitants	Participation and transparency within decision-making processes
Protecting natural landscapes with important ecological and/or aesthetic value	The preservation of a city's cultural heritage

(Satterthwaite, 1997; Robins and Kumar, 1999; Hopwood *et al*, 2005; Swilling, 2006; Girardet, n.d.).

Agyeman and Evans (2003) and Roberts *et al* (2009) identify a number of components of sustainable cities and sustainable communities. A sustainable city which contains a sustainable community seeks to enhance its environment in terms of meeting social needs through ensuring access; strengthening local community and identity; protecting human health; promoting participation; and being active, socially cohesive, inclusive and safe, in terms of its social and cultural aspects. It is also a city which is environmentally sensitive in terms of using resources carefully; minimising waste; limiting pollution; and valuing and protecting the diversity of nature, placing true value on resources; and promotes economic success, through creating a robust and vibrant local economy and providing a range of employment opportunities (Agyeman and Evans, 2003; Roberts *et al*, 2009). This study will explore the presence of such principles within urban regeneration, in the form of mega-projects, in the city of Durban.

Good governance is a further important aspect of sustainable cities, and principles regarding the application, management and maintenance of activities across a city are vital for the realisation of a sustainable city. These include the importance of strategic thinking to provide a clear vision and strategy to guide the planning, development and management of a city; the establishment of solid partnerships; the involvement of citizens, ensuring that the city is open, accountable and effective, and incorporates decisions which are equitable and fair for everyone; as well as ensuring that actors and stakeholders involved have access to the necessary skills and knowledge. These cities must also be well-served through the provision of social and economic infrastructure, including water, energy, health and education; must develop and manage an effective internal transportation system and linkages; and principles for good built and natural environments must be reflected in the city (Agyeman and Evans, 2003; Roberts *et al*, 2009). It is subsequently crucial to ensure that the progress of a city is monitored, evaluated and reviewed regularly (Roberts *et al*, 2009). This study will also examine the extent to which these principles are being incorporated in the investigation of mega-project development in Durban.

A number of aspects of 'Green' or 'sustainable' development were emphasised in a competitive design bid by Greenpeace Australia for the world's first 'Green Games' in Sydney (Digby, n.d.). These principles revolve around infrastructure projects, and may contribute to the realisation of a sustainable city, and hence they are relevant to this study which focuses on the development of mega-projects in Durban. According to them, a development should incorporate a number of principles, including using or adapting existing facilities rather than building from scratch; being financially viable; minimising adverse impacts on nearby residents; protecting and encouraging native vegetation; constructing on 'brownfield' sites, leaving 'greenfield', or undeveloped land, untouched; and providing an effective public transport system. Further principles include being environmentally friendly in terms of building and design; minimising waste and pollution, and encouraging recycling; minimising energy use; as well as minimising water use. Development should also provide affordable housing; be inclusive, benefiting and including all members of the community, and allowing low-income groups to benefit (Digby, n.d.).

Carmona (2001) formulated critical principles of sustainable urban design, which will contribute to the creation of sustainable cities. These include economic regeneration; stewardship, which is the application of a long-term regeneration vision, and resilience; diversity and choice, which includes the encouragement of mixed uses, and localisation of facilities and services; the consideration of

human needs; and distinctiveness, such as the maintenance of historical identity. Further principles include self-sufficiency, which incorporates the encouragement of inclusive consultation and participation; concentration, through encouraging high densities where appropriate; resource efficiency, such as enhancing public transportation; pollution reduction; and biotic support, which includes the provision of open spaces (Carmona, 2001).

All of the principles which have been presented contribute to the creation of a sustainable city, and their incorporation within planning and development in Durban is thus integral to the long term viability and success of the city. Such principles will therefore form a vital aspect of achieving the aim of this study, which is to determine the relationship between urban regeneration and sustainability in Durban, through the lens of mega-project development.

2.9 Summary

The role of globalization and neo-liberal urban restructuring has become increasingly evident in the increased competition between cities. This competition for investment and tourists has resulted in the regeneration of cities on a worldwide scale, and local authorities have begun to play an increasing role in such endeavours. Re-imagining strategies have thus become an important element implemented by local governments as a means of entrepreneurial governance.

Within this neo-liberal context, cities are influenced to implement pro-growth strategies, and are therefore required to make important choices in terms of their development agendas, as pro-poor strategies must also play a vital role in their development. This presents challenges for contemporary planning, and cities must attempt to ensure their long term sustainability through striving towards becoming more sustainable cities, which are defined by a range of principles.

The next chapter presents a number of strategies which cities may incorporate in their urban regeneration, including the hosting of mega-events, theming of cities, and the implementation of mega-projects. Mega-projects are then examined in greater detail as they are the focus of this study. Their characteristics and aspects concerning their planning and development are discussed; and thereafter a number of criticisms or problems which they have encountered are explored, as well as a number of development principles which may contribute to their success. An outline of the three types of mega-projects which are used in this study concludes the chapter, providing relevant literature on stadia, waterfronts and shopping malls.

Chapter 3

Conceptualising mega-projects in contemporary cities: Mega-projects as a strategy of urban regeneration

Cities employ various urban regeneration strategies in order to attract investment and become more competitive in the global landscape. One of the strategies which has become particularly evident in contemporary cities is the implementation of mega-projects, such as sports stadiums, waterfronts and shopping malls. These projects are defined by particular characteristics, and have the potential to produce regeneration effects for cities. They have however been met with extensive criticism concerning the processes of their implementation and their impacts, and it is therefore important to incorporate certain development principles which are able to contribute to their long term success. This chapter examines these concepts.

3.1 Urban regeneration strategies in cities

Chapter Two argued that cities implement a range of strategies in the attempt to regenerate and re-image their urban environments. Some of the most common strategies include the theming of cities; the staging of mega-events; and the development of mega-projects. This section will discuss each of these strategies, and mega-projects will be explored in detail in the remainder of the chapter as they are the focus of this study.

3.1.1 Mega-events

Mega-events, such as the Olympics or World Cup sports events, are one urban regeneration strategy which is implemented by contemporary cities (Van Der Westhuizen, 2007). These are short-term, high-profile events, which urban authorities tend to champion as instruments of long-term economic development and employment creation (Hiller, 2000; Van Der Westhuizen, 2007; Maharaj, 2011). It has become widely accepted that the staging of these mega-events can contribute to the creation of new city identities and images, altering their place in global society. They are also able to expand a country or city's capacity for tourism, and accrue major financial gains. Strategies for attracting investment and tourism which include mega-events are thus seen as a highly effective way of projecting cities as dynamic and vital, as well as promoting local urban development (Hiller, 2000; Bass, 2009; Maennig and du Plessis, 2009). This was evident in the rationale for the staging of the 2010 FIFA World Cup, which was hosted by South African cities, including Durban.

Such events therefore have major implications for the socio-spatial restructuring of the built environment in host cities, as they have the ability to transform urban space. There is thus a view that hosting mega-events provides the potential to fast track urban regeneration, which produces a stimulus for economic growth, improved transport and cultural facilities, and enhances global recognition and prestige (Chalkley and Essex, 1999, cited in Maharaj, 2011; Hiller, 2000). This however does not always occur, and benefits are accrued to the privileged at the expense of the poor, exacerbating socio-economic inequalities (Maharaj, 2011). These events therefore often fail to address the realities of urban challenges, and may result in infringement on civil rights, environmental sustainability and democracy (Pillay and Bass, 2008; Varrel and Kennedy, 2011).

Substantial financial spending is also required for the planning and organisation of these events, and according to Maennig and du Plessis (2009), it is thus essential to ensure that the benefits which the event produces warrant its cost. A review of literature by Maennig and du Plessis (2009) showed that major sporting events or venues have had no significant impact on regional income or employment, while some literature suggests negative impacts from such events, and very few have found significant positive effects. The ability of these mega-events to deliver long lasting benefits to host cities therefore remains uncertain at best (Van Der Westhuizen, 2007), and it is consequently important to rigorously assess their implementation.

These events have typically been hosted in the advanced industrial world due to the enormous costs involved, the infrastructure requirements, and the need for political stability. They are however increasingly being hosted by less advanced countries due to the intensification of competition amongst states to engage in post-industrial forms of development (Hiller, 2000; Van Der Westhuizen, 2007). Global organisations, such as FIFA, are also promoting these events as a means of providing redistribution to the developing world, however these benefits are rarely realised in practice. These aspects are particularly relevant in the context of South Africa as a developing country which has hosted mega-events.

3.1.2 Theming of cities

Cities have begun to capitalise on urban clusters as an urban regeneration strategy, developing themed “quarters” of cities, based on the concentration of industries, people and activities in certain areas. These themed urban quarters may be concentrations of activities that have emerged on their

own; or they may result from tourism promotion activity, designed to give coherence and visibility to certain urban districts (Smith, 2010).

The theming of cities as 'sports cities' has become more common, as several cities have constructed new sports facilities or supplemented existing facilities to create themed sport zones. As stated by Smith (2010), the idea of a "sports city" is a rather abstract concept, which usually takes one of two forms: the designation of one zone of a city as a sports city; or branding a whole city as a sports city. Sports-city branding has become strongly linked to mega-sports events; and has been used to give coherence to the sports resources which they bestow, enhancing post-event utilisation. Some cities, rather than developing a sports city concept, have used sports stadia as dominant features of plans to extend or establish entertainment districts. These sports facilities may even provide the anchors of these downtown re-development schemes (Smith, 2010). This study will explore the ways in which Durban may incorporate the notion of a 'sports city', or utilise the Moses Mabhida Stadium as a dominant feature of a sporting and entertainment district.

Although theming parts of cities may be beneficial, it is viewed by some as a threat to diversity, as unconventional, incoherent and undesirable aspects are ignored or removed (Smith, 2010). Mace *et al* (2007) argue that sport-city zones are land hungry, low density, one-dimensional, segregated phenomena; and that these characteristics are generally in contrast to sustainable urban development. It is therefore necessary to carefully consider the way in which this urban regeneration strategy is implemented in contemporary cities.

It has been noted that the theming of cities often incorporates the infrastructure bestowed by mega-events; and that these events have the ability to transform areas, as their preparation often includes new developments or the renewal of urban space (Hiller, 2000). This is evident in Durban as a host city for the FIFA World Cup, as preparations for the event included upgrading various areas of the city, and the construction of the Moses Mabhida Stadium, which forms part of the city's plans to promote Durban as one of Africa's leading sports destinations (Bass, 2009; Maennig and du Plessis, 2009), and is one of the mega-projects investigated in this study,

This chapter will now focus on mega-projects as a third urban regeneration strategy employed by cities, as these provide the case study through which the relationship between urban regeneration and sustainability in the city of Durban will be explored.

3.2 Mega-projects: an influential tool of urban regeneration

Throughout the post-industrial world, the restructuring of the 1970s and 1980s turned the urban into ruin through the associated collapse of the manufacturing industry and its related infrastructure, leaving many cities with a legacy of derelict warehouses, dilapidated housing and obsolete waterfronts. Urban policy thus turned its focus to rebuilding the city, and urban regeneration became an increasingly important component. Cities that wished to compete on the international stage of changing economic and political relations consequently began to adopt urban regeneration strategies with a focus on large scale and emblematic urban development projects or ‘mega-projects’, combining physical upgrading with socio-economic objectives, and forming an essential part of neo-liberal policies (Swyngedouw *et al*, 2002; Desfor and Jorgensen, 2004; Diaz Orueta, 2007; Waley, 2007; Diaz Orueta and Fainstein, 2008). These mega-projects have the potential to represent a series of critical moments in the history of cities, (Marshall, 2003), and are the focus of this study.

According to Swyngedouw *et al* (2002), mega-projects have become one of the most visible and influential urban revitalisation strategies pursued by cities within the context of rapidly changing local, national and global competitive conditions. They fit into a model of urban development that many governments favour, as they are high-profile strategic projects with the ability to satisfy immediate goals, such as job creation and economic development; generate future growth to compete for investment capital; provide a higher quality of life for citizens; and redefine the urban fabric of a neighbourhood or a city by achieving a range of economic, social and physical regeneration aims. They are therefore often applied through pro-growth policies to address the economic and social problems of a city, as well as to enhance its image in the eyes of the international community, placing it on the world stage. Mega-projects are consequently a fundamental element of contemporary city-building strategies in reshaping the city, as they combine the advantages of flexibility and targeted actions, with the ability to transform a segment of a city into the symbol of a new restructured and revitalised metropolis (Loftman and Nevin, 1996; Bassett *et al*, 2002; Brenner and Theodore, 2002b; Lungo, 2002; Swyngedouw *et al*, 2002; Marshall, 2003; McCarthy, 2003; Ehrenfeucht, 2004; Khan 2008, cited in Gounden, 2010; Bornstein, 2010; Kennedy *et al*, 2011).

Within developing countries such as South Africa, cities form the core of economic growth strategies for policy-makers, and large scale projects which are aimed at promoting growth present specific challenges for urban sustainability. This often results in increasing urban sprawl; changing employment patterns; fuelling land speculation; displacing citizens; exacerbating spatial

fragmentation and social exclusion by dismissing the establishment and fostering of communities, neighbourhoods, or social interactions; and increasing environmental health risks (Marshall, 2003; Kennedy *et al*, 2011). It is therefore vital that sustainability is incorporated into such projects, and they offer a case study through which to explore the relationship between urban regeneration and sustainability in a contemporary city such as Durban.

3.2.1 Mega-project definition

The classification of mega-projects is complex, as there are an array of definitions which are used to identify these projects, and there is consequently not always agreement concerning which projects may be classified as such. This section will present a comprehensive definition of mega-projects, which guided this study.

Mega-projects are defined as large-scale (re-)development projects composing of a mix of commercial, residential, retail, leisure, industrial, and infrastructure uses; or may refer to the construction of a huge edifice with strong symbolic significance. These projects are developed primarily in the inner city, on large tracts of former port, railway, industrial, military, or racetrack lands; or on 'underutilised' land within the extended metropolitan region, in order to regenerate areas of the city, usually to meet the special consumer demands of middle- and upper-class sectors. (Olds, 1995, cited in Hall, n.d.; Diaz Orueta and Fainstein, 2008). Mega-projects have become the ultimate in mixed-use environments, and include various forms of housing, retail and office space, public space and natural amenities, and community and cultural facilities (Lehrer and Laidley, 2009). According to various authors, examples of mega-projects include major seaport and airport developments, high-technology office districts and linked luxury residential districts, waterfronts, stadiums, exhibition halls and parks, roads, railways, malls, theme parks, energy projects, the revitalisation of historic centres, the construction of innovative public transportation, as well as international landmark events (Lungo, 2002; Swyngedouw *et al*, 2002; Gellert and Lynch, 2003; Bornstein, 2010; Priemus, 2010a; Hall, n.d.).

The definition of mega-projects used in this study incorporates flagship and prestige projects. Flagship projects are generally used to highlight the strategic location or unique facilities which are present in a city, are aimed at local property developers or private developers, and attempt to encourage growth in specific urban areas (Engelbrecht, 2004). Prestige projects are a type of flagship project, and are defined by Loftman and Nevin (1996: 992) as "pioneering or innovative, large-scale projects which are primarily concerned with harnessing and creating economic growth". These

projects are targeted at altering the image of a city; encouraging and attracting large-scale private investment; generating further economic spin-offs at the city and regional level; and changing outside perceptions of business decision-makers and potential visitors, predominantly at the national and international levels. This is in a bid to increase local economic activity and wealth for the city and its surrounds. They are often located in the central business district (CBD) or at waterfront locations, and include convention centres, festival market places, major office complexes, and leisure and sporting facilities (Loftman and Nevin, 1996; Engelbrecht, 2004). This study will define the three chosen mega-projects in terms of these concepts.

Further to the various types of mega-projects which can be identified, there are a number of characteristics concerning the development and implementation of individual projects, upon which the definition and recognition of a mega-project may be based. Table 3.1 presents some of these characteristics from international literature.

Table 3.1: Some defining characteristics of mega-projects

Capital	Enormous amounts of capital are invested into mega-projects
Duration and scale	Completion of these projects extends over long time spans, and they occur at a huge scale
Life span	Projects have a long life time of 50 years or more
Energy	Mega-projects utilise large amounts of energy
Uncertainty	Demand forecasts and cost estimates are uncertain
New methods of financing	They involve greater collaboration between the public and private sectors, and state support is necessary due to the scale of the investment required
Foreign exchange	They often require large amounts of foreign exchange in proportion to the total capital expenditure
Partnerships	The involvement of a large number of partners and organisations, including public and private, national and international actors
Complexity	Management combines features of conventional hierarchical management with those of networks
Urban processes	Introduction of new urban processes to transform the city

(Bruzelius *et al*, 2002; Lungo, 2002; van Marrewijk, 2007; Diaz Orueta and Fainstein, 2008; van Marrewijk *et al*, 2008).

This table illustrates the enormous amounts of time and resources which are required for the implementation of mega-projects within cities, as well as the complexity which is involved in their planning and development. Despite this, they continue to play a significant role in urban regeneration, with an increase in their development occurring in recent decades. The following section provides a discussion of some of the reasons for their continued implementation in cities around the world.

3.2.2 Mega-project development

According to Steinberg (1987, cited in Van Der Westhuizen, 2007), mega-projects are usually explained in terms of three factors; while Flyvbjerg, in an interview with Ehrenfeucht (2004), stated that the number and the size of mega-projects being developed has been increasing, and that the reasons for this increase are three fold. These factors explaining mega-project development, and the reasons for their increase in contemporary cities, are presented in Table 3.2.

Table 3.2: The reasons behind mega-project implementation

Three factors explaining mega-projects (Steinberg, 1987)	Reasons for the increase in mega-project development (Flyvbjerg, interview cited in Ehrenfeucht 2004)
Rational analysis: Refers to cost/ benefit decisions, often prompted by the perception that these projects provide the means to ‘skip centuries’, due to their ability to accelerate development	Technological driver: Improvements in technology have made it possible to build bigger projects
Political symbolism: The ideological and domestic political benefits which state elites believe the project can provide	Political driver: These types of projects are tangible and monumental, resulting in them being politically attractive
Bureaucratic and other interests: Bureaucratic, party or interest group explanations are based on the influence which special interest groups have in getting the state to undertake a mega-project	Economic drivers: Firstly, they present an opportunity for various groups to achieve substantial financial gain Secondly, there has been an increase in wealth in many countries around the globe, and therefore more areas are in a [position to finance these projects

(Steinberg, 1987, cited in Van Der Westhuizen, 2007; Ehrenfeucht, 2004).

Mega-projects thus form a part of a city’s marketing power as they are often closely identified with the government in power, providing the chance to create a legacy. They also ensure visibility,

promote economic growth and financial gain, and provide the opportunity to demonstrate technological prowess (Van Der Westhuizen, 2007). Many of these reasons appear to be prominent in the case of mega-project development in Durban, and may provide a rationale for the pursuit of this strategy within the city's urban regeneration. This study will explore some of the justifications which have been used in the development of the three mega-projects which provide the case study for the research.

Lehrer and Laidley (2009) however criticise the justification of mega-projects, stating that the diversity and flexibility evident in contemporary mega-projects in the uses, built forms and financing models, is mirrored in the diversity and flexibility of socioeconomic, cultural, aesthetic and environmental reasons used to justify the immense public cost and private gain which they incur. The justifications provided for the development of mega-projects are diverse, and are used in ways which are most suitable to those attempting to promote the projects; particularly when they are taken over by elite groups (Lehrer and Laidley, 2009).

3.2.3 Mega-projects as “elite playing fields”

The dimensions of mega-projects cause them to be elevated to central icons within the planned future images of cities. They have therefore often become arenas which display profound power struggles and position-taking of important political, economic, social, or cultural elites; as the imaging of the future of the city is directly formulated in line with the vision of those who are vital to the project's formulation, planning, and implementation (Swyngedouw *et al*, 2002). These projects thus reflect the aspirations of a specific group of local, regional, national, and even international actors who shape the development trajectory of areas by exercising their socio-economic, cultural or political power. As such, these projects can be considered “elite playing fields” on which the stake is to shape an urban future in line with the aspirations of the most powerful segments of society (Swyngedouw *et al*, 2002). This is an important aspect of mega-project development which this study will explore in terms of three projects in the city of Durban. Another aspect which is influenced by the position of these projects as icons is the emergence of exceptionality in their planning.

3.2.4 Exceptionality in mega-project planning

Mega-projects are generally inserted into existing planning guidelines, however their initial conception, design and implementation often lies at the margins of formal planning structures. They are therefore often associated with a framework of “exceptionality” which is part of a neo-liberal new urban policy approach associated with selective middle- and upper-class democracy, and forms of governing urban interventions which are characterised by less democratic and more elite-driven priorities (Swyngedouw *et al*, 2002). Local and national authorities tend to justify the exceptionality of a project based on factors such as scale, timing pressures, the suggested emblematic character of the project, the need for greater flexibility, and efficiency criteria (Swyngedouw *et al*, 2002).

This framework of exceptionality is linked to special plans and projects which circumvent statutory norms and procedures, bypassing statutory regulations and institutional bodies. It also involves the freezing of conventional planning tools; changing national or regional regulations; or creating strategic project agencies which are granted special powers of intervention and decision-making, and are protected from line agency or legislative oversight (Swyngedouw *et al*, 2002; Gellert and Lynch, 2003; Jones and Moreno-Carranco, 2007). These changes have important consequences for urban policy-making in general and for local democracy in particular. Many of these measures appear to be evident within the planning procedures of Durban, and will be examined in relation to the three chosen mega-projects.

Although exceptionality is dominant in mega-project planning, governments rarely implement mega-projects on their own, and they are usually undertaken through public-private partnerships (Bassett *et al*, 2002). This is the case in many of Durban’s mega-projects, and is consequently an important aspect of their development to consider.

3.2.5 Public-private partnerships

Public-private partnerships are considered by many to exist at the core of urban restructuring, and in the undertaking of urban regeneration projects (Waley, 2007). They generally involve collaboration between the public and private sectors, and civil society, in order to deliver an agreed outcome and successfully realise projects, as those involved view them as facilitating greater gains than could be achieved through working separately or in conflict, as well as allowing the sharing of risks and rewards. They may form for the development of a specific project, or may be longer term alliances formed to affect broader development goals such as the facilitation of development, service delivery,

urban renewal or the improvement of urban competitiveness, and decision-making processes (Lehrer and Laidley, 2009; Bornstein, 2010; Houghton, 2011; van Marrewijk, n.d.).

These partnerships have risen to the forefront of development processes and become an accepted mechanism of urban governance, due to the recognition that many contemporary problems cannot be solved through traditional mechanisms of government (Houghton, 2011). Mega-projects are thus associated with these novel funding and management arrangements between government and developers, which are often justified as providing an efficient approach to implementing complex and costly projects, as well as financial sustainability (Diaz Orueta and Fainstein, 2008; Bornstein, 2010; Varrel and Kennedy, 2011).

Mullin (2002) however questions whether public-private partnerships have a negative effect on the democratic process, as the involvement of the private sector may result in side-lining issues such as accountability, social equity and justice; and they can easily be taken over by certain private interests. There are also concerns that the private sector may use the partnership to influence the allocation of public funds, particularly into projects from which they will gain; and that there is a risk that these partnerships can mask the full extent of public funding of mega-projects. A further concern is that the public partner endures the greatest costs and risks within the partnership, and financial sustainability is not guaranteed in the long term (Freund, 2002; Van Der Westhuizen, 2007; Houghton, 2011; Varrel and Kennedy, 2011). This study identifies the role of these novel partnerships in mega-project development, within Durban's urban regeneration strategy.

The preceding sections highlight the characteristics and complex nature of mega-projects, as well as their associated development processes. Consequently, the implementation of these projects elicits various political and social responses within cities. The following section will examine some of these in further detail.

3.2.6 Political and social response to mega-projects

Urban mega-projects involve a transformation of urban space, its built form and its particular land uses; and they therefore change the social practices occurring in urban landscapes (Lehrer and Laidley, 2009). Their effect on the city, their immense economic cost and their large environmental impact could result in civic mistrust, and the societal impact of mega-projects is therefore enormous. Community attitudes to mega-projects are thus often mixed, as there are fears of gentrification,

displacement or loss of existing city character. In some instances mega-projects have proved successful as foci for wider community mobilisation and urban re-imaging, while in other cases, they have produced controversy and discord (Gordon, 1997; Bassett *et al*, 2002; van Marrewijk, 2007; Bornstein, 2010). According to Diaz Orueta and Fainstein (2008), widespread social and political support, or at least indifference, is essential for these projects to prosper. Each of the three mega-projects being considered has encountered controversy and resistance among community members due to their vast impacts, and this will be explored in the study.

Many people have begun to accept mega-projects as an inevitable form of development, due to their legitimisation through a rhetoric of environmental sustainability and the provision of public amenities. This has made open debate on their real goals and consequences difficult (Diaz Orueta and Fainstein, 2008), although as Lungo (2002) explains, it is evident that large interventions alone will not be able to solve the complex problems of the contemporary city. It is therefore important to consider that these projects can contribute to building a shared image of the city between the inhabitants and the users, while remembering that modern urban planning is not merely the sum of large projects (Lungo, 2002). This is important to take into account when considering the planning and restructuring path which the city of Durban is pursuing.

Despite the recognition of this, mega-projects have a significant role to play in the planning and development of cities. This is highlighted by Hale (2010: 609), who states that:

“A future of urbanism based on efficient use of scarce urban land and transport assets, and a new willingness to use planning as a tool toward meeting higher-level metropolitan sustainability goals, may mean that the urban ‘mega-project’, once derided as an overblown planner’s dream, emerges again at the crux of integrated metropolitan planning in the 21st century”.

Mega-projects have certainly begun to play an increasingly important role in the planning and urban regeneration of contemporary cities. It is thus vital to carefully consider their costs and benefits in order to ensure that they are implemented efficiently and effectively if they are indeed to become the core of planning in the 21st century. The following sections present a number of criticisms of this form of development, as well as development principles which may contribute to their long term success; in order to illustrate their pitfalls and ways in which they may be more effectively utilised to achieve sustainable long term planning.

3.3 Criticisms of mega-projects

According to Bornstein (2010), mega-projects are often ‘planning disasters’ that generate major impacts. This has resulted in a number of criticisms against mega-projects within pro-growth local economic development policies since their introduction (Loftman and Nevin, 1996). This section explores some of the main criticisms of mega-projects in order to illustrate the issues which may arise in their planning and implementation.

3.3.1 Highly risky

Most appraisals assume that infrastructure policies and projects exist in a “predictable Newtonian world of cause and effect where things go according to plan” (Flyvbjerg *et al*, 2003: 6). However, in reality, the world of mega-project development and implementation involves a high degree of uncertainty, risk and complexity, and things happen only with a certain probability, rarely turning out as initially intended (Bruzelius *et al*, 2002; Flyvbjerg *et al*, 2003; van Marrewijk, n.d.).

One reason for the highly risky nature of mega-projects is that their financial and economic viability depends on the realisation of projected future urban rents; which in turn are influenced by the characteristics of the specific projects, the viability of the local economy, and the prevailing national and international economic conditions (Swyngedouw *et al*, 2002; Gounden 2010). As these are highly variable, mega-project development becomes risky. Furthermore, the combination of cost and demand forecasts used in mega-projects results in a degree of inaccuracy within the cost-benefit analyses that are generally used as justification. The estimated viability of these projects is therefore often misleading, as well as the consequent environmental and socio-economic appraisals (Flyvbjerg, 2008). This study will reflect on the level of risk associated with the three mega-projects in Durban.

3.3.2 Time scale and time delays

The time scale involved in the development and implementation of mega-projects is a complicating factor in the process. Many projects take years to implement, ranging from a few years to twenty years, and consequently span timescales much longer than the lifetime of governments. This results in political discontinuity being a concerning factor; and the costs of a potential disaster do not always affect the people who originally made the decision. The result is that those who end up administering the project are able to avoid responsibility for any negative consequences (Ehrenfeucht, 2004; Priemus, 2010a; Priemus, 2010b).

Mega-projects are also often characterised by slow progress due to factors such as the poor awarding of tenders, inadequate consultation, problems procuring materials, and economic and political changes which occur alongside development (Cornelissen, 2008; Diaz Orueta and Fainstein, 2008). Many projects thus fail to be completed within the original implementation timelines (Flyvbjerg, 2003; Diaz Orueta and Fainstein, 2008; van Marrewijk *et al*, 2008), causing a number of problems and necessitating altered planning strategies.

3.3.3 Poor integration into the wider urban process and planning system

A large majority of urban mega-projects, while developmental in aim, are in conception often detached from other processes of economic or infrastructural development. Consequently, projects are poorly integrated into the wider urban process and planning system, and they have an ambiguous impact on the city (Swyngedouw *et al*, 2002; Cornelissen, 2008). It must therefore be determined whether the three projects in Durban have effectively been integrated into the wider urban process and planning system.

3.3.4 Lack of accountability, transparency and participation

As has been discussed, mega-project development is associated with a type of urban governance which involves an array of state, private sector and non-governmental organisation participation; and includes the formation of exclusive networks (Swyngedouw *et al*, 2002; Flyvbjerg *et al*, 2003). These are seen to be deficient in terms of participation and influence by local communities and, indeed, democratic control and accountability (Swyngedouw *et al*, 2002; Lehrer and Laidley, 2009). According to Flyvbjerg *et al* (2003), some project promoters may also tend to avoid or even violate established practices of good governance, transparency and participation in decision-making, either due to ignorance or because they perceive these practices as being the reason for delays in starting projects. Furthermore, the larger a project is, the less transparency and participation appears to be involved; causing major issues further on in mega-project development (Ehrenfeucht, 2004).

Decision makers or private interest stakeholders are therefore able to bypass official planning and policy channels, through the formation of these networks; while large sections of civil society are excluded from the decision-making process. The lack of public involvement, combined with the involvement of special interest groups, increases the risk of capture of the decision-making process by these interests, resulting in these projects becoming elitist and socially exclusionary (Bruzelius *et al*, 2002; Lungo, 2002; Swyngedouw *et al*, 2002; Jones and Moreno-Carranco, 2007; Barber and

Hall, 2008). This study will reflect on the issues of participation, transparency and accountability within the three selected mega-projects.

3.3.5 Inaccurate forecasts

Flyvbjerg (2003) describes mega-projects as being disaster prone, with ninety percent of projects experiencing problems such as cost overruns, revenue shortfalls and negative environmental and social impacts. He explains this in terms of a “disaster gene” which has been built into these projects. When they are proposed, project proponents tend to overestimate the benefits which they will provide, and underestimate the costs involved in order to promote projects and bias forecasts in ways that make decisions to proceed with projects more likely. Reality is thus distorted and it becomes extremely difficult to decide which projects deserve approval, resulting in cost overruns and benefit shortfalls (Flyvbjerg, 2003; Ehrenfeucht, 2004).

The forecasts of the impacts of major projects have thus remained constantly and remarkably inaccurate for decades, and many projects fail to deliver in the terms used to justify their need (Bruzelius *et al*, 2002; Van Der Westhuizen, 2007; Flyvbjerg, 2008; van Marrewijk *et al*, 2008). Some still argue that cost overruns are inconsequential in the long run, and that most large scale iconic projects had such overruns. However, the success or failure of a single project has important implications for nations in the medium and the long-term (Flyvbjerg *et al*, 2003). This study will explore the extent to which this has occurred in the three projects.

These inaccurate forecasts may also be deliberate in some cases in order to secure support for particular projects. Flyvbjerg (2003) found, through a study of several hundred projects in more than twenty countries, that it is not necessarily the best projects which get built; but rather those for which proponents are best able to conjure a “fantasy world of underestimated costs, overestimated revenues, undervalued environmental impacts and overvalued regional development effects” (Flyvbjerg, 2003: 64). In many of these projects, it was found that project proponents utilise this ‘formula’ to secure approval, despite the fact that it often serves to mislead parliaments, the public and the media concerning the true costs and benefits associated with the projects. The result is what Flyvbjerg (2003: 64) terms an “unhealthy survival of the unfittest” for many large public works and other construction projects. This is detrimental to the long term success of a city, and it becomes essential to ensure that all projects are efficient and sustainable.

3.3.6 Lack of alternatives

A mega-project is at best a solution, and there is generally at least one problem to which a specific project is the best solution; however it is vital to ensure a proper problem analysis is conducted to determine whether a proposed project is effective, efficient and legitimate. It is therefore essential to consider project alternatives to allow a determination of the best and most effective path to follow in each case. However, those involved in mega-project planning tend to focus on the quality of the project, the timescale and then the cost it will incur; and it is not often that alternative solutions are thought of, let alone consciously generated and designed (Priemus, 2010a; Priemus, 2010b). Lungo (2002) expands on this, and contends that many mega-projects are seen as the only alternative or the unavoidable cost that the city or society has to pay to generate an attractive environment in a context of growing competition among cities. This does not necessarily mean they are the best option, and it is therefore important to consider strategies other than mega-project implementation which may achieve the same goals.

3.3.7 Environmental and social effects of projects

According to Diaz Orueta and Fainstein (2008), mega-projects may result in negative environmental and social consequences. Hutton (2004) argues that these types of costs, as well as high levels of local exposure to risks, exist due to the fact that the expected benefits of globalization have eclipsed ecological and social values. Several authors emphasise that these effects are often not considered during project development, may be miscalculated, or may even be negative (Flyvbjerg *et al*, 2003; Diaz Orueta and Fainstein, 2008; Priemus, 2010a). These problems therefore often arise during later stages of the project, such as construction and operation, and may result in the destabilisation of habitats, communities or the mega-projects themselves (Flyvbjerg *et al*, 2003; Diaz Orueta and Fainstein, 2008; Priemus, 2010a).

One negative consequence is displacement, which Gellert and Lynch (2003) argue is intrinsic to mega-project development. The process of globally-scaled imagineering of sites and cities results in a displacement of people, generally low-income and ethnically different populations and their social practices; as well as many forms of nature (Hutton, 2004; Diaz Orueta and Fainstein, 2008; Lehrer and Laidley, 2009). However, elite groups of actors, international institutions, and the private sector consider mega-project displacement as an externality to be ignored or addressed through remediation, and thus support mega-project proliferation (Gellert and Lynch, 2003).

Mega-projects are also identified as a factor increasing spatial and socio-economic polarisation in cities (Hutton, 2004; Bornstein, 2010). This is accentuated by most projects as socio-economic inequality and inclusive participation is not adequately addressed; and project benefits are accumulated at a municipal level, while residents in nearby areas may accrue costs. Furthermore, priorities in public budgets are changed, such that funds are redirected from social objectives such as wealth distribution, to economic priorities such as investments in the built environment and wealth creation (Swyngedouw *et al*, 2002; Diaz Orueta, 2007; Waley, 2007; Lehrer and Laidley, 2009; Bornstein, 2010). This is of particular concern in developing countries, as the implementation of these projects may result in distortions in future development, particularly with regard to reinforcing tendencies of segregation and social exclusiveness (Lungo, 2002). This is important to consider as Durban is situated in a developing country, and mega-projects are therefore a contentious urban regeneration strategy to pursue.

Environmental costs in mega-project development are potentially enormous, in terms of costs in water consumption, air pollution, electricity usage, and impacts on the marine systems present in a city (Gounden, 2010). Other issues involved in project development include noise pollution, decreases in ground and water quality, as well as the loss of natural habitats (McCarthy, 2003). It is consequently vital to consider the ecological aspects of the environment in mega-project planning to ensure that these negative consequences are minimised. This study will explore the extent to which such aspects have been considered in the Moses Mabhida Stadium, the Warwick Mall and the Point Development in Durban.

3.3.8 Fragmentation

The feasibility of mega-projects depends on rent returns, which invariably targets high-income segments of the population or high-productivity-based economic activities. Within mega-project development, the poorer parts of the city are consequently often removed or hidden in order to attract global capital and 'add value'. They are thus distanced through carefully designed highways, open spaces, and infrastructure networks which result in the projects being self-contained, isolated, and disconnected from the general dynamics of the city (Swyngedouw *et al*, 2002). This may lead to the creation of islands of wealth in an impoverished environment, resulting in the city becoming a patchwork of socio-economically highly diversified and more mutually exclusive areas (Swyngedouw *et al*, 2002). Cities thus become punctuated by mega-projects and appear to be

increasingly fragmented (Jones and Moreno-Carranco, 2007). This study will explore whether the three identified mega-projects are connected to the rest of the city, or contribute to its fragmentation.

3.3.9 Local benefits not guaranteed

Evidence suggests that mega-projects, during construction and operation, tend to generate greater economic benefits for the regional economy than the city areas within which they are located (Loftman and Nevin, 1996; Engelbrecht, 2004). Therefore, although they may be successful in generating economic activity, local authorities are not able to guarantee that local residents will benefit from this growth; and even where economic benefits are retained within the city, it has been found that they are not distributed equitably for local residents. They therefore fail to address social equity issues and exclusion, and have extremely limited potential to improve the quality of life and opportunities of the urban poor (Loftman and Nevin, 1996; Engelbrecht, 2004; Pillay and Bass, 2008). The extent to which mega-projects in Durban have ensured local benefits will be addressed in this study.

3.3.10 Deliberative approaches often fail

Mega-projects usually involve strong interests and power relations due to the large amounts of money involved, the potential employment creation, the environmental impact and the national prestige which they bring. They are often also confronted with uncertainty, unclear decision-making processes, public protests, conflicting interests, uncertain politics, and extensive media attention due to the prestige involved. The result is that power play is often what characterises mega-project development; and deliberative approaches therefore often fail as they are defenceless in the face of power (Flyvbjerg *et al*, 2003; van Marrewijk, n.d.). This study will highlight the role of such power play in the development of mega-projects in the city of Durban.

3.3.11 Government in conflict

Government is often a partner of the commercial contracting organisation involved in the development of a mega-project, through a public-private partnership; and may at times be the land-owner anxious for development. They are however also the planning authority required to make the final decision, and are responsible for protecting the public interest. This leads to the government being placed in a position of conflict and incompatibility between its watchman and commissioning roles (Bassett *et al*, 2002; van Marrewijk, n.d.). Bruzelius *et al* (2002) questions whether a government can act effectively as both a promoter of such projects, and as the guardian of public

interests such as the protection of the environment, safety, and the protection of the taxpayer against unnecessary financial risk. The eThekweni Municipality has performed these two roles in the planning and construction of the Point Development and the proposed Warwick Mall, and this study will investigate whether they have encountered such conflict.

3.3.12 Diversion of money from other uses

The opportunity cost of capital spent on mega-projects is an important consideration, as although expenditure on mega-projects has stimulative effects on the economy; it involves the diversion of money from other uses, reductions in other government services, increased levels of government borrowing, or increased taxation, all of which produce a drag on the local economy (Matheson, 2006; Pillay and Bass, 2008). Diaz Orueta and Fainstein (2008) further note that the extent to which public funds are diverted from projects that might have a greater benefit for people is often obscured.

This section has highlighted that within mega-project development there are a number of problems which arise before, during and after their implementation. It is therefore important to investigate ways in which these problems may be addressed to ensure that these projects are successful. The following section therefore presents a number of development principles for the implementation of mega-projects.

3.4 Development principles

In order to ensure the long term success of mega-projects, a variety of development principles may be identified which are able to circumvent many of the problems which have been discussed. Durban, as a contemporary city implementing an array of mega-projects may greatly benefit from the incorporation of such principles, which will ensure the successful development of mega-projects, as well as more sustainable urban regeneration. Table 3.3 presents a summary of some of these principles.

Table 3.3 Development principles for mega-project implementation

Development Principles	Explanation
Provision of community benefits	<p>Mega-projects should benefit all members of the population and ensure social upliftment, addressing the needs of the city as a whole (Lungo, 2002; Gounden, 2010; Houghton, 2011).</p> <p>Community benefits such as parking, open space, access to all, green amenity and landscaping should be incorporated (McCarthy, 2004; Hale, 2010). The alternatives are too often exclusive, corporately or authoritarian dominated precincts (Gordon, 1997; Bruttomesso, 2001; Marshall, 2001a; Lungo, 2002).</p>
Incorporation of quality design and architecture	<p>Clear urban design structure: includes a set of high-quality public spaces, connections between major public uses, and connections to surrounding streets and facilities (Lungo, 2002; Marshall, 2003; Carmona, 2006).</p> <p>High-quality architecture is also vital, which establishes the significance of the development, and has the potential to attract visitors to the site (McCarthy, 1998b; Carmona, 2006; Hale, 2010).</p> <p>The inclusion of iconic or landmark buildings may also be important, which are typically located at a central and dramatic location, often near the city centre or beside a body of water. They are characterised by innovative and unique architecture, and allow cities to put themselves on the map through creating an image which will lead to long-term increases in tourism and revenue (Smith, 2005; Carmona, 2006; Maennig and du Plessis, 2009).</p>
Integration with the rest of the city	<p>It is necessary to find the best fit between infrastructure and the city, and mega-projects must be integrated into the fabric of the city to ensure success (Marshall, 2001a; Lungo, 2002; McCarthy, 2003; Gounden, 2010; Hale, 2010; Priemus, 2010a; Priemus, 2010b). Retail uses are particularly sensitive to a lack of integration, as they require large numbers of people in order to be viable (McCarthy, 1998b).</p>
Revitalisation of adjacent areas	<p>In mega-project development, it must be ensured that projects impact on and revitalise adjacent areas, so as to have regenerative effects on the city as a whole (McCarthy, 2003; Gounden, 2010).</p>
Creation of employment opportunities	<p>Mega-projects must carefully address employment creation in order for them to have effective results (Swyngedouw <i>et al</i>, 2002). The quality of employment, and the need to facilitate a good working environment are also important considerations (Houghton, 2011).</p>

Promotion of economic investment	It is important to not only increase economic investment through mega-project development, but to direct it into specific areas of the city as well (Swyngedouw <i>et al</i> , 2002; Gounden, 2010).
Enhancement of the image of the city	<p>A focus on creating a new image for the city, or enhancing it, is valuable in marketing and promoting the city to investors, developers and visitors (McCarthy, 2003; Gounden, 2010).</p> <p>Contributing to promoting a post-industrial and international city; creating an image of a place for people to live, work and play; developing a common theme, image and authenticity; and retaining sense of place and local identity are crucial (Swyngedouw <i>et al</i>, 2002; McCarthy, 2004; Gounden, 2010).</p>
Incorporation of uniqueness, diversity and flexibility	It is important for mega-projects to incorporate mixed-use environments (Lehrer and Laidley, 2009), and it is also important for different uses to reinforce each other and create diversity (Carmona, 2006). A mega-project should also function with uniqueness, incorporating social and cultural diversity (Marshall, 2001a; Marshall, 2001c; Swyngedouw <i>et al</i> , 2002; Gounden, 2010).
Ensure participation, transparency and accountability	Stakeholder engagement, consultation, transparency, accountability and openness are extremely important aspects, and the role of major stakeholders and local communities is vital during the planning and development of mega-projects (Marshall, 2001a; Bassett <i>et al</i> , 2002; Bruzelius <i>et al</i> , 2002; Lungo, 2002; Swyngedouw <i>et al</i> , 2002; Flyvbjerg <i>et al</i> , 2003; McCarthy, 2004). Democratic, participatory and deliberative approaches are therefore needed to ensure better decisions are made (Flyvbjerg <i>et al</i> , 2003).
Exhibit well co-ordinated planning	<p>It is vital to develop a well co-ordinated plan for current and future uses of a project, which is carefully articulated and well publicised (Cashman, 2006).</p> <p>It is also imperative to develop a planning process which has a greater focus on the economic performance, environmental sustainability and safety performance of the project at an early stage (Bruzelius <i>et al</i>, 2002).</p>
Protection of culture and heritage	Historic, architectural and cultural heritage is considered a major asset and resource to be protected, as it preserves a city's character (McCarthy, 1998b; Marshall, 2001c). The conservation of heritage has proved to be a significant driver of regeneration; and the protection of culture and heritage may be crucial to the economic competitiveness of an area in the long term (Bruttomesso, 2001; Shaw, 2001; McCarthy, 2004).

Ensure adequate analysis of costs and benefits, as well as trade-offs	<p>It is necessary to undertake a comprehensive analysis of economic and financial costs, and opportunity costs associated with mega-projects (Lungo, 2002).</p> <p>Trade-offs surrounding economic, political, social or environmental aspects are another feature of mega-project development which require careful consideration, as objectives for spatial planning are often traded off against broader and more immediate economic benefits (Lungo, 2002; McCarthy, 2004).</p>
Ensure adequate financing	An important component of mega-project development is to ensure that adequate funding is provided, and that the project will be able to be maintained over time without placing a drain on government (Cashman, 2006).
Ensure effective management of impacts	It is vital to develop effective ways to measure and assess various types of impacts, as well as ways to mitigate the negative effects through adequate attention to remediation (Lungo, 2002; Gellert and Lynch, 2003).
Incorporate efficient partnerships	Establishing innovative, broadly-based, inclusive, open and equitable public-private partnerships is an essential element of mega-project development. They are also more likely to secure popular assent and legitimacy through such partnerships (Bassett <i>et al</i> , 2002; Lungo, 2002; McCarthy 2003).
Ensure efficient management of the environment	Including concepts of good practice and sustainable land use, improved public transport, energy conservation, water conservation, waste minimisation, pollution avoidance and protection of the natural environment (Bruttomesso, 2001; McCarthy, 2003; Carmona, 2006; Hale, 2010; www.cabe.org.uk).

It is important to incorporate sustainability into the design and management of mega-projects, and to take a long-term, strategic approach from the outset (www.cabe.org.uk); as well as attempting to support a more environmentally sustainable city (Marshall, 2001a). The incorporation of these development principles into the planning and implementation of mega-projects is therefore important, as they provide a ‘blueprint’ for successful mega-project development which will allow for the achievement of a long-term strategic approach, and the shift to a more sustainable city. This study will explore the incorporation of these development principles within mega-project implementation and urban regeneration in the city of Durban.

The characteristics of mega-projects and aspects of their planning and implementation have been discussed in this chapter. It is now pertinent to concentrate on the three types of mega-projects which are the focus of this study, which include a sports stadium, a waterfront zone and a shopping mall. The remainder of the chapter will investigate the characteristics of each, through an examination of relevant literature.

3.5 Mega-projects: sports stadia, waterfront zones and shopping malls

3.5.1 Sports stadia

A centrally located sport stadium has the potential to boost regional economic activity; contribute to a city’s development, particularly when it is in close proximity to related businesses and cultural opportunities; and increase the regional income (Maennig and du Plessis, 2009). According to Smith (2010), stadia are also able to consistently attract visitors by being imaginatively designed as attractions; or supplemented with more participatory sports facilities, museums, exhibitions, demonstrations, and other sports attractions. This can assist the promotion of sport as a secondary activity while visiting a city, and add to the city’s portfolio of tourist opportunities (Smith, 2010).

Stadium construction is however contentious for a variety of reasons. Sports venues are often highly specialised facilities that have limited use after an event, and there is nothing to suggest that the construction of a stadium is the best possible use of government funds, or that the return on this infrastructure will exceed the return on the next best alternative (Matheson, 2006). According to Maennig and du Plessis (2009), a range of empirical studies suggest that major sports events and the associated new stadium construction does not necessarily produce considerable short-term income or employment effects on the regional or municipal scales. Matheson (2006) further argues that in the best case scenario, expenditure on sports-related construction or operation has no net impact on the

economy, as the employment benefits produced by the project are countered by employment losses elsewhere in the system associated with increased taxes or spending cuts.

It is therefore important to note that the mere existence of a stadium does not produce a positive effect; and this will only result from its successful integration into the social fabric and structure of the city (Maennig and du Plessis, 2009). Matheson (2006) further suggests that unless a convincing case can be made in favour of such a project, in terms of the community being in dire need of a fiscal stimulus, and that no other possible projects could provide a comparable return; spending on infrastructure should be considered a cost and not a benefit.

The city of Durban has thus been presented with an opportunity to provide enormous benefits through the construction of the Moses Mabhida Stadium; the challenge now remains to ensure that these benefits are realised and to avoid the pitfalls of such development, while ensuring that it contributes to a more sustainable city.

3.5.2 Waterfronts

Waterfronts are often considered strategic areas in urban planning, and a keynote of economic development in many post-industrial cities; with some of the most important redevelopments in recent years being waterfront revitalisation projects (Marshall, 2001b; Millspaugh, 2001; Shaw, 2001; Sairinen and Kumpulainen, 2006). Port cities have consequently begun to enter into competition through waterfront development, entrusting the waterfront with the important task of re-launching the city, by redeveloping areas through the inclusion of residential, commercial and cultural projects (Sairinen and Kumpulainen, 2006; Lehrer and Laidley, 2009). This has involved attempting to use waterfront redevelopment to attract major private investment to assist in the transformation of an area into a thriving cultural, commercial and recreational area for tourists and locals; and provides the opportunity to recreate the image of a city and recapture economic investment and spending power (Marshall, 2001a; McCarthy, 2003; McCarthy, 2004).

There is a tendency in much of the literature to view waterfronts as a cure-all for ailing cities, however the problems and possibilities which face cities as they create these waterfronts are often ignored (Marshall, 2001a). It has been shown that redevelopment of waterfront areas for tourism-based uses often fails to address the social and economic problems of the wider city, or even the immediate locality (McCarthy, 2004); and these urban waterfront regeneration projects are therefore

often the objects of intensive local planning debate and even conflict (Sairinen and Kumpulainen, 2006).

The redevelopment of the Point waterfront area is therefore another mega-project which provides important opportunities for regeneration within Durban. The planning of the area therefore requires careful consideration in order to ensure that the project is successful and embraces the principles of a sustainable city, through addressing the city's social, economic and ecological problems.

3.5.3 Shopping malls

The shopping mall has become a seemingly ever-present feature of mega-project design, and cities have realised that retail is an essential part of a successful urban regeneration strategy (Jones and Moreno-Carranco, 2007; European Shopping Centre Trust and the International Council of Shopping Centers, 2008). According to Jones and Moreno-Carranco (2007), the mall is a space that is suggestive of the re-inscription of meaning amidst deliberate conformity, blandness and control.

Shopping malls involve a variety of stakeholders, and they are accepted as a property asset class by investors, an efficient trading venue by retailers and a destination for choice and convenience by consumers. Governments are also a stakeholder, and they have increasingly recognised that public-private partnerships with retail developers can provide social and economic benefits for the community. The measures of success, significance and contribution of the shopping centre industry however vary for each of these stakeholders (European Shopping Centre Trust and the International Council of Shopping Centers, 2008).

Retailers propose that retail is a catalyst for other forms of real estate development, employment creation, generating tax revenue and investment, and for the consumer in terms of choice (European Shopping Centre Trust and the International Council of Shopping Centers, 2008). Many of these projects are therefore justified with economic development and urban blight arguments, and have resulted in the increasing renovation of historic 'colonial' centres, in the pursuit of tourism and middle-class consumption (Gordon, 1997; Jones and Moreno-Carranco, 2007).

The proposed Warwick Mall is an example of such development, as it would have involved the renovation and conversion of a historic section of the city in order to promote urban regeneration

through the development of a shopping mall. Such projects require careful consideration and planning to ensure they capture the associated benefits while ensuring long term sustainability.

3.6. Summary

It has been established that mega-projects have become a dominant strategy of urban regeneration within contemporary cities, including Durban, and consequently play a vital role in their future development. These large scale projects have particular distinguishing characteristics and procedural attributes, and are implemented for a variety of reasons in cities around the world. However, due to their large scale and associated impacts, they have elicited particular social and political responses, and have been confronted with criticism. It is therefore vital to identify, and incorporate into their implementation, development principles which are able to contribute to their long term success and a more sustainable urban future.

The next chapter presents the background to the study, reflecting on the South African, and specifically the Durban context, where a dual agenda of international growth and redistribution is required to address the conditions of the post-apartheid city, as well as the incorporation of a sustainability paradigm. The strategies which are employed in order to achieve this are governed by the city's policy and planning framework, and this is presented in the chapter. The implementation of mega-projects as a pro-growth form of urban regeneration within the country and city is subsequently discussed, as a way in which the goals of Durban are being pursued. Background concerning the three identified mega-projects: the Moses Mabhida Stadium, the previously proposed Warwick Mall and the Point Development is thereafter provided. A presentation of the specific debates which surround mega-project development concludes the chapter.

Chapter 4

Durban: a post-apartheid city

South African cities have been shaped by their unique history, as well as more recent processes of globalization, which have resulted in urban restructuring and the current character of cities. These cities, such as Durban, consequently face specific challenges as they are confronted with the need to compete in the global economy, and simultaneously pursue redistribution. Cities must therefore make choices regarding the pursuit of pro-growth and pro-poor objectives in their urban regeneration, while attempting to incorporate sustainability into their development. National policy highlights the need for growth, and it is argued that economic growth will provide trickle-down effects which may then address poverty and unemployment. Cities have thus begun to focus on the implementation of predominantly pro-growth strategies, which include the development of mega-projects, to meet their goals. The city of Durban has planned and undertaken a number of these large scale urban regeneration projects, such as the Moses Mabhida Stadium, the previously proposed Warwick Mall, and the Point Development. There are however questions concerning the role which such mega-projects play in the city, and they are therefore surrounded by some debate. This chapter will address these ideas by firstly looking at the multiple agendas of the post-apartheid city.

4.1 South Africa and urban restructuring

For many years South Africa has been widely considered the most developed and modern country on the African continent; and for more than a decade, dramatic social and spatial change has been occurring in the country's major metropolitan areas, particularly since the inception of democracy in 1994. The demise of apartheid resulted in forces of globalization becoming prevalent in South Africa; and this globalization of people and activities has exposed cities to a number of economic, political and demographic processes which have significantly changed the spatial structure of urban areas, as well as the social interactions of their residents (Freund, 2002; Wiley *et al*, 2002; Popke and Ballard, 2004).

South African cities, and particularly the large metropolitan areas, have thus all been shaped by the same global and national processes, but they also have distinct features which result from their unique natural environments, history, and economic, social and cultural make-up (Patel, 2000). They are characterised by a strong tradition of top-down planning and have significant capacity to finance

change, whilst de-industrialisation and decentralisation have been occurring. They are, however, also the sites of unemployment and poverty, and large numbers of citizens are involved in the informal economy (Freund, 2002). Within South African cities, there is consequently a stark juxtaposition of developed and developing world conditions in close proximity, which presents a unique range of environmental and developmental challenges (Patel, 2000; Todes, 2000).

4.1.1 Competing agendas: the challenge of the post-apartheid city

There are therefore a number of elements which are vital to the development of South African cities. Urban development and regeneration have been identified as crucial national imperatives, and one element is therefore the establishment of a city region that is able to compete effectively in the global economy (Cornelissen, 2008; Pillay and Bass, 2008; Pillay and Bass, 2009); while another is the ability of the country to address issues of poverty, unemployment and under-development (Patel, 2000; Schwabe, 2002; Boraine *et al*, 2006; Cornelissen, 2008). There has also been a paradigmatic shift to sustainable urban development, and sustainability has become a central concept in South African urban planning, as a means of holistically addressing the various challenges which the country faces (Patel, 2000; Swilling, 2003; Boraine *et al*, 2006).

The post-apartheid city is thus confronted with an overwhelming array of objectives, as policy obliges city authorities to engage in social development, prioritising the needs of the poor in order to address the apartheid legacy of inequality and disempowerment, through explicitly pro-poor interventions. Simultaneously, local authorities are presented with major challenges to encourage economic growth through the extension of the international reach and integration of cities with the world economy, which requires the implementation of pro-growth strategies (Freund, 2002; Hall and Robbins, 2002; Nel *et al*, 2003; Rogerson, 2006b; Cornelissen, 2008; Pillay and Bass, 2009). These seemingly contrasting priorities of growth and redistribution result in particularly acute tensions between pro-growth and pro-poor agendas in the regeneration of South African cities which are trying to achieve meaningful sustainable development, and therefore require the incorporation of both agendas (Pillay and Bass, 2009; Sutherland *et al*, 2011). This dual agenda is reflected in the country's Local Economic Development strategy, which emerged as one of the most important post-apartheid development options for addressing the country's challenges (Rogerson, 2006b).

4.1.2 Local Economic Development

Local economic development (LED) is a characteristic feature of development thinking and planning in South Africa. It is a participatory development process which encourages the formation of partnerships between a territory's private and public stakeholders in order to allow for the joint design and implementation of a common development strategy. This is achieved by utilising local resources and competitive advantage, with the goal of employment creation and the stimulation of economic development (Maharaj and Ramballi, 1998; Rogerson, 2003; Nel and John, 2006; Rogerson, 2006b). According to Lootvoet and Freund (2006), LED can be interpreted in two ways: the promotion of growth through the competitiveness of the economy, and the struggle against poverty. The national government therefore also attaches vast importance to the role of LED in contributing to reconstruction and development. Significant space and responsibility for LED strategy-making and implementation is established by the South African Constitution (Rogerson, 1999; Hall and Robbins, 2002; Rogerson, 2003), and these agendas are consequently entrenched in South African neo-liberal urban policies.

South African local governments are therefore trying to achieve both pro-growth and pro-poor development in the pursuit of creating a more sustainable city in the long term. However, market realities and attempts by cities to infiltrate the global economy often become the determining force in strategic interventions (Nel *et al*, 2003), resulting in a neo-liberal pro-growth agenda becoming dominant in cities. Consequently, pro-growth agendas are implemented with more frequency than pro-poor agendas in the urban regeneration of cities, as they provide the opportunity to pursue the economic imperative of competing effectively in the global economy, and thereby generating benefits for cities, such as Durban.

4.2 The city of Durban

The city of Durban, which falls within the eThekweni Municipality, is located in the province of KwaZulu-Natal, and has a population of approximately 3.6 million people (Sutherland *et al*, 2011). It is the second most important demographic and economic urban nexus of South Africa's cities; and is the second largest industrial city, being defined by its large and busy port, which is the most vital in terms of value (Freund, 2002; Lemanski *et al*, 2008; Freund, 2010; Sutherland *et al*, 2011). It is defined as a core urban region, as it is a gateway to the global economy, providing national and supra-national, continental, cultural, educational and innovation functions (Sutherland *et al*, 2011); and is consequently one of the country's most important cities.

The city however faces numerous social, economic, ecological and governance challenges. These include poverty, with 33.1 percent of the population classified as poor; unemployment, with an unemployment rate of 20.6 percent (SACN, 2006; Breetzke, 2009; eThekweni Municipality, 2009a; eThekweni Municipality, 2011); unequal distribution of wealth; economic inequalities; corruption and high levels of crime. There are great expectations that some of these problems may be addressed by the expansion of the tourism sector, as well as economic expansion and urban regeneration within the city (Freund, 2002; Marx and Charlton, 2003; Borraine *et al*, 2006; eThekweni Municipality, 2011). This is evident in the 1996 Green Paper on Economic Development, which suggested that the main challenge which Durban faced was to become globally competitive, in order to attract investment, address the uneven spatial distribution of economic activity, create considerable sustainable jobs, and to grow in an environmentally sustainable way (Hall and Robbins, 2002).

4.2.1 Competing goals within the city

Durban, like other South African cities, is required to achieve multiple agendas, which at times appear to be contradictory, and are thus difficult to achieve together. The city is attempting to become a competitive global player through the support and encouragement of business and development projects, and the realigning and repositioning of the inner city to mainstream economic processes; while simultaneously attempting to address poverty and the empowerment of citizens. This is evident within the policy formulation of the city, which places emphasis on rapid economic growth, while at the same time highlighting the need to promote pro-poor strategies and pursue sustainable development, with the goal of creating an environmentally sustainable city (Patel, 2000; Bond, 2002; Marx and Charlton, 2003; Nel *et al*, 2003; Robbins *et al*, 2005; Maharaj *et al*, 2006; Michie, 2006; Naidoo, 2006; eThekweni Municipality, 2008; Terreblanche, 2008; Bass, 2009; eThekweni Municipality, 2011; Sutherland *et al*, 2011). These agendas require integrated management where possible, as this is vital to ensure that they are pursued together rather than becoming competing agendas (Robbins *et al*, 2005). The following section explores these various agendas in the policy and planning elements which guide development in the city.

4.3 Policy and planning in Durban

The Reconstruction and Development Programme (RDP), a socio-economic policy aimed at addressing the high levels of poverty and inequality inherited from the apartheid era, was the initial policy of the post-apartheid period. There was subsequently a realisation that economic growth and job creation were necessary elements to ensure the achievement of these goals, and in 1996 the

Growth, Employment and Reconstruction (GEAR) policy was introduced. GEAR implemented a neo-liberal economic policy which was based on the premise that economic growth is able to provide trickle-down effects, which have the potential to promote social upliftment (Patel, 2000; Atkinson and Marais, 2006; Nel and John, 2006; Todes, 2006; Freund, 2010; Sutherland *et al*, 2011).

These policies were introduced into cities, such as Durban, and became entrenched in the approach to growth and development, providing the normative framework for the cities' planning and policy landscapes, including the implementation of LED strategies (Todes, 2006). Three of the main policy and planning instruments which are employed within Durban, and highlight the choices that have been made in terms of their policy priorities, are the Long Term Development Framework - Imagine Durban, the Integrated Development Plan, and the Spatial Development Framework, which contains four Spatial Development Plans.

4.3.1 Long Term Development Framework - Imagine Durban

Overall policy guidance for the future development of the city is provided by the city's Long Term Development Framework (LTDF), which was developed in 2001 in consultation with major local partners (Nel and John, 2006). It identified critical development challenges as including creating economic growth, jobs and income, with the need to strengthen the economic base of the city; as well as meeting basic needs; alleviating poverty; and striving for sustainability (eThekweni Municipality, 2001), thus reflecting the multiple agendas of the city.

The LTDF was later reviewed through the "Imagine Durban Process" to ensure that all aspects of sustainability are embedded in the Municipality, as well as influencing the city's Integrated Development Plan (IDP) (eThekweni Municipality, 2008; eThekweni Municipality, 2011). Imagine Durban is a council-led project on integrated, long-term planning, with the goal of developing a visionary plan to inspire citizens, non-governmental organisations, business and government to work together to make Durban the best city in the world (eThekweni Municipality, 2008; www.imaginedurban.org). It is a community-based process to design a desired development path which will enable the attainment of a more sustainable city (eThekweni Municipality, 2011). Six key theme areas were identified as the most important areas for collective action, and have been incorporated into the city's IDP. These are:

1. Creating a safer city
2. Ensuring a more environmentally sustainable city
3. Promoting an accessible city
4. Creating a city where all enjoy sustainable livelihoods
5. Fostering a caring and empowering city
6. Celebrating our arts, culture and heritage

(www.imaginedurban.org).

4.3.2 Integrated Development Plan

The 1996 Constitution afforded metropolitan authorities a significant role in promoting social and economic development within their jurisdiction; while these authorities are tasked with the formulation of development programmes and objectives by the Municipal Systems Act of 2000. This is achieved through the drafting and review of IDPs, which are the focus of South Africa's post-apartheid municipal planning system. They are prepared for five year cycles, and constitute the main framework for development targeting, services delivery and management of municipalities, through the identification of particular strategies or sectors that require focus (Marx and Charlton, 2003; Harrison, 2006; Cornelissen, 2008; eThekweni Municipality, 2008).

The vision of the Municipality is stated in the IDP as: "By 2020, eThekweni Municipality will enjoy the reputation of being Africa's most caring and liveable city, where all citizens live in harmony" (eThekweni Municipality, 2011: 37). The IDP also identifies a number of key development challenges, within the Municipality that require continued attention, such as those set out in the LTDF, in order to attain the vision. The Municipality is required to address all of these challenges with limited human and financial resources, and it is therefore imperative that the Municipality makes these difficult and important choices in terms of its development mandate. These choices are made in the Key Development Dialogues, which indicate the priorities which the Municipality has chosen to pursue (eThekweni Municipality, 2011). The IDP also contains an eight point plan which identifies critical areas that the Municipality has targeted. These choices and the eight point plan reveal that the city is aware of its competing obligations (Kennedy *et al*, 2011), and are presented in Table 4.1.

Table 4.1: The IDP’s key choices and Eight Point Plan

Key choices	Eight Point Plan
Creating sustainable livelihoods	Develop and Sustain our Spatial, Natural and Built Environment
A caring and empowering city	Developing a Prosperous, Diverse Economy and Employment Creation
A financially sustainable city	Creating a Quality Living Environment
Creating a safer city	Fostering a Socially Equitable Environment
Promoting an accessible city	Creating a Platform for Growth, Empowerment and Skills Development
An environmentally sustainable city	Embracing our Cultural Diversity, Arts and Heritage
	Good Governance and Responsive Local Government
	Financially Accountable and Sustainable City

(eThekweni Municipality, 2011).

4.3.3 Spatial Development Framework: Central Spatial Development Plan

The primary spatial response to the development context, needs and development vision of the Municipality as set out in the IDP is the Spatial Development Framework (SDF), which is the primary level of translation of social, economic and environmental development and management policy into spatial terms, and the Municipality’s primary Land Use Management tool. This was translated into more geographically specific physical development and land use management guidelines through the preparation of Spatial Development Plans. These plans, which were adopted in November 2009, provide strategic multi-sectoral planning guidance for each of eThekweni’s four planning regions, and were prepared for the North, South, Central and Outer West areas (Harrison, 2006; eThekweni, 2009; eThekweni, 2011).

The Central Spatial Development Plan (CSDP) involved a strategic assessment of the Central Spatial Region (CSR), within which the three identified mega-projects are located. The CSR is a highly developed and serviced area which represents the urban core of the Municipality, and is home to approximately 1.30 million people. It is centred on the transport and logistics activities of the Port, and characterised by economic development opportunities for industry, commerce and tourism. The CSDP investigated the major roles of the area; identified important opportunities and constraints for

development of the area, and formulated spatial development guidelines (eThekweni Municipality, 2009; eThekweni Municipality, 2011).

The IDP recognises that the Municipality has to make difficult choices within a spatial framework; and this is therefore done within the CSDP by connecting actions, resources and expenditure across the metropolitan area to unlock sustainable growth, whilst ensuring that inequitable, inefficient and unsustainable consequences of past development patterns are addressed over a period of time (eThekweni Municipality, 2009). Specific choices have thus been made in the context of the CSDP which fit within the framework of the IDP, including elements of the city's competing agendas.

The preceding sections have described the challenges which Durban faces, in terms of the need to incorporate multiple agendas in this post-apartheid city in order to pursue a sustainable future; and the policy and planning context within which these difficult choices are made. As highlighted by the shift from the RDP to GEAR, pro-growth strategies have become more prominent in South African cities in order to promote economic growth and development. One strategy which has been identified as able to promote these goals of pro-growth development, as well as providing trickle-down effects through urban regeneration is the implementation of mega-projects. The following sections address the implementation of mega-projects as a strategy of urban regeneration within South Africa, and Durban in particular, as these provide the focus of this study.

4.4 Mega-projects in South Africa

The idea that cities should be a catalyst and vehicle of growth within national economies has gained wide consensus, and South African cities possess a range of institutional vehicles with the goal of advancing growth targets. Each city has thus implemented an internationalist strategy, and committed to undertake a number of mega-projects, whether infrastructural or social in nature, which are aimed at providing momentum to local economic development, as well as drawing large proportions of public and private investments in the pursuit of urban competitiveness (Cornelissen, 2008). Secondary to this, statutory bodies, development agencies and public-private partnerships have been established to stimulate and steer these development projects (Cornelissen, 2008; Kennedy *et al*, 2011).

Many of these mega-projects are targeted and often extremely comprehensive initiatives which are driven by private capital. They are designed to facilitate global competitiveness, gain access to global

capital and investment, enhance infrastructural development and ensure sustainable job creation in areas which have unrealised economic potential due to a range of historical and political factors (Bond, 2002). In South Africa, the legacy of apartheid has led to the existence of many such areas, and in this way certain mega-projects have a significant role to play in the country's future development (Freund, 2010); as well as through promoting development in the country's major cities.

South African political culture has historically favoured a relatively strong central state, with relatively subdued regional rivalries; however, the post-apartheid state has seen the cities of Cape Town, Johannesburg and Durban beginning to compete with one another to attract international capital, tourism and business. These rivalries have been evident in the development of mega-projects; which include large international convention complexes, high-speed rapid rail systems (Nel *et al*, 2003; Nel and John, 2006; Van Der Westhuizen, 2007; Cornelissen, 2008), and most recently, stadium construction and associated tourism promotion for the 2010 FIFA World Cup, as well as the development of waterfronts. The trend within these cities thus suggests a focus on large scale infrastructural developments, many of which have a strong pro-growth orientation (Nel *et al*, 2003; Cornelissen, 2008).

4.4.1 Durban and mega-project development

Durban was one of the first South African cities that sought to come to terms with political change and development priorities, by responding to the challenges of promoting urban renewal and economic growth in an era of globalization and post-apartheid transformation. Since the early 1990s, Durban has thus been actively attempting to position itself as an aspirant global city. The city is now renowned for being one of the country's premier domestic tourism destinations, and can boast success in becoming one of the most important emerging global cities in the South (Todes, 2000; Nel *et al*, 2003; Robbins *et al*, 2005; Maharaj *et al*, 2006; Rogerson, 2006a; Freund, 2010).

The implementation of mega-projects has consequently become one of the dominant development strategies within the city (Nel *et al*, 2003; eThekweni Municipality, 2008; Marx, 2011; Kennedy *et al*, 2011; Sutherland *et al*, 2011), and the city's budgets reflect significant portions of capital expenditure being allocated to these projects (Robbins, 2005; Kennedy *et al*, 2011). The Municipality views itself as a major driver of development processes, and aims to use catalytic large scale projects as a tool to address poverty, as well as to encourage economic growth and job creation, as well as to

build investor confidence in the city (eThekweni Municipality, 2008; Marx, 2011; Kennedy *et al*, 2011).

Public-private partnerships have emerged as an important neo-liberal tool for stimulating urban development and play an important role in the development of mega-projects in Durban. These partnerships involve the private sector as a main actor in achieving economic growth, with the Municipality playing an enabling role (Sutherland *et al*, 2011). The economic strategy of the local government thus places itself in the context of the Durban Growth Coalition, initiated in 1999, which has seen large property development projects emerge in the city with the aim of fast tracking development, and promoting local, national and international visibility. Many of these projects can be considered boosterist as their focus is on improving Durban's competitiveness within the global economy rather than addressing social development and equity (Lootvoet and Freund, 2006; Houghton, 2011). They thus reflect a pro-growth strategy to development.

Durban's inner city is seen as a particularly vital asset in improving the quality of life of all residents, as it is a significant hub of employment and the most important centre for a variety of retail, leisure, entertainment and cultural activities; as well as playing a role as an icon representing the entire city. Furthermore, it has been recognised as having strategic importance to the metropolitan economy, as well as contributing significantly to overall metropolitan sustainability (Robbins *et al*, 2005; eThekweni Municipality, 2009). Considerable interest has thus been directed at it from an economic development point of view (Robbins *et al*, 2005), and various mega-projects, including the three which are the focus of this study, have been emerging within its boundaries.

2010: an impetus for mega-project development

As has been discussed, it is important for the city to demarcate a niche attractive to potential investors, tourists and its citizens; and this took particular and accelerated effect through strategies associated with hosting the 2010 FIFA World Cup (Bass, 2009). Leading up to, and during 2010, planning towards this event constituted a large component of investments and commitments undertaken by metropolitan governments, including eThekweni. This created an impetus for the implementation of mega-projects, which constitute the main thrust of urban planning, redevelopment and infrastructural respatialisation around which much future city development will occur (Cornelissen, 2008).

A number of mega-projects have therefore been planned and constructed, and play a critical role in Durban. It is therefore important to examine the role these projects play in the city in order to understand the way in which urban regeneration is being pursued, and to what extent sustainability is being incorporated, to achieve the aim of this study. Three of the main projects which have been developed and planned in the inner city are the Moses Mabhida Stadium, the previously proposed Warwick Mall and the Point Development. The classification of these three projects as mega-projects may be contested, as the definitions of what constitute a mega-project are diverse; however these have been identified as mega-projects based on the definition which this study incorporates. Figure 4.1 shows the location of the Moses Mabhida Stadium and the Point Development within the city, and the site for the previously proposed Warwick Mall, which was in the Warwick Market Junction.

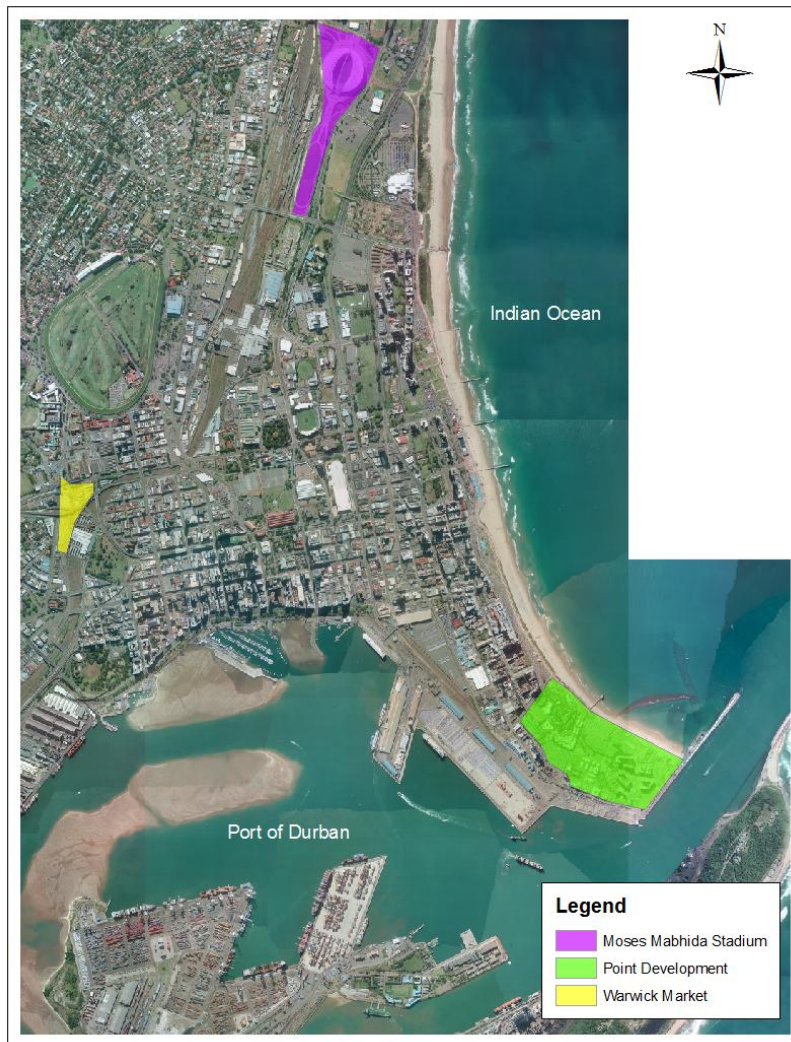


Figure 4.1: Map showing the location of the three mega-projects within the city.

4.4.2 Moses Mabhida Stadium



Plate 4.1: The Moses Mabhida Stadium

(www.fifa.com).



Plate 4.2: The stadium

The Moses Mabhida Stadium was constructed on the site of the old Kings Park Soccer Stadium, within the greater Kings Park precinct near the city centre. Durban, like other host cities of the 2010 FIFA World Cup, poured capital into the construction of an iconic stadium, which was primarily designed as a state-of-the-art world-class sporting facility for the event. It was also expected to be utilised thereafter for various sporting events, and was seen as a multi-functional, hard-working and easy-to-maintain asset for the city (www.durban.gov.za).

The stadium precinct has been designed to be active for 365 days a year, by featuring a dynamic entertainment node consisting of retail space, restaurants, an amphitheatre, a sky car and a landscaped green space for all residents to enjoy, referred to as the People's Park (www.durban.gov.za). It was also envisioned that the stadium would form the centre of a sporting precinct which would be well used on a daily basis by citizens of Durban, as well as national and international visitors (Alegi, 2008; Bass, 2009; www.durban.gov.za).

The city desires to be a destination for local, provincial, national and international events, and the World Cup was thus regarded as a stepping stone on the way to bidding for the Commonwealth and the Olympic Games, as well as projecting a particular image of the city. The stadium is thus positioned to be the anchor of a concept of developing the city, and re-imagining Durban as one of Africa's leading sports cities (Bass, 2009; Maennig and du Plessis, 2009), thus reflecting the goals of neo-liberal urban restructuring.

4.4.3 Warwick Mall



Plate 4.3: The proposed mall (Comins, 2009).

The idea for the Warwick Mall emerged as part of the city's plans to revamp and reconfigure the city's primary transport hub, Warwick Junction; in terms of traffic and public transport, as well as upgrading commuter facilities and modes to improve efficiency, safety and access in the area. This was to be achieved through the private development of a 22 000 square meter, R400 million mall in Warwick Junction, with the incorporation of a 400-500 bay taxi rank on the top level provided by the eThekweni Municipality, through a public-private partnership. The mall was to be developed by Warwick Mall (Pty) Ltd, a Durban-based black empowerment company (Jenvey, 2008; Comins, 2009; Kockott, 2009b; KwaZulu-Natal Provincial Government, 2009; Palitza, n.d.; www.durban.gov.za; www.eprop.co.za), and would have formed part of the city's urban regeneration associated with the 2010 FIFA World Cup.

The mall was proposed on the site of the Early Morning Market (EMM), which was established in 1910, and forms part of the Warwick Market (www.abahlali.org; www.ins.onlinedemocracy.ca; www.l2b.co.za). The original aim of the market was as a retail market for small-scale Indian farmers, and it was recognised as the primary fresh produce retail outlet in the city. The EMM now serves primarily as a wholesale market to the informal sector, which is responsible for creating employment and income opportunities, and providing affordable goods and services to Durban's poor (Nesvåg, 2002; Robbins and Skinner, 2009; www.ipetitions.com; www.streetnet.org.za). Plate 4.4 illustrates the location of the EMM amongst the various markets of Warwick Junction, and Plate 4.5 shows a picture of the EMM.



Plate 4.4: Markets in Warwick Junction (www.designother90.org).



Plate 4.5: The EMM in Warwick Junction (Saib and Bowman, 2010).

Market traders, citizens and academics therefore raised objections to the plans for the development of a mall in this location, as they felt it was not in the best interests of the majority of the people of Durban (www.historymatters.co.za). The plan for the mall was consequently set aside due to intense opposition, and subsequent court proceedings in 2011 (Mbonambi, 2011; www.iolproperty.co.za).

Due to the scale and characteristics of the proposed Warwick Mall, it is the project which would least likely be considered as a “mega-project”. For this study it was however classified as such, due to its potential impacts, the conflict that surrounded its development and the effect which it would have had on Warwick Junction, which is a major business and transport hub, and hence development node, in the city.

4.4.4 Point Development



Plate 4.6: The Point Development (www.laurusco.com).

The Point Development is situated in the Durban Point area, which is one of the city's most historic and significant urban quarters. The Point area has local, national and international connections due to the fact that it incorporates access to a range of modes of movement which include pedestrian, road, rail and sea. However, it represents one of the most under-utilised assets in the city, and has in the past been subject to encroaching blight, which resulted in the area becoming abandoned and vacant. The area has long been considered to have extensive redevelopment potential, but intentions for its revitalisation foundered for several decades until approximately 2003, when significant redevelopment was planned for the area (McCarthy, 2000; eThekweni Municipality, 2009; www.durbanpoint.co.za (a)).

The implementation of the uShaka Marine World project in 2003 created much of the renewed impetus for this initiative, and was regarded as the catalytic project for the 55ha Durban Point site (Robbins, 2004b; Nel and John, 2006; eThekweni Municipality, 2009; www.durbanpoint.co.za (a)). The aim of the Point Development is to create one of the country's newest and most prestigious mixed-use environments consisting of leisure activities, commerce and hospitality industries; including a five-star hotel and retail zone, apartments, offices, canals and the construction of a small craft harbour, in order to attract high-value tourism (Lootvoet and Freund, 2006; www.iol.co.za). As stated on the Durban Point website, the Point is intended to become "an important, well-defined and exciting addition to the city and a sought after place to live, work and play" (www.durbanpoint.co.za (a)).

The development is being undertaken by the Durban Point Development Company, a joint venture between Malaysian controlled company Rocpoint, and the Durban Infrastructural Development Trust, owned by the eThekweni Municipality (Robbins, 2004a; Robbins, 2004b; Naidoo, 2011; Brink, n.d.; www.durbanpoint.co.za (a); www.southafrica.info). It is therefore being developed through a public-partnership between private developers and the city, with the goal of promoting urban regeneration.

There are however many people who are in opposition to some aspects of the development, particularly the small craft harbour, which has been surrounded by controversy and criticism for a lack of stakeholder inclusion (www.iol.co.za). There have also to date been a number of financial issues with uShaka Marine World, and development of other aspects of the project have been slow. Only with the passing of time will it be seen whether the Point Development will be able play a significant role in the development of the city.

4.5 Debate around mega-projects

The formation of public-private partnerships, the strong commitment to the need for sound planning which addresses both economic growth and poverty alleviation, and the development of mega-projects have thus been strengths for the city (Maharaj and Ramballi, 1998; Nel *et al*, 2003; Nel and John, 2006). These projects have however evoked much public criticism for being undertaken without due input from all stakeholders; for their large fiscal requirements; uncertain costs and benefits; and the fact that, given their scale, they will play a crucial role in determining future urban programmes of the city (Cornelissen, 2008).

Problems also arise wherein the costs and benefits of these development projects are not borne equally, and judgements are made which are value-laden and entrenched in systems of power, resulting in benefits being accumulated by those in power, while costs are accrued to the disenfranchised (Patel, 2000). Questions have therefore been raised as to how responsive these projects are to the needs of the poor, and whether they will receive benefits from interventions which generally focus on local and foreign business and tourist elite, and are dominated by business and the local state due to a lack of public participation (Maharaj and Ramballi, 1998; Nel *et al*, 2003; Nel and John, 2006; Sutherland *et al*, 2011). They are therefore emblematic of the ongoing struggle within urban planning in the city, which requires growth objectives to be balanced with providing for the socio-economic needs of citizens (Cornelissen, 2008).

The concept of mega-projects is therefore one which is surrounded by much debate as the need for such projects, as well as the possibility for their long term sustainability, is often brought into question. In South Africa, and Durban, it is now vital to ensure that the costs are no longer borne by the poor and marginalised, by moving beyond traditional urban planning, and focusing on institutional transformation, democracy and community participation (Patel, 2000). It is consequently crucial to work with, and through, inclusive partnerships in order to establish projects which benefit all of the city's residents, and allow the twin objectives of economic growth and poverty alleviation to be achieved; in order for the ideal of 'developmental' local economic development to be attained. Policies and projects which sustain economic growth through redistribution, improve living standards and enable community residents to become economically self-sufficient therefore require greater emphasis in a bid towards a more sustainable city (Nel *et al*, 2003). It is consequently important to determine whether sustainability is being incorporated within such projects, and planning and development in the city; and subsequently whether urban regeneration and sustainability are mutually reinforcing or competing agendas. This is the aim of the study, and will be achieved through using mega-projects as a lens.

4.6 Summary

South African cities face difficult choices in their planning and development, as they have been shaped by a legacy of apartheid and the urban restructuring associated with globalization processes of recent decades. They must therefore address redistribution, through pro-poor initiatives; while simultaneously implementing pro-growth initiatives to improve their position within the global competitive landscape, as well as attempting to incorporate sustainability. Durban is a prime example of these changes and challenges, and its development is guided by a range of policy and planning documents which highlight these conflicting imperatives. Pro-growth strategies have however become entrenched and dominant within policy and planning of the city, and mega-projects have emerged as one way of achieving these aims. Durban has thus planned and implemented a range of projects, including the Moses Mabhida Stadium, the previously proposed Warwick Mall and the Point Development. Many of the mega-projects are surrounded by debate, and local authorities must consequently address these challenges in an attempt to create a more sustainable city.

The next chapter presents the methodology which was followed in the completion of this study. The data collection, sampling methods, analysis, and any limitations which were encountered during the research are therefore discussed.

Chapter 5

Methodology

This research adopted a qualitative approach in the collection and analysis of the relevant data; and both inductive and deductive methods were utilised in the analysis. The analysis concentrated on determining the relationship between the two dominant agendas of urban regeneration and sustainability in the city of Durban. This chapter details the methodology which was utilised in the sampling, collection and analysis of the data which was gathered for this study. Further, the limitations which resulted from any problems encountered in the process of data collection and analysis are explored. The chapter is presented in four sections: data collection, sampling, analysis, and limitations.

5.1 Data Collection

The data which was gathered for this study was qualitative due to the use of interviews as an information gathering tool, with the questions being of a qualitative nature. The secondary data and newspaper articles which were used as a data source also provided qualitative information.

Data collection was undertaken in a parallel process. The three mega-projects were identified, and secondary data such as policy documents, including the Long Term Development Framework (LTDF) and the Integrated Development Plan (IDP) were reviewed in order to identify planning and policy issues and goals in the city. Reports, newspaper articles and internet sources were then reviewed to allow for the identification of the specific goals and issues surrounding the particular mega-projects and their development.

At the same time, it was necessary to develop a set of sustainable city principles in terms of which to evaluate these projects. A number of principles were therefore elicited from relevant literature; legislation, such as the National Environmental Management Act (NEMA); policy documents, such as the IDP; and a set of interviews which were conducted. Aspects of sustainability and sustainable city principles from each of the sources were reviewed, and a set of principles was developed based on their importance from a sustainability perspective, as well as those which form the basis of management and the achievement of sustainability within the city of Durban.

Interviews formed an important part of the data collection process, and in order for a set of questions to be compiled, it was necessary to identify the relevant stakeholders. Interview schedules were thereafter compiled for each stakeholder; depending on their role in planning within Durban, their role in terms of the chosen mega-projects, or their particular knowledge of planning, development and mega-project implementation. These were semi-structured interview schedules; consisting of a set of core open-ended questions, which were developed based on literature, information gathered regarding the mega-projects, and on personal ideas of the researcher, with the goal of eliciting the necessary information. Appendix A provides the interview schedules which were used.

Table 5.1 summarises the interviews which were conducted for the study. Respondents included planners within the city, city officials, an architect, social scientists and development researchers, as well as consultants who produced plans for the projects being reviewed.

Table 5.1: Interviews conducted

Name	Position	Date
Don Alberts	Architect	20/04/2010
Dianne Scott	Social scientist	22/04/2010
Glen Robbins	Development researcher	22/04/2010
Vicky Sim	Planner	30/04/2010
Nina Foster	Planner	05/05/2010
Hoosen Moolla	Acting Head of iTRUMP	25/08/2010
Brij Maharaj	Social scientist	11/07/2011
Nathan Iyer	Lead urban designer for the Point	03/08/2011
Soobs Moonsammy	Head of Development and Planning in the eThekwin Municipality	12/09/2011

The interviews were initially conducted with planners who work in Durban, as well as social scientists and development researchers in order to gain an understanding of general planning and development within the city, as well as views on the three mega-projects. Thereafter, interviews were conducted with those directly involved in the planning and design of the specific mega-projects, as well as an official from the planning department of the eThekwin Municipality. These were conducted in order to gather information about planning and policy in the city, and the mega-projects in particular.

The interviews were conducted using semi-structured interview schedules, with open-ended questions in order to determine the main elements of each project, as well as the rationale behind their planning and development. The expected future outcomes of each mega-project were also elicited, so that a determination could be made as to whether these projects are incorporating a sustainability paradigm. The interview schedules also incorporated a number of questions concerning the development landscape of the city, in order to determine the way in which planning and urban regeneration are being undertaken in Durban.

The media became a 'stakeholder' due to the vast amount of information and opinions which were presented concerning the various mega-projects and development in the city. Newspaper articles were consequently collected over a period of time, from February 2009 to October 2011, and became a vital source of data. Various websites featuring articles on the three mega-projects; as well as specific websites for these projects, such as www.mmstadium.com, www.mosesmabhida.co.za and www.durbanpoint.co.za were also reviewed and utilised as an important data source.

Further data was collected through the attendance of a presentation on the Warwick Development Project by the Provincial Task Team, particularly focused on the Early Morning Market and the Warwick Avenue Mall Development, which took place at the International Convention Centre on the 27 August 2009. A screening of Fahrenheit 2010, a film by Craig Tanner on the FIFA 2010 World Cup was also attended on the 29 July 2009, and valuable information regarding the Moses Mabhida Stadium and its planning was gathered. Finally, a seminar on the Soccer World Cup by Udesb Pillay via video conference at the Human Sciences Research Council in Durban was attended on the 16 March 2010, where further information was obtained.

5.2 Sampling

Non-probability sampling was employed in the study, which involves the selection of the members of a population in some non-random manner (StatPac, accessed 04/09/2009). Purposive sampling, which constitutes sampling with a purpose in mind and having one or more specific predefined groups, was used in the form of expert sampling. Expert sampling involves the identification of people with known expertise and experience in a particular area (www.socialresearchmethods.net), and was the predominant method employed due to the need for specific knowledge regarding planning and the chosen mega-projects. Certain criteria were thus identified in order to determine inclusion in the study, and sampling was carried out based on these criteria, which were:

1. Planners within the city: general planners, and those directly involved in the three projects
2. Social scientists and development researchers
3. City officials

A small number of respondents were also identified through the use of snowball sampling. This involves the identification of people who meet the pre-determined criteria for a study, and thereafter requesting that they recommend other people they may know who meet these criteria (www.socialresearchmethods.net). The majority of interviewees were however chosen based on their experience and expertise in specific areas, which were relevant to planning within the city and the mega-projects, in order to elicit their views and information.

Planners and an architect who work within the city were interviewed in order to obtain their views on the current and future planning in Durban, as well as their ideas on the implementation of mega-projects within the context of the city. Their understanding of sustainability and its relevance to the area, along with its pursuit within city planning and mega-projects, was also elicited. This was in order to gain a broad picture of what is occurring within the city in terms of development; and to determine whether sustainability and sustainable city principles are being incorporated within urban regeneration, planning and development. An official in the planning department was approached concerning Durban's current planning strategies and plans for the future, particularly in terms of the mega-projects and sustainability in the city.

Development researchers, social scientists and a city official were interviewed in order to gain their knowledge of planning and urban regeneration within the city from a social and developmental perspective, as well as to obtain their views on the incorporation of these mega-projects into the planning strategies of a city. It was also important to elicit their understanding of sustainability in the mega-project context, and within the context of Durban.

The interviewees included a number of people directly involved in the three identified projects who were interviewed in order to elicit specific information and details about each project, in terms of their goals, their role within the city and any issues which have been associated with their planning or implementation. They were also asked questions pertaining to sustainability within the city, and concerning the specific mega-projects to gain the perspective of project development.

5.3 Analysis

The research for this study was based on inductive as well as deductive methods. A deductive approach, which involves working from the more general to the more specific, was used in the development of sustainability principles from various sources. An inductive approach, which involves working from specific observations to broader generalisations and theories, was thereafter used when working from observations of mega-projects to broader generalisations concerning urban regeneration and sustainability within the city of Durban (www.socialresearchmethods.net). An open approach was adopted in the analysis of the data when themes were allowed to emerge from the data rather than being constructed as a result of pre-determined ideas. A qualitative approach was used when conducting the interviews, examining sustainability principles and goals, policy and planning goals, and in assessing the sustainability of the various projects; based on relevant literature and the interviews which were conducted.

The two parallel agendas of urban regeneration and sustainability provided the framework for this study. The planning and policy goals of the city of Durban were therefore elicited from relevant policy and planning documents, such as the LTDF and the IDP, which govern the management of the city. This provided the context of urban regeneration in the city, and this was reflected on throughout the study.

At the same time, it was necessary to determine the various components of sustainability, and the critical underlying characteristics and principles comprising a sustainable city. This was achieved through the review of international literature, policy, reports, information gathered from the interviews, and personal ideas of the researcher. A set of principles which allowed for a comprehensive view of sustainability within cities was therefore developed, consisting of ecological, social, economic and governance components. This provided a broad view of sustainability, which allowed an effective consideration of the extent to which sustainability has been pursued in the chosen mega-projects.

The identification of mega-projects within Durban was thereafter required, as these served as a lens through which to view broader urban regeneration processes within the city. Three mega-projects were selected based on the definition of “mega-projects” which was used in this study. Each of them was in different stages of planning and construction in order to ensure diversity, as well as to allow for a broader picture of the development which is occurring in the city. These mega-projects were

considered crucial to the city's future; and allowed the researcher to gain a view of the planning and urban regeneration strategies which are dominant in Durban. The projects which were chosen were:

1. The Moses Mabhida Stadium: A soccer stadium built for the 2010 FIFA World Cup, and thereafter to be used for various purposes.
2. The Point Development: A port redevelopment project started in 2003, consisting of residential, commercial and retail components.
3. The Warwick Mall: A proposed mall in the vicinity of the historical street trading hub of Warwick Junction.

Following the identification of the projects, it was necessary to obtain all relevant information concerning them, including their characteristics, their role in the city, and their planned future outcomes. This was achieved through the use of various sources; including relevant reports and planning documents in the city, a set of interviews with important stakeholders, newspaper articles concerning the projects, and the attendance of a workshop, movie screening and video presentation.

The policy and planning context of the city was then explored through the identification of the main discourses and planning goals which are evident in the city. These were elicited from the interviews, as well as from policy and planning documents. The planning landscape of the city was thereafter reflected on in terms of the incorporation of elements of urban regeneration and sustainability within the planning and policy documents of the city. A number of important themes which emerged through the research were then identified, primarily from the interviews which were conducted as well as secondary data sources and policy, concerning urban regeneration and development in Durban. This allowed for an exploration of urban regeneration strategies, particularly mega-projects and their characteristics, within the city.

The main facets of the mega-projects were subsequently assessed against the sustainable city principles, allowing for a determination of the extent to which the projects, as tools of urban regeneration, incorporate sustainable city principles.

These steps subsequently allowed for an examination of the relationship between sustainability and urban regeneration in the city of Durban. Diagram 5.1 provides an illustration of the process followed in the data collection and analysis of the study.

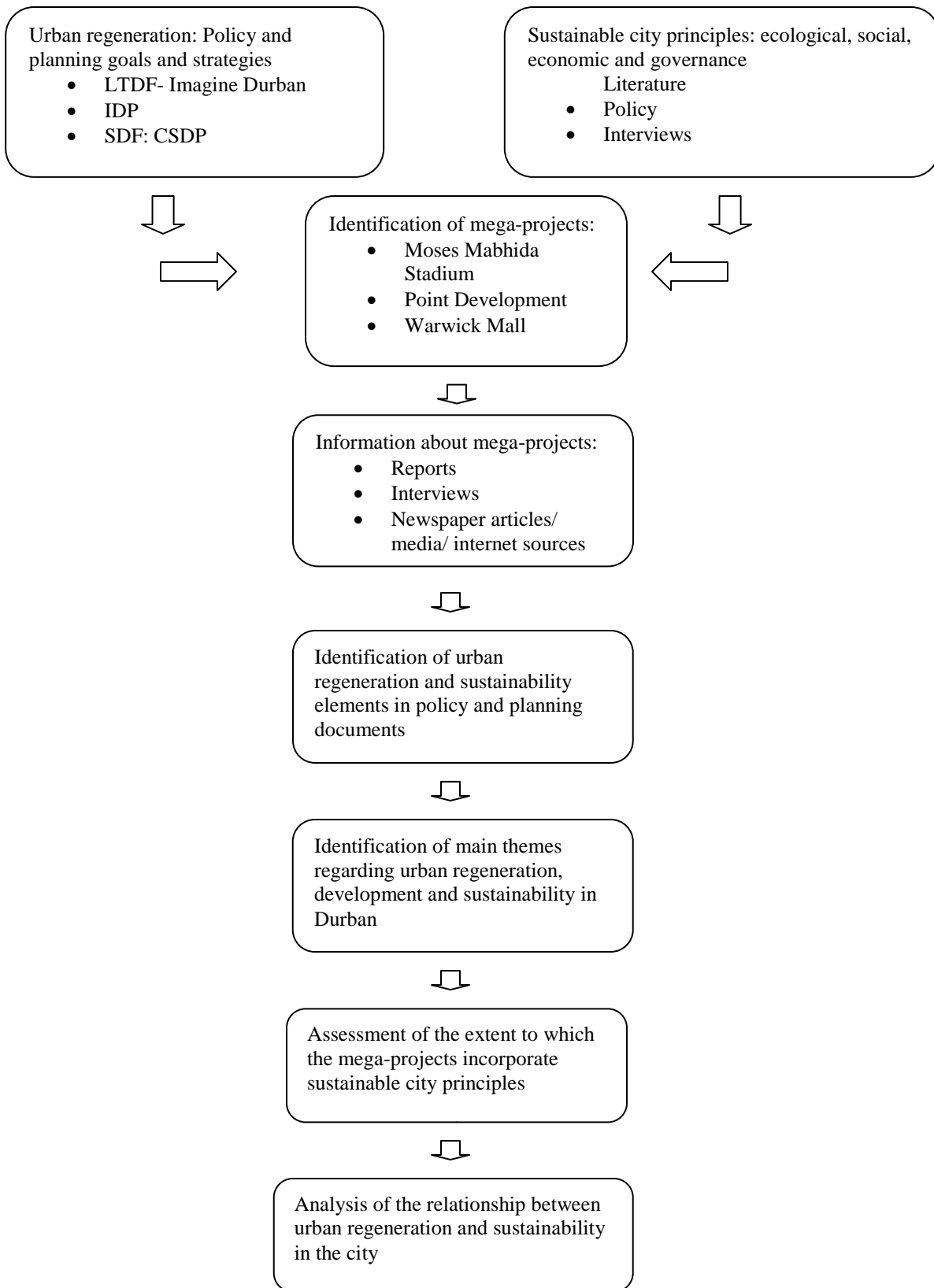


Figure 5.1: Process followed in the study

5.4 Limitations

5.4.1 Contacting respondents

As in any research endeavour, problems occur throughout the process, and one of these was the difficulty in contacting some of the respondents. Attempts to contact some respondents were not initially successful, and therefore had to be postponed for some time. Various attempts were also made to contact some respondents, but were unsuccessful, and the interviews were consequently unable to be conducted. There was therefore a delay in the collection of some of the data, which caused delays in the study; however the majority of interviews which were required were able to be conducted, and this therefore did not prove to be a major constraint in the project.

5.4.2 Availability of respondents

Difficulties were encountered concerning the availability of some of the respondents, such as those within the eThekweni Municipality, due to their busy schedules. Therefore at least one of the interviews which was initially considered important was unable to be conducted as the respondent did not have time available. When contacting their office, alternative people were however provided by the secretary, in terms of who had been involved in, or had knowledge of, the specific projects. Therefore this was also not considered a major constraint as although the original respondent was unavailable, other interviews were conducted and the necessary information was consequently obtained.

5.4.3 Interviews

One issue which was encountered in the interview process was the length of the interview. It was originally estimated that each interview would take approximately forty five minutes, but many of them exceeded this time, depending how in depth and detailed each respondent chose to be with their answers concerning the various aspects.

5.4.4 Sampling

The sampling process proved difficult due to the sheer size of the projects which were being investigated. A variety of stakeholders, and a large number of people were involved in each of the projects, and it was therefore not possible to interview all of them. Consequently, it was important to carefully select a number of people who possessed the relevant knowledge and expertise in order to obtain the information. This is however a problem which is encountered in any research, and was merely magnified in this study due to the number of the projects which were being investigated. The newspaper articles which were collected, as well as the various

internet sources, also provided statements by some of those who were not interviewed, ensuring more comprehensive information.

5.4.5 Definition of mega-projects

Due to the fact that there are multiple definitions of what constitutes a mega-project, there may not be consensus on whether the three projects investigated in this study warrant that title. The study was however based on in depth research and each project was considered a mega-project in its own right. This is therefore not a major limitation.

5.5 Summary

This chapter has detailed the methodology which was followed in the completion of the study. The data collection methods which were used have been discussed, and the sampling procedures which were followed have been explained. The way in which the analysis occurred was thereafter discussed, in order to provide a clear view of the process which was followed in the achievement of the results. Any limitations of the study have also been documented in this chapter, so as to highlight any issues which were encountered. It was concluded that these limitations have not undermined the validity of the results in any significant way.

The next chapter is the first results chapter, which provides an overview of the policy and planning context of the city of Durban. The elements of urban regeneration and sustainability evident within the policy and planning documents of the city are then explored. Thereafter, a number of main themes which were identified in the research are presented, which focus on urban regeneration and development in the city, the implementation of mega-projects as a prominent tool of regeneration, and the move towards sustainability.

Chapter 6

Urban regeneration and mega-projects in Durban

Over the past decade, the city of Durban has undergone a number of important changes within planning, one of the most significant being that mega-project implementation has come to the forefront of the city's development. Urban regeneration and competition have provided the impetus for the proliferation of these projects, as the city has been competing for tourism and investment through the regeneration of certain areas, particularly within the inner city; as well as attempting to promote further development. Mega-events have also played a role in increasing the number of mega-projects, as events such as the FIFA World Cup have been hosted by the country, resulting in the construction and upgrading of facilities and areas within the city.

This results chapter identifies a number of themes which emerged from the research surrounding the development and planning landscape of Durban, and the particular role played by mega-projects within this landscape. The three mega-projects which are being investigated in the study are also located within the themes, in terms of being either locally strategic, entrepreneurial, or having elements of both, in order to understand their role in the urban regeneration of the city. The shift towards sustainability is a further important theme which is examined.

6.1 Durban's planning and policy context

The first theme which was identified through the research concerns the dominant discourses and policy elements in Durban, as these provide insight into the prevailing agendas in the city, and what the city is currently focusing on in terms of planning and development.

6.1.1 Dominant discourses and planning goals in the city

A number of discourses are evident in planning and development approaches within Durban. Moonsammy (12/09/2011), head of the city's Development and Planning Unit, suggested that there is no one dominant discourse or approach within the city, as there are a range of factors which constantly have to be balanced. This section will provide an overview of some of the discourses and planning goals which are apparent in the city.

Discourses surrounding economic growth, furthering economic initiatives and enhancing the attractiveness and competitiveness of the city can be identified within the planning landscape of Durban. These discourses are evident through a focus on planning goals which include retaining and growing the rates base of the city; addressing a slow or negative uptake in growth rates; a

focus on the port and related activities; tourism promotion; business growth, particularly regarding industrial land; and the promotion of sustainable transport systems (eThekweni Municipality, 2001; Foster, 05/05/2010; Houghton, 2010; Scott, 22/04/2010; Sim, 30/04/2010; Moonsammy, 12/09/2011). A further discourse around urban renewal is evident, as the city focuses on urban renewal goals through programs such as the inner inner Thekwini Regeneration and Urban Management Programme (ITRUMP) (Moolla, 25/08/2010). These discourses highlight a pro-growth development discourse in the city, as well as the implementation of urban regeneration strategies.

Other discourses which are evident are discourses around dealing with the social and ecological dimensions of the city, highlighting a sustainability discourse. Planning goals therefore include improving the public realm and spaces, improving movement in the city, safety and access, and the provision of public transport (Sim, 30/04/2010). Elements of a pro-poor development discourse are evident through discourses around addressing past inequalities, which form around planning goals such as addressing backlogs in housing, addressing high rates of poverty, and the provision of services to the poor and disadvantaged (eThekweni Municipality, 2001; eThekweni Municipality, 2009; Sutcliffe, 2009; Moonsammy, 12/09/2011). Discourses around ecological protection are evident through planning goals focused on the mitigation of climate change; the protection of the natural resource base, promoting environmentally sensitive management, promoting green economies and energy efficient development, and a focus on water issues and biodiversity (eThekweni Municipality, 2009; Sim, 30/04/2010; eThekweni Municipality, 2011; Moonsammy, 12/09/2011).

The 2010 World Cup presented a new dimension to planning, as the city had to undertake the necessary preparations, which was to some extent a deviation from a more regular discourse (Moonsammy, 12/09/2011). This involved discourses surrounding iconic symbols and sports promotion, and included planning goals such as the upgrading and construction of infrastructure, including the Moses Mabhida Stadium, as well as renewal in various areas of the city (Moolla, 25/08/2010; Robbins, 22/04/2010; Scott, 22/04/2010; Iyer, 03/08/2011; Moonsammy, 12/09/2011).

There are therefore an array of discourses which influence the planning and development of Durban, and highlight the competing agendas which were discussed in Chapter Four. In Moonsammy's (12/09/2011) opinion, the dominant discourse is thus "one of trying to deal with everything". Thus the city attempts to draw on elements of economic growth and increased

competitiveness to undertake urban transformation, which should lead to an improvement in quality of life, therefore viewing these as complementary rather than as competing with each other (Houghton, 2010). This is however problematic as it is difficult to deal with all aspects equitably, and there are consequently always trade-offs and compromises which have to be made within the development of Durban (Moonsammy, 12/09/2011). These discourses and planning goals therefore require connection and collaboration in order to ensure that sustainability is not merely a rhetoric, but is practically pursued.

6.1.2 Policy aspects of the city's development

Planning within Durban is governed by a number of policies and plans which have been formulated and control how the city is managed. This package of plans includes the Long Term Development Framework (LTDF); the Integrated Development Plan (IDP), which has a focus on development sustainability and integrated space; and the Spatial Development Framework (SDF) which incorporates four spatial development plans for the city, including the Central Spatial Development Plan (CSDP), which focuses on central Durban (Sim, 30/04/2010). A brief overview was provided of these in Chapter Four, and this section will present a more in depth review; highlighting aspects of urban regeneration and sustainability which are relevant to this study.

LTDF and Imagine Durban

The 2001 LTDF identified a set of development challenges faced by the eThekweni Municipality that need to be addressed both in the short and longer term. Some of these challenges include: creating economic growth, jobs and income; alleviating poverty; developing our people; ensuring a safe and secure environment; and striving for sustainability (eThekweni Municipality, 2001; Nel and John, 2006). The LTDF therefore highlights the crucial role which urban regeneration has to play in the city, as well as the importance of sustainability. The LTDF also identified a number of phases which the city would like to achieve, with the long term goal being that of creating a sustainable city (eThekweni Municipality, 2001).

Imagine Durban, as noted in Chapter Four, is a project on integrated, long-term planning, and is specifically focused on incorporating sustainability into the city. The LTDF and Imagine Durban process therefore have a clear focus on creating a more sustainable city in the long term, highlighting the emphasis which the city is placing on sustainable development and sustainability. There is also an emphasis on urban regeneration as an important aspect required in the development of the city in both of these documents.

IDP

The eight point plan, which is a major focus of the IDP and was outlined in Chapter Four, involves the implementation of a number of programmes and projects which provide a basis for the type of development which is occurring in the city. Table 6.1 illustrates some of these programmes which are significant in terms of this study, as they illustrate the incorporation of urban regeneration and sustainability elements within the planning of Durban.

Table 6.1: Some of the relevant programmes of the Eight Point Plan

Plan	Programmes
One	Developing a sustainable & integrated spatial planning system; ensuring sustainability of the natural resource base; and developing a sustainable land use system
Two	Stimulation of sectors that promote investment and economic growth, and create jobs Supporting and growing tourism and related industries, promoting the municipality as a lifestyle destination, and a strategic focus on sports events Identification of appropriate projects, including the Kings Park Precinct Project; and managing the informal economy: street trading and retail markets
Three	Implementing an effective public transport plan; creating sustainable public spaces; management guidelines which target economic, social and environmental benefits are being applied within urban renewal
Four	Developing and implementing a water quality monitoring system; improving air quality management systems; and the development of a climate change adaptation strategy
Five	Developing the city as a smart city, in order to cope with current and future challenges
Six	Preservation and management of heritage assets; and creating opportunities to promote the development of sport and recreation within communities
Seven	Formulated to achieve attributes of good governance, including accountability, responsiveness, management innovation, public-private partnerships and citizen participation
Eight	Include budgeting according to IDP priorities; programmes to grow and diversify revenues and ensure sound financial management; energy efficiency programmes, renewable energy programmes and climate change programmes

(eThekweni Municipality, 2011).

The programmes within these eight plans highlight the focus which the city has on promoting a more sustainable city and improving conditions for all of its citizens, as well as pursuing the goals of urban regeneration. The social, ecological, economic and governance aspects of sustainability are included in these plans, with emphasis on programmes which can lead to improvement in all of these dimensions. Sports events are highlighted as a strategic focus of increasing tourism, and enhancing the image of the city; the need to manage the informal economy, particularly street trading and retail markets is noted; and the preservation and management of heritage assets is explicit in these plans (eThekweni Municipality, 2011). These are important as they cover aspects of the three mega-projects investigated in this study.

The IDP also contains a set of value filters which were introduced to preserve the meaning of the set of principles and development values which were adopted. These then filter every programme, project and initiative in terms of the values of sustainability; an economically successful city; poverty reduction; a smart city; a caring city; and a democratic and equal city (eThekweni Municipality, 2008). These value filters further highlight the role of urban regeneration and sustainability in Durban.

From this analysis of the IDP, it becomes clear that the city is focused on a number of main goals and strategies which form part of an urban regeneration strategy, including promoting the city as a tourist destination, creating jobs and enhancing economic growth. Sustainability is also an important aspect which is evident in the city’s development plans, as the need to sustain growth and development is acknowledged.

CSDP

The CSDP is the development plan for the Central Spatial Region (CSR) of eThekweni, within which the three mega-projects are situated. It is based upon a number of SDF principles which guide the way in which development should occur in the city, and each of these principles incorporate ways in which they may be achieved. Table 6.2 presents these principles, as well as some of the ways they may be achieved which highlight urban regeneration and sustainability.

Table 6.2: SDF principles which guide the CSDP

SDF principles	Achievement
Promotion of an equitable city	Redressing imbalances in the location of employment opportunities; promoting integration; making the city work better for the disadvantaged; and providing adequate, accessible and affordable housing opportunities
Promotion of an efficient city	Promoting more compact development; optimising development in areas of greatest opportunity; encouraging effective use of infrastructure and facilities; promoting cost effective movement systems; and promoting accessibility
Promotion of a sustainable city	Promoting optimal use of remaining land opportunities; promoting the inherent value of the natural and built environment and introducing environmentally sensitive management of development; alleviating environmental health hazards; and retaining and enhancing positive qualities and productive assets of the Durban Metropolitan Area

(eThekweni Municipality, 2009).

The identification of strategic spatial investment areas at a metropolitan level highlights the areas that can play an important role in promoting spatial principles. The CSDP identifies a number of areas which are covered by a range of projects and initiatives, and require attention and linking to other spatial elements in order to realise the opportunities they present (eThekweni Municipality, 2009). These include a number of development priorities which are important in terms of this study as they reflect elements of urban regeneration and sustainability, such as the promotion of the city as a commercial and tourist gateway; protecting the qualities of the existing built and natural environment; identifying places and elements of historical, cultural and natural significance, and ensuring their maintenance and enhancement. These areas further include ensuring that tourism enhances the quality of the environment and is undertaken in a sustainable manner, and that other competing uses are managed, in order to balance physical, social and economic benefits; and maintaining infrastructure and services, in order to maintain and generate economic opportunities (eThekweni Municipality, 2009).

Major points of focus in the CSDP are environmental sustainability and quality of life. The vision for the CSR therefore requires that physical development balances and integrates a social needs-based approach with an economic opportunity and an environmentally driven approach. “The challenge is thus to ensure spatial development addresses areas of need and opportunity in a way that promotes the relationship between the physical environment (natural and built) activities and people in an efficient, equitable and sustainable manner” (eThekweni Municipality, 2009: 41). Sustainability is therefore once again highlighted as an important component within the CSDP.

The CSDP further highlights tourism as one of the most important components of the economy, and has identified a number of tourist and recreation nodes, which play a crucial role in stimulating economic generation through earning tourism related revenue. The Moses Mabhida Stadium and the King’s Park Precinct were identified as major tourism destination points which will attract an influx of local and foreign tourists, and possibly major forthcoming events such as the Olympics and Commonwealth Games. The Point Waterfront Regeneration Precinct was also identified as a major flagship tourist attraction within the region, as it is an attempt to extend the city’s fabric, as well as to become a significant, well-defined addition to the city (eThekweni Municipality, 2008). These were also identified as strategic spatial investment/ priority areas; as well as regeneration and urban management in the inner city, which is driven by iTRUMP, which was involved in the proposal for the Warwick Mall (eThekweni Municipality, 2009). Each of the three identified mega-projects were therefore specifically targeted within the development and urban regeneration strategies of Durban, highlighting their important role in the city.

The CSDP consequently highlights urban regeneration as a major element of eThekweni's urban policy, and an array of initiatives such as the three mega-projects which have been investigated, are implemented to meet this goal. Environmentally sustainable development has also emerged as an important element of urban policy, and is emphasised in this plan, as well as in the SDF.

Sim (30/04/2010), a former planner in the Municipality, identified that the main concepts and discourses which are evident in the city's policy documents are integration, densification and the pursuit of a sustainable city; and there is therefore a parallel process of planning and sustainability within the city. However many elements are not always well aligned to sustainability, and the way in which sustainability is filtered down into planning and specific projects is not always overt (Sim, 30/04/2010). It is suggested that sustainability should underpin each spatial development plan, and that the biophysical environment should be the first layer of framework planning as it needs to be protected and enhanced (Sim, 30/04/2010). This study is focused on exploring the relationship between urban regeneration and sustainability in the city, through the lens of mega-projects, and will therefore investigate whether sustainability has filtered down into three specific mega-projects.

Urban regeneration and sustainability have thus both been identified as vital components of policy and planning within Durban. This chapter will now focus on themes which were identified concerning the role of urban regeneration in the development of the city, particularly through the strategy of mega-project implementation; and the shift towards the incorporation of sustainability. Chapter Seven will then reflect on the incorporation of sustainability within the city's urban regeneration, through the investigation of mega-projects.

6.2 Development, growth and urban regeneration in Durban

There is a contradiction in terms of the development goals of Durban as a result of the city's position within a developing world context, as discussed in Chapter Four. On one hand it is responsible for providing housing and services to the poor; while on the other it is attempting to satisfy international and globalization imperatives, and trying to create a more marketable city. Thus in the recent past the city has tried to balance these two conflicting imperatives in development processes (Foster, 05/05/2010).

This is evident in recent development within the city, as up until 2010, the city was delivering approximately 15 000 -16 000 low income housing units per year, which was the highest number in any city in the country; as well as providing services such as electricity and water supply to

poor households (Sutcliffe, 2009; Moonsammy, 12/09/2011). Simultaneously, in the last ten years, the city reached a “tipping point” in terms of development (Moonsammy, 12/09/2011). According to Moonsammy (12/09/2011), the city was on a particular course where there were not many significant changes occurring; and then a number of considerable shifts and changes took place in the city, including extensive growth (Moonsammy, 12/09/2011), and a “refocus on re-energising the city as a different place” in terms of regeneration (Iyer, 03/08/2011). Scott (22/04/2010) highlighted that this recent development has had a strong pro-growth focus, and is associated with neo-liberalism. Urban regeneration and economic growth has thus become a dominant strategy within the city’s planning and development within the last decade, and it is consequently important to explore the drivers behind this in order to gain an understanding of what is occurring within urban processes in Durban.

6.2.1 Drivers of development and urban regeneration in the city

A number of factors have contributed to this pattern of development and urban regeneration which appears to have emerged within the city. Moonsammy (12/09/2011) identified a number of important factors which have been driving development, including growth within the wider economy, the private sector and the property boom, the King Shaka International Airport which has pushed the growth path further north, and the presence of a number of dominant landowners who respond to the market. Maharaj (11/07/2011) also emphasised the role of ‘tenderpreneurs’, which are groups of individuals who are closely aligned with the ruling party, in the development of the city. The tenets of the Reconstruction and Development Programme (RDP), and backlogs in provision, have also led to subsidised housing development occurring within the city (Moonsammy, 12/09/2011), once again highlighting the two imperatives which the city is addressing.

Competition and the neo-liberal growth agenda

Increased competition, and the consequent need to compete with other cities, such as Cape Town and Johannesburg, as well as on the continent and in the wider global context, has also played a role in driving development and urban regeneration within the city (Moonsammy, 12/09/2011). Durban is thus attempting to market itself, and to integrate into the global economy, secure direct foreign investment, and boost economic growth; contributing to a specific development path of regeneration (Scott, 22/04/2010). Scott (22/04/2010) suggested that the incorporation of such strategies may be in response to the 2001 Monitor Report which focused on the discourse of neo-liberal growth in terms of city development, as well as emphasising the trickle down benefits for the poor which such development has the potential to provide. Each of the mega-projects in this

study appear to fit within this neo-liberal growth agenda which has pervaded much of the city's planning and development.

The 2010 FIFA World Cup

The 2010 World Cup was highlighted by a number of respondents as another driver of development and regeneration in the city; playing a role in the construction of the Moses Mabhida Stadium, as well as upgrades of infrastructure along the beachfront, in Warwick Junction, and other areas of the city (Savides, 2009a; Moolla, 25/08/2010; Robbins, 22/04/2010; Scott, 22/04/2010; Iyer, 03/08/2011; Moonsammy, 12/09/2011). In Iyer's (03/08/2011) opinion, 2010 was a "huge milestone", resulting in the biggest injection of development in the city. He notes that since 2006, there has therefore been an increased focus on investment, in particularly the public environment and public installations in the city (Iyer, 03/08/2011). The World Cup played an important role in each of the mega-projects of this study, as it drove the construction of the Moses Mabhida Stadium, and played a role in the planning of the proposed Warwick Mall, as strategies of urban regeneration. However, the focus on the World Cup planning resulted in a deceleration in the progress of the Point Development as efforts and resources were redirected to other projects.

The role of the local state in driving development and regeneration

In recent years, the development landscape within the city appears to have been primarily driven by the local state, particularly under the leadership of the previous city manager, Mike Sutcliffe, and the previous Head of the Strategic Projects Unit (SPU), Julie May Ellingson (Scott, 22/04/2010; Sim, 30/04/2010; Iyer, 03/08/2011). The SPU has played a major role in development in the city, as it was formed to drive special and strategic projects, and has driven economic development including the beachfront upgrade, and the Moses Mabhida Stadium and its precinct. iTRUMP has also played a role in driving development from an urban renewal point of view, through addressing the public land upgrade, attempting to improve confidence in the inner city, addressing the deteriorating buildings within the city, and influencing owners to regenerate their buildings by offering tax incentives in terms of Urban Development Zones (Moolla, 25/08/2010; www.durban.gov.za). iTRUMP therefore plays a significant role in the Point Development, and would have been influential in the proposed mall development.

Although some of the projects which are being undertaken are driven by national government, which presents the local government with clear imperatives concerning what they require; other projects are developed by the city and are based on their decisions regarding the development

path they wish to follow (Robbins, 22/04/2010). Iyer (03/08/2011) noted that the public sector has been the most dominant in influencing development in the inner city, and that in his career he has not seen any other city leadership invest as much in changing the face of Durban (Iyer, 03/08/2011). This is illustrated in the choices which they have made, as all three of the projects investigated in this study were driven by the local state, as opposed to being undertaken by the national government. The Point Development and Warwick Mall were both planned through public-private partnerships involving the local state, and the decision to build a new stadium for the FIFA World Cup was taken at a local level.

Development and urban regeneration are thus being driven by a range of factors, and are predominantly being driven by the city through the implementation of a number of pro-growth regeneration strategies. Durban has consequently witnessed a number of significant changes within its landscape in recent years.

6.2.2 Changes in the Durban landscape: evidence of urban regeneration

In the last ten to fifteen years there have been some prominent changes within Durban, including an increase in residential development and retail due to the property boom. Tongaat Hullet Development, which is a dominant land owner has become a property developer, and played a significant role in the Durban north region in projects such as Cornubia, and in the inner city in endeavours such as the redevelopment of the Point area. This serves to highlight the role of the private sector in public-private partnerships. There has also been an increased focus on investment, particularly in the public environment; and the development of the new airport, which has been on the agenda since 1972. Further development includes uShaka Marine World; the development of the International Convention Centre (ICC) and a number of shopping centres, which have generated some positive externality effects; the development of gated estates; investment in infrastructure, road upgrades and public transport; and increases in port activity which has led to the current plans for the expansion of the port (McCarthy, 2000; Todes, 2000; Breetzke, 2009; Sim, 30/04/2010; Iyer, 03/08/2011; Maharaj, 11/07/2011; Moonsammy, 12/09/2011). There have therefore been a number of significant changes in the landscape of the city, many of which are highly conspicuous, and a number of which have not been as visible.

Development in the city

During the last five years, private sector projects, such as the Point in particular, have been impacted by the recession, which resulted in a loss of confidence in markets and the economy. This resulted in the bulk of construction, building and investment being public sector driven,

particularly in the inner city (Iyer, 03/08/2011). Moolla (25/08/2010) emphasised that the face of the inner city has changed in recent years, with the revamping, restructuring and renovation of many existing buildings; while another aspect of development in the inner city has involved the movement of businesses out of the area due to perceptions of “crime and grime” (Todes, 2000; Moolla, 25/08/2010).

Another change which is evident is that there has been an increase in informality in the city, in terms of trading, land use, buildings and settlements. According to Moonsammy (12/09/2011), it has been difficult “for people and even city officials to accept that they have to work with informality and give recognition to it”. However as Durban is situated in a developing country, informality plays an important role, and it requires efficient management and acceptance (Moonsammy, 12/09/2011), as well as inclusion within urban regeneration strategies. The proposal for the Warwick Mall therefore played an important role in the plans for urban regeneration which included the city’s informal economy.

The development in the inner city cannot be viewed in abstraction from what is occurring in other areas of the city. Development has also been edging out to the South, with projects such as Harbour View and Galleria; and particularly to the North, which has seen the significant development of the Gateway commercial sector, as well as projects such as Riverhorse Valley and the new Dube Trade Port (Breetzke, 2009; Moolla, 25/08/2010; Maharaj, 11/07/2011). According to Maharaj (11/07/2011), this is representative of the mobility of capital, as capital is leaving the inner city and moving to other areas. As opposed to growth in the inner city which has been public sector driven, the growth in areas such as Umhlanga has been predominantly driven by the private sector (Iyer, 03/08/2011). It is now important to look at which other precincts or areas require regeneration and capital investment in terms of development (Moolla, 25/08/2010).

6.2.3 The future focus of development

Urban regeneration also features prominently in the future focus of Durban. In the next few years, the city will be focusing on development that creates jobs, particularly in terms of industrial development; the port expansion and its associated benefits for the city; building on tourism investments, such as the Kings Park Precinct; enhancing the manufacturing component of the city; and promoting a general investment in confidence in the city. Densification, the provision of public transport and associated development; promoting green economies; energy efficient development; mitigation of climate change; responding to housing backlogs; and the drive of

development to the North, including the Dube Tradeport and Cornubia are further areas which the city will be focusing on (Sim, 30/04/2010; Moonsammy, 12/09/2011).

Urban regeneration has thus been identified as a significant aspect of planning and development in the city; and from the above discussion, it can be ascertained that large scale projects appear to play an important role within the city's urban regeneration strategies. This is consistent with Swyngedouw *et al's* (2002) assertion that mega-projects are one of the most visible and influential urban regeneration strategies which are pursued by contemporary cities in the context of the prevailing competitive landscape.

6.3 Mega-projects and their role in urban regeneration

The third theme which was identified through the research is therefore the profusion of mega-projects within the city's development and urban regeneration. After the introduction of democracy in 1994, the focus of the city was on institutional reform and restructuring, and establishing the policy context and legislation. The city was therefore growing at the pace and will of the private sector, and growth was thus incremental and dependent on the economy. The last ten years however have been much more assertive, and a stronger institution has emerged (Robbins, 22/04/2010; Iyer, 03/08/2011), whereby "there is someone who is saying let's make all of these big things happen now" (Iyer, 03/08/2011). There has thus been an increased focus on large scale projects which the municipality believe will have a metropolitan wide impact, including the Point Waterfront and stadium precinct (Robbins, 22/04/2010).

Consequently, it appears that there is a focus on mega-project development within the city. Scott (22/04/2010) highlighted that it is "evident on the Durban landscape that the city has been experiencing widespread change, as huge pro-growth developments have become very visible, emerging particularly in the central city". There is thus a pro-growth landscape and a strong idea of neo-liberal growth evident in development in Durban; and mega-projects, such as the three which are the focus of this study, have been playing a crucial role in the city's regeneration. The three projects in the study have been identified as mega-projects as they reflect the purposes, and many of the criteria upon which such projects are defined; although there may not be consensus on this classification.

Foster (05/05/2010) noted that although Durban does not necessarily meet international criteria in terms of the money spent on what are considered mega-projects, there are mega-projects evident in the city if they are defined in terms of how much of the city, regional or national budget is

allocated to them. She also stated that in terms of the city's expenditure, a large amount of capital is being channelled into these large scale projects (Foster, 05/05/2010). Another respondent emphasised that this mega-project agenda coincided with Mike Sutcliffe's term of office (Maharaj, 11/07/2011), once again emphasising the role of the local state in development and urban regeneration.

According to Moonsammy (12/09/2011) however, Durban is "not really in the game of mega-projects". She asserted that they do not have a particular focus or discourse on large scale projects that change the landscape, as they do not have the funds, or a specific agenda relating to this. Large projects are rather considered based on demand and their relevance for the city; whereby "some might be smaller but equally important, others might be bigger but sufficiently important" (Moonsammy, 12/09/2011). The focus is therefore rather on how to grow and sustain the city, and create a balance, as spending resources only on "delivering a city to the lowest denominator" is not conducive to the long term sustainability of the city (Moonsammy, 12/09/2011).

6.3.1 Mega-projects on the Durban landscape

As has been identified, in recent years Durban has been experiencing the development of a number of large scale or "mega-projects", depending on who is defining them. These have included the King Shaka International Airport; the ICC, which was identified by one respondent as the first pro-growth project (Scott, 22/04/2010); uShaka and the Point Development; the inbound and outbound flyovers over Warwick Junction; Suncoast Casino; Moses Mabhida Stadium; the upgrading of the "Golden Mile" along the beachfront; Riverhorse Valley; Bridge City; upgrading of the roads for 2010, such as the Inkhosi Albert Luthuli Highway (southern freeway); and the planned expansion of the port. Many of these projects have been undertaken as part of a neo-liberal growth agenda, and some were a result of planning for the 2010 World Cup as noted in 6.2.1. Many of them are also being undertaken through public-private partnerships, which involve an array of actors from the public and private sectors (Foster, 05/05/2010; Moolla, 25/08/2010; Robbins, 22/04/2010; Scott, 22/04/2010; Sim, 30/04/2010; Iyer, 03/08/2011; Maharaj, 11/07/2011; Moonsammy, 12/09/2011), including the proposed Warwick Mall and the Point Development.

From the above discussion it can be ascertained that whether or not the Municipality has a specific 'mega-project agenda', there has been an increase in their planning and implementation within the city in recent years, and they appear to be at the forefront of development, driving further growth and inflicting dramatic change on the landscape of the city. Many of them have

however met with criticism and conflict, resulting in many of them being surrounded by controversy.

6.3.2 Criticisms of Durban's "mega-project focus"

There has been some criticism of the development agenda of the city, and the focus on mega-projects from a variety of people. Maharaj (11/07/2011) asserted that Durban has gambled with mega-projects over the past ten years and "gambling is a high risk activity under any conditions or circumstances". As the "mega-project, big business agenda" forges ahead, the poor and the disadvantaged are being pushed out of the city; and there has been "a rhetorical lip service that these projects will benefit the poor and disadvantaged, and the reality is that they do not" (Maharaj, 11/07/2011). Maharaj (11/07/2011) further stated that:

"There is an obsession in Durban about being world class, and for me, it means a subliminal disconnection from Africa, and a hankering to become like New York or London or Amsterdam. In this focus on world class, we forget the history, the legacy of apartheid, and the agenda to create a city that is fair, just and more credible".

Thus, while post-apartheid restructuring was posited on fairness, justice and addressing inequalities of the past; many of the projects in Durban appear to reinforce the social, spatial and economic inequalities of the past, rather than challenging them (Maharaj, 11/07/2011). In Maharaj's (11/07/2011) opinion, it could in fact be argued that, despite Durban's slogan of becoming the most caring city in Africa, it is one of the most uncaring cities in terms of the way it deals with issues relating to the poor and disadvantaged, bypassing very basic aspects of service delivery.

Scott (22/04/2010) stated that she was concerned about the real intent driving development in the city, and that the "acceptance of the neo-liberal growth paradigm is questionable" as many of these projects are exacerbating social polarisation by making the rich richer and the poor poorer. Foster (05/05/2010) questioned whether channelling money towards these mega-projects would give you the best return on your money, and speculated that it should rather be spent on something more developmental; while Albert (20/04/2010) asserted that he found the development of Durban very disappointing, as within the planning climate gestated by Mike Sutcliffe, tender norms and participation which are meant to ensure a fair tender process and effective participation have been circumvented in development planning, including in the case of mega-projects.

It is therefore evident that the current development path in Durban, with a focus on mega-projects, is surrounded by uncertainty and debate. Hence it is crucial to gain an understanding of the reasons behind their implementation as well as important aspects of the role they may play in development in the city. The following two themes are related to these aspects, and provide further insight regarding the proliferation of these projects. Each of these themes has distinctive features, but they are also linked in certain ways in their role in urban regeneration and development of the city. The first one examines mega-projects as locally strategic, and the second explores mega-projects as tools of entrepreneurialism. Some projects are developed based on elements of being locally strategic, some are focused on the elements of entrepreneurialism, and others may combine elements of both.

6.4 Mega-projects as locally strategic

Some mega-projects are considered to be locally strategic, as they are developed to serve a strategic purpose at a city level, through improving the local environment. These projects are generative, in that they are responsible for unlocking further development or investment for the city. They thus have a financial imperative of attracting or generating revenue, and help a city to meet their strategic goals (Foster; 05/05/2010; Robbins, 22/04/2010; Maharaj, 11/07/2011; Moonsammy, 12/09/2011), thereby shaping the future of the city (Kennedy *et al*, 2011). A locally strategic project thus has widespread benefits; is long term and visionary; addresses a pertinent, immediate issue; and plays a role in restructuring part of the city. Size is not always a factor in determining whether a project is strategic in a city, as some smaller scale projects are also able to provide locally strategic outcomes (Foster, 05/05/2010; Iyer, 03/08/2011).

The intention of locally strategic projects is primarily to transform or enhance an area of the city, starting with a project which has stimulative effects on the rest of the area; promoting further change and development; as well as providing trickle-down effects, emphasising an element of pro-poor growth. They therefore predominantly intend to have an effect at a local scale, with goals of creating a more competitive or attractive city being secondary.

6.4.1 Catalyst for further development in the city

The Moses Mabhida Stadium has a locally strategic component, in that it forms the catalyst for creating a sports and recreation hub or precinct around the stadium, thereby promoting further development in the area. The integration of the stadium to the beach also allows the project to feed into the bigger development of Durban, and to generate a number of tourism related spin-offs for the city (Scott, 22/04/2010; Sim, 30/04/2010).

It thus creates a new installation within a zone of the city which is completely underutilised and fragmented by a range of road corridors and open space corridors; as it is now viewed as the beginning of a potential sports precinct (Iyer, 03/08/2011). The stadium is therefore viewed as the initial step in a longer term plan for the city, which highlights the unique facilities which are present, and will play a critical role in what the city does in the future (Robbins, 22/04/2010).

6.4.2 Upgrading and regeneration of an area within the city

The previously proposed Warwick Mall is considered to be primarily locally strategic, as it formed part of a plan to upgrade the inner city. The mall formed part of a transport planning exercise, which included plans for a taxi rank on top of the mall which would decongest the traffic in the city, while simultaneously re-cementing the idea of Warwick as being the main hub of public transport (Jenvey, 2008; Comins, 2009; Kockott, 2009b; KwaZulu-Natal Provincial Government, 2009; Moolla, 25/08/2010; www.l2b.co.za).

The plan for the Warwick Mall was based on a number of goals and principles for regeneration of the Warwick area, in an attempt to capture the benefits of that specific location (Scott, 22/04/2010). The intention was to improve the functioning of Warwick, in terms of the movement of people and the conditions in which they trade; to incorporate better services; and to upgrade an area of the city which was considered “a blotch on the landscape”; as well as capitalising on the fact that it is an important transport node (Scott, 22/04/2010; Sim, 30/04/2010; Maharaj, 11/07/2011). The goal was therefore one of formalising the informal and contributing to urban renewal, while feeding into the broader development of Durban (Scott, 22/04/2010).

The mall would thus have had the potential to transform an area of the city which is considered unsafe and affected by urban blight, through converting the existing market area into commercial and retail space. This may have had further positive effects in the area, resulting in the regeneration of nearby vicinities. It would also be considered locally strategic as the Warwick market area has enormous cultural and historical significance, and replacing it with a mall would have resulted in a dramatic transformation of that space in the city, as well as other adjacent spaces.

The Point Development is also considered to be locally strategic, as it is intended to regenerate an area which has a history of decay (Maharaj, 11/07/2011) through an area-based regeneration and nodal development model. The rejuvenation of the Point is an important element of the city’s 2020 vision of establishing Durban as Africa’s most caring and liveable city; and it is viewed as a

catalyst for broader urban regeneration (Nel *et al*, 2003; Nel and John, 2006; Moonsammy, 12/09/2011; www.durban.gov.za). The Background Report of the Point Development highlighted that “the ‘Point Initiative’ was not an isolated project, but part of a broader strategy of the city to turn the economy, through regenerating an area of the Central Business District (CBD) that had severely deteriorated (Brink, n.d.). Consequently, it forms part of a strategy to regenerate a particular area of the city.

Iyer (03/08/2011) suggested that the Point is about creating a new image and waterfront product for the city, with clear underlying regeneration objectives. It is thus based on a number of ideas and principles, such as the promotion of economic growth within Durban; creating employment; attracting tourists and local citizens into the area; and re-imagining the city. It further aims to clean up an eyesore on the Durban beachfront; and promote urban renewal, through triggering private investment and development, and thus promoting wider benefits for the beachfront and associated downtown areas. It is also integrated into broader development within the city, through the link to the Moses Mabhida Stadium (McCarthy, 2000; Robbins, 22/04/2010; Scott, 22/04/2010; Sim, 30/04/2010; Iyer, 03/08/2011), thereby playing an important regeneration role at a city level.

The Point Development is also located on land which is unique, in terms of its location and its income generating potential; and this important piece of real estate has the potential to be part of an approach aimed at reviving the entire inner city. It may thus assist the city to function as a more efficient and sustainable urban space by utilising the available infrastructure to the optimum and avoiding excessive sprawl (Foster, 05/05/2010; Robbins, 22/04/2010; Iyer, 03/08/2011).

Each of these projects therefore incorporate elements of being locally strategic, thereby reflecting the implementation of urban regeneration within the city which is locally focused. The following section will discuss mega-projects as tools of entrepreneurialism, highlighting a global focus within the city’s urban regeneration.

6.5 Mega-projects as tools of entrepreneurialism

Entrepreneurialism was discussed in Chapter Two, and relates to the adoption of an entrepreneurial approach by cities, which involves the pursuit of innovative strategies aimed at the maintenance or enhancement of a city’s economic competitiveness in relation to other cities and economic spaces (Waley, 2007). Cities thus focus on competing for investment, and employ interventions with the intention of economically reinvigorating urban areas, allowing them to be more competitive within the global market (Barber and Hall, 2008; Scott, 22/04/2010).

Mega-projects form an important tool of entrepreneurialism as they play a vital role in urban regeneration strategies pursued by cities in search of economic growth and competitiveness, with their goals of generating growth, promoting cities to compete for investment, as well as achieving a range of economic, social and physical regeneration aims (Swyngedouw *et al*, 2002). Projects which form part of entrepreneurialist strategies are thus outward looking and have a global focus, as their primary agenda is attempting to position cities more competitively in the global economy. Each of the three mega-projects investigated in this study incorporate elements of entrepreneurialism to some extent, particularly the Moses Mabhida Stadium and the Point Development.

6.5.1 Enhancing the competitiveness of the city for tourism and investment

The stadium would be considered predominantly a strategy of entrepreneurialism, as it was developed on a number of principles and goals associated with enhancing the competitiveness of the city. The stadium was constructed for the 2010 FIFA World Cup, with one of its primary goals being to capture the benefits of being a host city; as well as aiming to position the city strategically internationally; while capitalising on the income generation potential of a new stadium (Foster, 05/05/2010; Scott, 22/04/2010). It also formed the focal point of demonstrating to the rest of the world that South Africa and its cities can host mega-events such as the World Cup (Foster, 05/05/2010), enhancing the potential for the city to compete for further such opportunities. The goals of the stadium were thus to connect and integrate Durban into the global economy; enhance the city so that it is able to effectively compete with other cities around the world for investment and tourism, demonstrating a boosterist agenda; as well as creating a magnet to attract people to Durban (Scott, 22/04/2010; Sim, 30/04/2010).

The possibility of using the stadium precinct as the focal point for bidding for the Olympics was also touted as a major goal of the city, thereby furthering a competitive agenda (Foster, 05/05/2010; Maharaj, 11/07/2011). This fed into the idea of building the brand of the city beyond 2010 as a sporting, eventing city. Sports eventing is a substantial market in the global arena, and Durban already takes part in events such as the Comrades Marathon, Dusi Canoe Marathon, and Amashovashova cycling race; and this type of precinct would have the potential to enhance the city's opportunities in this regard (Moonsammy, 12/09/2011). Beyond this, the stadium sets a path that the city has chosen to follow concerning positioning itself as an international standard sporting destination, with officials discussing notions such as the 'sports capital of Africa' or the 'southern hemisphere sports mecca' (Robbins, 22/04/2010).

One of the distinct logics evident in the Point Development is an aggressively competitive response to initiatives from other cities to attract international tourism and its associated benefits (Lootvoet and Freund, 2006; Sim, 30/04/2010). The incorporation of a ‘world class waterfront’ is thus a pro-growth development aimed at enhancing the city’s competitive position for investment and tourism globally, displaying an entrepreneurial agenda (Robbins, 22/04/2010; Scott, 22/04/2010; Brink, n.d.). According to Deputy Mayor, Logie Naidoo, the vision is for the Durban Point Waterfront to become the prime tourist destination for the city, and it is expected that the entire development will create huge interest both nationally and internationally (www.sailingkzn.org.za).

The original idea of the Point was for it to be a catalyst for the redevelopment of the inner city space, and the repositioning of Durban as a city; as well as helping the city to gather momentum to regenerate its tourism offerings. According to Robbins (22/04/2010), it has been incorporated into the city angling itself as a “tourism, sports destination”, and has therefore become a support enterprise to the bigger goal of becoming “the playground of the east coast of Africa”. The Point Development therefore has aspects of entrepreneurialism in its development, while it also embraces aspects of a locally strategic nature.

6.5.2 Becoming more attractive

The proposed mall would have formed part of an entrepreneurialist approach through showcasing to the world the ability of the city to transform a downtrodden area into a mall precinct. It was also linked to the World Cup and the development of the Moses Mabhida Stadium, as these provided the impetus for infrastructure and transport upgrading within the city, which was seen as contributing to ensuring that Durban is an internationally friendly travel destination, and a user-friendly city for visitors and residents (Jenvey, 2010).

The proposal for the mall was thus established on the notion of upgrading the transport infrastructure of Warwick Junction, thereby aiming to address economic, social and physical regeneration aims for the city. However, it is not considered to have the potential to increase the city’s global competitiveness to any large degree and is therefore judged only minimally as a form of entrepreneurialism.

The above discussion highlights that each of the three projects possess locally strategic aspects as well as forming part of an entrepreneurial approach. The Moses Mabhida Stadium has a locally strategic component secondary to forming part of an entrepreneurialist approach, as its main

focus was enhancing the competitiveness of the city; while the Point Development is both entrepreneurial and locally strategic, as it incorporates elements of both to an extensive degree. The proposed Warwick Mall would have been considered predominantly locally strategic as its focus was on the improvement of a particular area in the city. Projects may therefore be locally strategic, entrepreneurial or incorporate elements of both; and these themes therefore have distinct features, but are also connected in their role in planning and development.

Flagship and prestige projects

The projects which incorporate elements which are locally strategic appear to be similar to flagship projects, discussed in Chapter Three, as they are aimed at promoting growth in specific areas, and highlight the strategic location or unique facilities which are present in a city (Engelbrecht, 2004). In the same way, projects which incorporate elements of entrepreneurialism appear to be synonymous with prestige projects which are aimed at enhancing the image of a city; encouraging and attracting investment; generating economic spin-offs; and changing the perceptions of national and international business decision-makers and visitors (Loftman and Nevin, 1996; Engelbrecht, 2004).

The previous two themes have highlighted the important role which each of the mega-projects play within urban regeneration and development in Durban. They also provide an idea of the strategies which the city has been implementing in planning within the last decade. The role of urban regeneration in the development of the city has therefore been discussed, and it is now pertinent to explore the role of sustainability, in order to determine whether these two agendas are conflicting or mutually supportive within the planning and development of this contemporary city.

6.6 Sustainability in Durban

Along with the changes which have been occurring in terms of urban regeneration within the city, there has been a growing realisation of sustainability as being part of mainstream development planning, with some shifts in the way people are thinking about it (Iyer, 03/08/2011). Sustainability is a meaningful and important concept for Durban, as it is critical to consider the consequences of decision-making, and to ensure that development contributes to a more sustainable city in the long term (Moolla, 25/08/2010; Robbins, 22/04/2010; Iyer, 03/08/2011; Maharaj, 11/07/2011; Moonsammy, 12/09/2011). It is thus important for this crucial normative concept to be conscientiously applied and integrated into development and planning initiatives in the city. This is however difficult to achieve due to its complexity.

6.6.1 Difficulties in achieving sustainability

Sustainability concerns balancing social, environmental and economic needs and demands within the city, and is consequently difficult to achieve, particularly as there are different systems of decision-making. Sim (30/04/2010) also highlighted a number of challenges within public processes, including that the various interests which emerge in these processes do not always represent the most sustainable paths, and therefore involving people in a process does not guarantee that there will be a sustainable outcome. Another challenge is that a ‘sustainable’ solution for some will not be sustainable for others, as they may have vastly differing views (Sim, 30/04/2010).

Realistic and transformational sustainability is consequently difficult to achieve, and a capitalist society makes strong sustainability unlikely (Sim, 30/04/2010; Moonsammy, 12/09/2011). The context of the city’s social history provides further challenges to its achievement (Moonsammy, 12/09/2011), as there are a range of competing priorities which need to be addressed, as discussed in Chapter Four. Sustainability is therefore something to aspire towards, rather than being an end goal; and it provides principles which may guide decision-making to ensure a more sustainable future (Sim, 30/04/2010; Moonsammy, 12/09/2011).

Sim (30/04/2010) suggests that as long as the city is striving to be more environmentally sustainable in terms of managing the biophysical environment, and trying to consider the needs of people, and the impacts on the lives of individuals more in decision-making, sustainability will be strengthened. The economic bottom line is however too often the one that is given the most consideration (Sim, 30/04/2010), leading to the other dimensions of sustainability being sidelined in decision-making. This consequently presents a further challenge to the city’s pursuit of sustainability.

6.6.2 Evidence of the incorporation of sustainability, yet to what extent?

Despite its complexity, sustainability is a concept which is being incorporated into the city at different levels, and to varying extents. The incorporation of sustainability is evident in some of the city’s planning and policy, as illustrated in 6.1.2; as well as in specific projects. There have also been successes with regard to the ecological dimension, such as the protection of wetlands and sensitive areas, as well as the development of the city’s open space system (Foster, 05/05/2010; Robbins, 22/04/2010). According to Robbins however (22/04/2010), although the language of sustainability is present in a large amount of what the city does, it consistently acts in ways that “would be hard pressed to be considered sustainable”, and is not necessarily always as

articulate or as strident as it could be in terms of being accountable to demands for greater sustainability.

Sustainability is therefore potentially seen in a mechanistic way in the city, in terms of “we have to do this therefore we need to have some open space, plan for some public transport, have integrated housing, and so on” (Robbins, 22/04/2010). There is thus a parcelling off of commitments; which is insufficient in the longer term for the city. There also appears to be a lack of a strong unified sense of where the city needs to go, and how it can most effectively meet challenges; resulting in many decisions being made, and activities progressing, in a very isolated way (Robbins, 22/04/2010). A further concern is that many of the current projects are being rushed through due to political pressure and time constraints, and they are consequently unsustainable in the long term (Foster, 05/05/2010; Scott, 22/04/2010).

Robbins (22/04/2010) advises that continually referring back to issues of sustainability is an important element in trying to correct the problems in the city, and Iyer (03/08/2011) suggested that everybody should be working within a sustainability framework. Resultantly, it becomes vital to determine the relationship between sustainability and development in Durban. This project achieves this through the investigation of the incorporation of sustainability within urban regeneration in the city, through the lens of mega-projects.

6.7 Summary

Urban regeneration and sustainability have been determined to be critical aspects within the policy and planning context of the city, as well as evident within the dominant discourses. Urban regeneration has been identified as an important form of development within Durban, and the city has consequently witnessed many changes in its development and planning landscape. One particularly notable change has been the increasing implementation of mega-projects as a strategy of urban regeneration. These projects, including the three which are the focus of this study, have been undertaken in a locally strategic or entrepreneurialist manner, each providing particular benefits for the development of the city; or have combined elements of both in their development. The concept of sustainability, although evident in the city’s policy, has proven difficult to achieve in practice and continues to face many challenges. There is therefore a need to ensure that it is incorporated within the development landscape of the city, including urban regeneration strategies.

The next chapter explores the incorporation of elements of sustainability within the development of mega-projects in the city of Durban. Sixteen sustainable city principles have been developed which incorporate social, economic, ecological and governance aspects of sustainability. The characteristics and role of each of the three chosen mega-projects are thereafter explored in terms of each of the principles in order to determine their incorporation of sustainability. The incorporation of sustainability in the city's urban regeneration strategies is subsequently reflected on.

Chapter 7

Mega-projects and sustainability in the city

This chapter explores the three mega-projects in relation to sixteen sustainable city principles that have emerged from the literature as vital framing principles. This is done in order to determine the extent to which sustainability is being incorporated in to the planning and development of mega-projects in the city of Durban, and what this means in terms of the relationship between the two agendas of urban regeneration and sustainability.

7.1 Sustainable city principles

In order to create a sustainable city, a balance between social, economic and environmental aspects is required (Iyer, 03/08/2011; Moonsammy, 12/09/2011). Sustainability thus involves striving to be more sustainable in terms of the biophysical environment; increasingly considering peoples' needs, and the impacts on their lives in decision-making; and evaluating the economic viability of projects and plans (Sim, 30/04/2010). A sustainable city may be defined based on a number of sustainable city principles, some of which were presented in Chapter Two. In order to allow a determination of the extent to which sustainability is being incorporated within mega-project development, and thereby to what extent mega-projects are contributing to the achievement of a sustainable city, it is thus important to evaluate the three chosen mega-projects in terms of a set of core sustainable city principles.

These principles were developed from a variety of sources, including relevant literature, legislation, the interviews which were conducted, and the personal discretion of the researcher. Detailed tables and sections were produced containing an array of sustainable city principles and components (refer to Appendix B), and these were then condensed into sixteen core principles. The principles which were chosen represent the normative components of what constitutes a sustainable city; and include principles of sustainable development, sustainability, sustainable communities, sustainable urban design, and development principles which increase the success of mega-projects; as a sustainable city is determined by the elements which it contains. The Moses Mabhida Stadium, the previously proposed Warwick Mall and the Point Development (Point) are thus able to be explored in relation to these principles, which are listed in Table 7.1.

Table 7.1: The sixteen sustainable city principles

Creation of a place with a vibrant culture, where socialising, education, politics and commerce can take place	Ensure a city/ place is active, inclusive, safe and accessible
Maintain a sense of place and neighbourhood	Ensure social justice
Contribute to intergenerational and intragenerational equity	Ensure stewardship: long term regeneration vision
Ensure adequate community participation and democratic governance	Preservation of cultural and architectural heritage, distinctiveness
Promote diversity, vitality and choice	Ensure integration
Promote economic growth and employment creation	Ensure economic viability
Promote more sustainable and efficient forms of transport	Minimise pollution and waste; and maximise energy efficiency
Maintain ecological integrity	The reflection of principles for good “built environments”

These principles provide a normative framework pertaining to characteristics which cities should exhibit in order to become more sustainable. These may therefore be used to investigate mega-project development as an urban regeneration strategy, in order to fulfil the aim of this study; which is to determine the relationship between urban regeneration and sustainability in Durban.

7.2 Sustainable city principles and mega-project development

The following section presents the core sustainability principles and the ways in which these are reflected in the three mega-projects.

7.2.1 *Creation of a place with a vibrant culture, where socialising, education, politics and commerce can take place*

This principle includes the provision of facilities and local amenities that create a vibrant culture, enhance social interactions, and make city environments more pleasant, safe and valued by inhabitants; such as sport, recreational and community facilities (Satterthwaite, 1999; Lehrer and Laidley, 2009; Scipioni *et al*, 2009). The introduction of green, open, public spaces that benefit the community, such as public parks and gardens is also important; and it is vital to ensure that every person has sufficient area and quality of space (Couch and Dennemann, 2000; Scipioni *et*

al, 2009; Scott, 22/04/2010²). These open spaces increase environmental sustainability and contribute to the creation of a “green city”, as well as providing a recreation and meeting space for residents, facilitating social interactions, and thus contributing to social sustainability (KwaZulu-Natal Planning and Development Commission, 2010a).

Each of the projects incorporated the provision of facilities and amenities, such as those for recreation, including the sky car and big swing; sports; retail; education and culture at the stadium (Maennig and du Plessis, 2009; Savides and Attwood, 2009; Savides, 2010a³). Julie May Ellingson, former head of the city’s Strategic Projects Unit (SPU), stated that “we want activity here seven days a week” and “we want it to be used wider than the [2010] event” (Venter, 2009). The incorporation of such measures is consistent with Smith’s (2010) assertion that stadia are able to consistently attract visitors through being imaginatively designed as attractions; or supplemented with more participatory facilities. Plate 7.1 provides a picture of the sky car which forms part of the stadium development.



Plate 7.1: The sky car at the Moses Mabhida Stadium (www.mmstadium.com).

The proposed mall included transport facilities, through the proposed taxi rank; retail; trading and social facilities (Correia, 2009; Kockott, 2009a; KwaZulu-Natal Provincial Government, 2009⁴). Plates 7.2 and 7.3 show an artist’s impression of the mall, and the combination of facilities which were proposed. The Point Development incorporated retail, through various shops; recreation; education; culture and entertainment facilities and amenities (Iyer Rothaug Collaborative, 2003, cited in Gounden, 2010; Robbins, 2004b; Give uShaka, 2009⁵).

² Iyer, 03/08/2011.

³ www.cup2010.info; www.durban.gov.za; www.mmstadium.com; www.mosesmabhida.co.za.

⁴ Luthuli, 2009; Naran, 2009c; Sithole, 2009; Robbins, 22/04/2010; Saib, 2010c; Sim, 30/04/2010; www.abahlali.org; www.durban.gov.za.

⁵ Johnson, 2009; Gounden, 2010; eThekweni Municipality, 2011.



Plate 7.2: An artist's impression
(www.skyscrapercity.com).



Plate 7.3: An artist's impression of the mall
(Kockott, 2009a; www.skyscrapercity.com).

Public, open spaces have also been included in the design of each development. Iyer (03/08/2011) stated that Iyer Urban Design Studio, the lead urban designers for the Moses Mabhida precinct and the Point Development, ensured the creation of a well-considered, generous, expansive and carefully made public environment for both projects. This was achieved through the People's Park at the stadium, which is a landscaped central, green public area, with lawns, active spaces, promenades and cycle tracks; and through the inclusion of a range of public spaces and squares which add to the vibrancy of the area in the Point (Iyer Rothaug Collaborative, 2003, cited in Gounden, 2010; Iyer, 03/08/2011). Moses Mabhida Stadium won the President's award from the Institute of Landscape Architects at the Corobrik-ILASA Awards of Excellence in 2011 for a variety of elements, which included the creation of an accessible, well-made and generous public space system (www.worldlandscapearchitect.com). Public space also formed an integral part of the proposed mall in the form of Masigiye Square, a public space which was planned for traders (KwaZulu-Natal Provincial Government, 2009; www.durban.gov.za).

All of the projects have thus achieved steps towards this principle. However, according to architect Don Albert (Albert, 2009), it has become evident that many of the proposed intentions have not been realised at the stadium, and it has therefore not fulfilled its potential of being a critical part of the day-to-day life of the city. It has also been noted that Warwick Junction plays an important social function in the city, as "the heartbeat of the informal trading in Durban" (Kockott, 2009b), and is a convenient shopping precinct and transport node in its current state (KwaZulu-Natal Provincial Government, 2009; Dobson, n.d.; www.streetnet.org.za). It is thus uncertain whether the provision of facilities and open space by the mall would have improved what currently exists in that space. There have also been concerns that the development of a small craft harbour (SCH), and the associated eight to ten year construction period, will negatively affect a range of activities and facilities around Vetch's Bight which is already a public space of

active engagement (Iyer Rothaug Collaborative, 2006; Scott *et al*, 2006; Albert, 2009⁶). Plates 7.4 and 7.5 show the Point area, and Vetch’s Beach area where a number of facilities and activities currently exist.

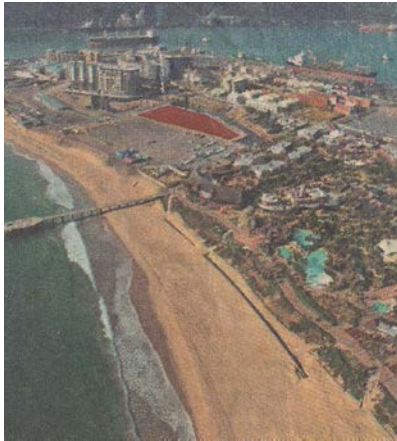


Plate 7.4: The Point
(Jasson da Costa, 2009).



Plate 7.5: The Point area, and some of the activities which occur there (Scott *et al*, 2006).

It is therefore evident that this principle has been incorporated into the development of these projects; however the extent to which it has been achieved in the stadium has not reached its full potential, while the provision of facilities, amenities and public spaces by the proposed mall and the Point may actually have a negative impact on the social spaces that already exist, as argued in the social assessment conducted for the Point area, and by several commentators surrounding the Warwick Mall (Scott *et al*, 2006; Robbins, 22/04/2010; Maharaj, 11/07/2011). The contribution to a sustainable city is therefore somewhat limited, but may be enhanced through measures which address these issues. It is consequently evident that elements of this principle are taken into account in the city’s planning and urban regeneration strategies, however the extent to which this is achieved is at times limited.

7.2.2 Ensure a city/ place is active, inclusive, safe and accessible

It is important for cities to be safe, socially cohesive, inclusive, accessible and active in order for them to be sustainable. Public access and safety for all are crucial components of a sustainable city, and should thus be ensured; while in order for spaces to be “active” or dynamic, they must be inclusive of all citizens; thereby encouraging socially mixed communities and allowing all

⁶ Vassilaros, 2009; Gounden, 2010; Clarke, 2011; Save Vetch’s Association, 2011; Brink, n.d.; Pravin Amar Development Planners and Common Ground, n.d.

members of the community to benefit (Satterthwaite, 1999; Agyeman and Evans, 2003; McCarthy, 2004⁷).

The stadium has been built in accordance with international safety and security measures, and the stadium and surrounding area are relatively safe (Savides and Attwood, 2009; Hennig, 2010; www.durban.gov.za). The safety of the proposed mall was somewhat in dispute, as it included a variety of measures to enhance the safety of traders and pedestrians, (Hanuman and Mchunu, 2009; KwaZulu-Natal Provincial Government, 2009; Sithole, 2009⁸), however there were concerns that crime would increase in the rest of the precinct (Robbins and Skinner, 2009; www.ddp.org.za). The safety of the Point Development is also uncertain, as although it has increased the safety of the immediate area, there are still safety issues, such as crime, evident in the downtown area which provides access to the Point (Scott *et al*, 2006; Johnson, 2009; Albert, 20/04/2010⁹).

With regard to access, the stadium precinct has been enhanced in terms of public access (Iyer, 03/08/2011). However it may ultimately not be that accessible to all people, and it is remote from the bulk of people who watch soccer (Robbins, 22/04/2010). The Warwick Junction area is currently accessible due to the range of public transport options available, and the inclusion of a taxi rank in the mall may have enhanced this access. Access at the Point has been enhanced as the public are able to walk around the majority of the area due to the incorporation of promenades and walkways (Brink, n.d.; www.durban.gov.za). There are however concerns that the SCH will result in a loss of public access to space and amenity in the Point area (Iyer Rothaug Collaborative, 2006; Scott *et al*, 2006; DAEA, 2009¹⁰).

The stadium and Point have both caused concern in terms of inclusiveness, as they are both considered to be exclusive, due to the cost of their associated facilities, such as the shops and entertainment provided around the stadium (Lamprecht, 2010; Scott, 22/04/2010). In the case of the Point, there are concerns that access and use of Vetch's Bight will be taken away from ordinary people and it will become elitist and exclusive, while the increase in property values will result in increased exclusion (Maharaj, 11/07/2011; Moonsammy, 12/09/2011; Pravin Amar

⁷ Ugwu and Haupt, 2007; Roberts *et al*, 2009; Scott, 22/04/2010; Iyer, 03/08/2011; Digby, n.d.

⁸ Moolla, 25/08/2010; Saib, 2010d; Dobson, n.d.; www.durban.gov.za.

⁹ Gounden, 2010; Scott, 22/04/2010; Pravin Amar Development Planners and Common Ground, n.d.

¹⁰ Johnson, 2009; Vassilaros, 2009; Gounden, 2010; Iyer Rothaug Collaborative, 2003, cited in Gounden, 2010; Scott, 22/04/2010; Iyer, 03/08/2011; Save Vetch's Association, 2011; Brink, n.d.; Pravin Amar Development Planners and Common Ground, n.d.

Development Planners and Common Ground, n.d.¹¹). Architect Don Albert noted that this “little bay seems very threatened by the land use now approved” as it is currently used by people from “all walks of life” (Albert, 2009). There is a consequent sense of injustice as it is felt that the space will be taken from ordinary people and used exclusively for the wealthy (Pravin Amar Development Planners and Common Ground, n.d.). These two projects are therefore active to a certain extent, as citizens do visit them and utilise the amenities they provide, however poorer members of society may be excluded. This social exclusiveness is a negative impact and criticism of mega-project development (Lungo, 2002).

It is uncertain how inclusive the mall would have been, as the accommodation of traders and the use of the market could not be assessed. Scott (22/04/2010) stated that it should not have become a dead space, but would have resulted in a more exclusive space being created; while Maharaj (11/07/2011) was of the opinion that if the market were to be moved, people would no longer have a reason to go to the area, thus making it less active.

Safety is therefore an issue which has been addressed in these projects, however safety is improved in the precinct where the development takes place, rather than enhancing the safety of the broader area and making it more accessible. Accessibility has also been enhanced to an extent, however this is limited to certain groups of people, resulting in these projects tending to be exclusive. This highlights the tendency of many mega-projects to be socially exclusive (Lungo, 2002); which consequently affects their ability to become more active spaces. The projects therefore incorporate this principle to a limited extent, resulting in a negative effect on their social sustainability, as well as their economic sustainability, due to their exclusiveness. There is consequently also a negative impact on the achievement of a sustainable city through these urban regeneration strategies in the city.

7.2.3 Maintain a sense of place and neighbourhood

Sustainability recognises the critical importance of sense of place, and thus requires the recognition of, and building on, the distinctive characteristics of cities, including their human and cultural values, history and natural systems. It is thus important to maintain a sense of place and neighbourhood, focusing on the local community which utilises the space on a regular basis

¹¹ Scott *et al*, 2006; Johnson, 2009; Vassilaros, 2009; Foster, 05/05/2010; Robbins, 22/04/2010; Scott, 22/04/2010; Carnie, 2011a.

(McCarthy, 2003; McCarthy, 2004; Newman, 2005¹²), and local governments must take into account that it is the local community who will contribute to the creation of a sustainable city.

The stadium, in the sense that it is aimed at attracting investment and tourism, has changed the sense of place of the area. It has however created a new sense of place and neighbourhood, providing a vibrant atmosphere and an icon for the city. It also contributes to the sense of place of the wider precinct, providing a sense of a sporting and entertainment neighbourhood, which community members can be proud of, and utilise on a regular basis.

The Warwick market has a distinct sense of place and neighbourhood due to the unique mix of people and activities which are present there, as well as its long history. The demolition of the Early Morning Market (EMM), and the development of a mall in this area would thus have negatively affected the sense of place for the local community who utilise it and depend on it for their livelihoods. It is uncertain what sense of place the mall would have introduced, however it is unlikely that it would have improved the current sense of place.

The Point Development has created a new sense of place for citizens, by improving the safety and attractiveness of the area for community members; as well as by introducing a range of new elements to the city. There are however concerns that development is being aimed at people from outside the city, rather than expressing the values and culture of the people of Durban, and that the development of an SCH may destroy the unique sense of place and identity which has emerged around Vetch's Bight over many decades (Scott *et al*, 2006; Johnson, 2009; Robbins, 22/04/2010¹³).

The Point and the stadium have therefore each played a role in enhancing the sense of place; however the Point incorporates aspects which will negatively affect the sense of place, and the Warwick Mall may have destroyed it altogether. Thus, while the sense of place has been enhanced in some respects, it appears that the focus of urban regeneration is on the promotion of the city to tourists and the wealthy, rather than on maintaining a sense of place for local communities, or a local identity, thus affecting the ability to contribute to a sustainable city.

¹² Pope *et al*, 2005; Gounden, 2010; Robbins, 22/04/2010.

¹³ Pravin Amar Development Planners and Common Ground, n.d.; www.durban.gov.za.

7.2.4 Ensure social justice

Sustainability recognises that it is important to create an environment where all people can express their full potential and lead productive lives; and that significant gaps in peoples' sufficiency of resources, safety and opportunity endanger the earth. Social justice is thus a crucial element of sustainability, and involves the reduction of environmental hazards; attending to those citizens who face the greatest risk; the inclusion of marginalised populations; the consideration of the poor and disadvantaged; the reduction of poverty; and quantitatively and qualitatively enhancing income, employment and productivity. Minimising adverse impacts on nearby residents; ensuring participation and transparency within decision-making processes; and striving for decisions that are fair for everyone are further important aspects of social justice (Goodland, 1995; Goodland and Daly, 1996; DEAT, 1998¹⁴).

Many issues concerning social justice were identified within each of the projects. The benefits to the poor have been questioned, as they were pushed out of the stadium (Maharaj, 2011), while, as was noted in 7.2.2, the SCH does not include all people; and in terms of affordability and access, both of these negatively affect lower income groups. The initial stages of the Point resulted in the displacement of The Ark, a facility for the homeless (Robbins, 22/04/2010; Scott, 22/04/2010), and the SCH will result in informal vendors, historically significant seine netters and subsistence fishermen in the Vetch's Beach area losing their livelihoods (Scott *et al*, 2006; Pravin Amar Development Planners and Common Ground, n.d.). These are examples of the negative social effects of displacement in mega-projects (Gellert and Lynch, 2003; Hutton, 2004; Diaz Orueta and Fainstein, 2008¹⁵). The stadium and uShaka Marine World (uShaka) at the Point are also being subsidised by ratepayers and taxpayers, which will result in increased service charges, which will affect even the city's poorest citizens (Sole, 2010).

The mall was touted by the city and developers as being suitably located for low income residents and workers (Maharaj, 2010), as well as being able to contribute to the elimination of poverty (Moolla, 25/08/2010), and provide economic opportunities for previously disadvantaged individuals (KwaZulu-Natal Provincial Government, 2009; www.ddp.org.za). However concerns were raised that rather than acting in the interests of poor and excluded citizens; the mall would displace them and destroy the livelihoods of thousands of people, many of whom come from low-income groups, are minimally educated, and live day to day, with "no plan B"; as well as

¹⁴ Satterthwaite, 1999; Mog, 2004; Newman, 2005; Houghton, 2011; Iyer, 03/08/2011; Digby, n.d.

¹⁵ Lehrer and Laidley, 2009.

indirectly affecting approximately 100 000 people who depend on them (Comins, 2009; Dardagan, 2009a; Dorasamy, 2009¹⁶).

It also would have resulted in the destruction of a market which provides poor citizens with basic foodstuffs at a cheap price. Research done at the University of KwaZulu-Natal indicated that the introduction of a Spar would result in the prices of nine core products for a poor household increasing by 118 percent; and highlighted that when comparing the prices of fifty three products including fresh produce, toiletries, clothes, shoes, hardware and fast foods, the average cost charged by formal retailers was seventy six percent more expensive than the same products sold by informal traders in Warwick market (Skinner, 2009; Maharaj, 2010; Maharaj, 11/07/2011). Such concerns led to extensive opposition from various groups including traders, commuter organisations, researchers, development economists and urban designers; as well as a number of court cases (Albert, 2009; Robbins, 22/04/2010; Maharaj, 11/07/2011). The project was postponed in 2010 awaiting the decision of the court (Moolla, 25/08/2010), and in 2011 the plans were officially put on hold. Plates 7.6 and 7.7 show traders protesting against the construction of a mall in Warwick market due to the implications it would have had for poorer citizens.



Plate 7.6: Hundreds of traders protested against the plan for a mall (Omar, 2009).



Plate 7.7: Traders protesting against the mall (Kockott, 2009b).

It thus seems that world class facilities and infrastructure are being delivered to the rich, which pay rhetorical lip service to reducing socio-economic inequalities and addressing the needs of the poor, but which the majority of South Africans will never enjoy (Tanner, 2009; Maharaj, 2011). This highlights the decision which is made concerning addressing the immediate basic needs of the region versus marketing the city as a world class international destination, where the city has “forgotten the other half of the city, the poor” (Maharaj, 11/07/2011). It is therefore important to

¹⁶ Kockott, 2009b; Makhaye and Memela, 2009; Omar, 2009; Robbins and Skinner, 2009; Skinner, 2009; Dorasamy, 2010; Johnstone, 2010; Maharaj, 2010; Moolla, 25/08/2010; Ndlovu, 2010; Robbins, 22/04/2010; Saib, 2010a; Saib, 2010b; Saib, 2010c; Saib, 2010d; Saib and Bowman, 2010; Scott, 22/04/2010; Sole, 2010; Maharaj, 11/07/2011; www.abahlali.org; www.ddp.org.za; www.ins.onlinedemocracy.ca; www.ipetitions.com; www.sarpn.org; www.streetnet.org.za

question what the costs are to poor people and households in the city, in terms of the investment choices that have been made, as pro-poor commitments and social issues have been displaced by economic commitments that appear to have very tenuous connections to the needs of the poor (Robbins, 22/04/2010; Sim, 30/04/2010; Sole, 2010¹⁷).

This is consistent with the current neo-liberal agenda and pro-growth urban restructuring, whereby cities undertake re-imaging in order to access foreign investment and development finance through initiatives such as mega-project development; while social values are eclipsed and money is diverted from other uses, resulting in large sections of the urban poor being excluded and displaced, leading to increased socio-economic polarisation (Loftman and Nevin, 1996; Flyvbjerg *et al*, 2003; Gellert and Lynch, 2003¹⁸).

Social justice is consequently a principle which is not adequately considered in the urban regeneration plans of the city, and this has dire consequences for the city's poor and the long term sustainability of Durban. This is a principle which should be rigorously incorporated into every project, particularly in the context of the country's history, and the consequent need for the effective implementation of pro-poor strategies.

7.2.5 Contribute to intergenerational (futuraity) and intragenerational (equal opportunities) equity

Sustainability proposes that the needs of current and future generations are vital to ensuring long-term economic health, innovation, diversity and productivity of the earth (Newman, 2005). Intragenerational equity involves reducing inequalities within the current generation. It therefore involves the sharing of wealth, allowing low income groups to benefit; increasing equity and human rights in the provision of material security and effective choices; and ensuring the equality of livelihood sufficiency and opportunity to ensure fairness for everyone (Satterthwaite, 1999; Mog, 2004; Pope *et al*, 2005¹⁹).

Intergenerational equity requires that development provides net environmental, social and economic benefits for future generations, and decisions which compromise future generations' ability to survive and thrive in the world should therefore not be made (Goodland, 1995; Swilling,

¹⁷ Was 2010 worth, 2010; Maharaj, 11/07/2011.

¹⁸ Hutton, 2004; Diaz Orueta and Fainstein, 2008; Maennig and du Plessis, 2009; Roberts *et al*, 2009; Bornstein, 2010; Priemus, 2010b.

¹⁹ Gibson, 2006; Roberts *et al*, 2009; Digby, n.d.

2003; McCarthy, 2004²⁰). In a developing world context, these principles are highly pertinent, as cities constantly have to make choices between focusing on current issues and ensuring that everyone is treated fairly now; and making long term decisions concerning the future.

As with social justice, this principle has not been incorporated into the three projects at any significant level. The stadium has widened the gap between the rich and the poor, as is evident in section 7.2.4; particularly as its benefits appear to be highly concentrated among large construction firms, empowerment regulars and the local political elite (Sole, 2010). The proposed mall would have resulted in the interests of traders being traded off for the interests of a network of already empowered businessmen and foreign-owned entities; and would also have resulted in inequity between the formal traders incorporated in the mall and the remaining informal traders who would have been unable to compete with them (Comins, 2009; Kockott, 2009b; Omar, 2009²¹).

The Point Development has also traded off facilities for lower and middle income people, for the benefit of the wealthy; and the SCH threatens to be exclusive, as noted in 7.2.2, which will result in property owners and developers accruing benefits at the expense of the current users of the area (Johnson, 2009; Vassilaros, 2009; Scott, 22/04/2010²²). All of these elements lead to a negative effect on intragenerational equity within the planning and development of the mega-projects. This reflects the ideas of McCarthy (2004) and Sairinen and Kumpulainen (2006) whereby the redevelopment of waterfront areas often fails to address the social and economic problems of the wider city, resulting in them being the objects of intense local planning debate and conflict.

In terms of intergenerational equity, although the stadium has provided an icon which citizens now and in the future can utilise and be proud of, and the Point has brought in a range of new elements for present users and future generations (Johnson, 2009); they have both imparted costs which will very likely continue to be borne by future generations. It is however uncertain how the mall would have affected intergenerational equity, as although it may have provided improved formal facilities for future generations, it may have resulted in increased poverty for the excluded traders due to the loss of livelihoods.

²⁰ Newman, 2005; Robbins, 22/04/2010; Iyer, 03/08/2011.

²¹ Robbins, 22/04/2010; Sim, 30/04/2010; www.abahlali.org; www.ddp.org.za; www.streetnet.org.za.

²² Maharaj, 11/07/2011; Save Vetch's Association, 2011; Pravin Amar Development Planners and Common Ground, n.d.

According to Maharaj (11/07/2011), all of the projects involve the reinforcement of inequalities rather than addressing them, and as discussed in section 7.2.4, scarce public resources have been diverted to these projects rather than addressing basic needs (Scott, 22/04/2010; Maharaj, 11/07/2011). This is once again indicative of a neo-liberal agenda within cities; where there is a focus on entrepreneurialism, which diverts money from other uses; and pro-growth policies are implemented which do not benefit all citizens equally, resulting in increased social and economic polarisation (Sykora, 1994; Loftman and Nevin, 1996; Hutton, 2004²³). The city's neo-liberal, pro-growth agenda has therefore resulted in intergenerational and intragenerational equity being side-lined within urban regeneration strategies, and the achievement of a sustainable city has thus been compromised.

7.2.6 Ensure stewardship: long term regeneration vision

The application of a broader, strategic, long-term regeneration vision, or stewardship, is an important aspect of a sustainable city; and strategic thinking must be utilised to provide a clear vision and strategy to guide planning, development and management for all elements of sustainability. This includes the recognition of the importance of tourism and related functions as potential catalysts for social and economic development; the need for an integrated approach to tourism development, with linked and complementary attractions, as opposed to haphazard and uncoordinated development; as well as a strategic vision for the management and protection of the natural environment (Bassett *et al*, 2002; McCarthy, 2003; McCarthy, 2004²⁴).

Sustainability requires caution; avoiding poorly understood risks of serious or irreversible damage to environmental, economic or social capital; designing for surprise or shocks; and managing for adaptation. Precaution and adaptation thus play a vital role in long term regeneration, as this will ensure that there are acceptable levels of risk with appropriate adaptation processes available for the worst case scenarios (Fricker, 1998; Newman, 2005; Pope *et al*, 2005).

Each of the projects incorporated a long term vision, which included elements such as contributing to urban renewal, creating opportunities and feeding into the broader development of the city, boosting investor confidence, attracting people, and enhancing tourism opportunities. The creation of an iconic identity for the city, particularly in the case of the stadium and the Point; increasing property prices, predominantly around the Point; improving the competitiveness of the

²³ Matheson, 2006; Pillay and Bass, 2008; Bornstein, 2010.

²⁴ Pope *et al*, 2005; Cashman, 2006; Roberts *et al*, 2009.

city; injecting revenue into the economy; and creating a re-energised and safer city precinct were also important elements (Iyer Rothaug Collaborative, 2003, cited in Gounden, 2010; Nel and John, 2006; Scott *et al*, 2006²⁵).

Further elements of the stadium's long term vision included that it was considered as a catalyst for the development of the surrounding sports precinct; and it was developed with the notion that it could be reconfigured and the surrounding precinct incorporated as a means of hosting the Olympic Games. This precinct provides the opportunity for the city to market itself as a 'sports city', and the stadium may be linked with other features, such as the Point Development, to establish an entertainment district (Smith, 2010), thereby incorporating an integrated approach to tourism development. It was further suggested that the stadium would accommodate and incorporate a variety of other sporting activities, such as rugby, cricket and athletics, as according to Julie May Ellingson, the city "can't afford to build a stadium for only one sports code" (Albert, 2009; Maennig and du Plessis, 2009; Savides, 2009a²⁶).

It has however since been decided that the city will not bid for the Olympics, resulting in questions surfacing around how public funds have been gambled with in the construction of the stadium (Maharaj, 11/07/2011). Issues have also emerged concerning the incorporation of rugby and cricket into the stadium, as the relevant constituencies were not consulted, and therefore their requirements were not taken into consideration. This has resulted in these sports codes being unable to use the stadium due to incorrect configurations; and it not being economically viable for the local rugby franchise, the Sharks, to move there (Savides, 2010e). This has affected the long term vision, and consequently the sustainability, of the stadium (Moolla, 25/08/2010; Scott, 22/04/2010; Sim, 30/04/2010²⁷). Furthermore, the pre-existing Mr Price Kings Park Rugby Stadium, located next to the new stadium, was rated as meeting ninety three percent of FIFA's requirements for the World Cup, and was deemed the most appropriate stadium for redevelopment (Robbins, 22/04/2010; Maharaj, 11/07/2011). The construction of a new stadium

²⁵Pillay and Bass, 2008; DAEA, 2009; Give uShaka, 2009; Jasson da Costa, 2009; Johnson, 2009; Kisten, 2009; Kockott, 2009a; Maennig and du Plessis, 2009; Maluleka, 2009; Mbonambi, 2009a; Mbonambi, 2009b; Mbonambi, 2009c; Naidoo, 2009a; Savides, 2009c; Zikalala, 2009; Dorasamy, 2010; Foster, 05/05/2010; Goldstone, 2010; Gounden, 2010; Khumalo, 2010; Mbanjwa, 2010; Moolla, 25/08/2010; Saib, 2010a; Saib, 2010d; Savides, 2010c; Savides, 2010d; Scott, 22/04/2010; Sim, 30/04/2010; Iyer, 03/08/2011; Naidoo, 2011; Brink, n.d.; www.durban.gov.za; www.sa2010.gov.za; www.southafrica.info; www.sacities.net; www.thepropertymag.co.za (b).

²⁶ Tanner, 2009; Tomlinson, 2009; Venter, 2009; Zikalala, 2009; Foster, 05/05/2010; Goldstone, 2010; Savides, 2010f; Sole, 2010; Iyer, 03/08/2011; Maharaj, 11/07/2011; www.durban.gov.za; www.sa2010.gov.za.

²⁷ Maharaj, 11/07/2011.

was therefore not required. Plate 7.8 illustrates the proximity of these two stadiums to each other²⁸.



Plate 7.8: The new Moses Mabhida Stadium and the Mr Price Kings Park Stadium (Coppola, 2010).

The proposal for the Warwick Mall formed part of the city's plans to revamp, reorganise and reconfigure the Warwick transport hub to become a multi-modal transport precinct with better safety, efficiency, and access; as well as encouraging sustainability of the existing economic activity, providing opportunities for informal and formal trade (www.durban.gov.za). It has however been pointed out that the current Warwick market presents an opportunity for tourism and other local economic development, and such markets are important tourist attractions in many cities in the South. The EMM also plays a role in local food production and distribution, as well as providing local employment, thereby contributing to a more sustainable city (KwaZulu-Natal Provincial Government, 2009; Maharaj, 11/07/2011; www.streetnet.org.za). The destruction of the EMM for the construction of a mall, and the consequent effects on the rest of the market may therefore have negatively impacted on the long term sustainability of Durban, rather than enhancing it. This reflects the criticism of mega-project development whereby alternatives are not considered, and the only option may not be the most appropriate (Priemus, 2010a; Priemus, 2010b). Caution is therefore an important element of this principle which would play a role in the proposed development of the mall.

The previous city manager, Mike Sutcliffe, stated in his newsletter that the decision to develop and sell off the land in the Point area was a “deliberate strategy aimed at regenerating the inner city, growing our tourism base and ensuring we create jobs in both the tourism and retail sectors” (www.durban.gov.za). The Point Development incorporates three phases in its plan, the first of which was the construction of uShaka, which according to Mike Sutcliffe, has become an icon for Durban and the province; and the final of which includes the R100 million SCH and further

²⁸ The Mr Price Kings Park Stadium (previously the ABSA Stadium) is located in the bottom right of the picture. This highlights the close proximity of the two stadiums.

mixed use development opportunities (Robbins, 2004a; Mbonambi, 2009a; Maharaj, 11/07/2011²⁹). Plate 7.9 shows the entrance to uShaka, and Plate 7.10 provides an image of the interior of uShaka.



Plate 7.9: The entrance to uShaka Marine World



Plate 7.10: Part of uShaka Marine World (www.internetaccommodation.co.za).

Although the Point has had some success in terms of renewal (Gounden, 2010), it has not taken off in terms of rejuvenating the area, and the original idea of it as a catalyst for the redevelopment and repositioning of Durban as a city, and helping it gather momentum to regenerate its tourism offerings, have been lost over time. The area has therefore failed to be developed in an integrated and coherent manner, and a major part of the site, the SCH, has not yet been developed (Easton, 2010; Robbins, 22/04/2010; Maharaj, 11/07/2011). This reflects a criticism of mega-projects concerning the projects being poorly integrated into the wider urban process and planning system (Swyngedouw *et al*, 2002; Cornelissen, 2008). One of the reasons for this fragmented progress concerns the development of the King Shaka International Airport, as this resulted in a shift of investment and development to the north, diverting attention away from inner city development. The appeal process and legal action associated with the contested nature of the development, the global economic recession and the focus on the World Cup which detracted from the Point have also impacted on this.

All of these projects thus reflect the city's attempt to reposition itself within the competitive landscape for locals, tourists and investors; through the use of mega-projects which are a fundamental element of contemporary city-building strategies, as they are able to satisfy immediate goals, redefine neighbourhoods and cities, stimulate other urban processes and have a significant impact on development (Loftman and Nevin, 1996; Lungo, 2002; Swyngedouw *et al*, 2002³⁰).

²⁹ www.durban.gov.za; www.durbanpoint.co.za (b); www.laurusco.com.

³⁰ McCarthy, 2003; Ehrenfeucht, 2004; Pelkonen, 2005; Waley, 2007; Roberts *et al*, 2009; Bornstein, 2010.

Each of the projects have incorporated a long term vision in their planning, indicating that urban regeneration within the city has considered the need for such a vision. However, in the case of the Warwick Mall, a long term vision incorporating the current market may have been a more appropriate strategy; and the stadium and the Point have both encountered problems in terms of achieving these visions. Furthermore, all of the projects reflect a focus on a long term economic vision and success, rather than greater social and ecological sustainability. This suggests that although long term visions are developed within the city's planning, there is a lack of coherence and an uneven focus, and it is thus uncertain whether they can contribute to creating a sustainable city.

7.2.7 Ensure adequate community participation and democratic governance

Sustainability recognises that engagement of the public lies at the heart of all sustainability principles, and community participation and democratic governance are therefore crucial aspects which should be present in a sustainable city. It is imperative to incorporate the community and all stakeholder groups into planning and decision-making processes, and take into account under-represented groups; as extensive involvement throughout a project can build community confidence, resolve conflicts, promote social acceptability and sustainability, and ensure a more successful and sustainable urban environment in the long term (Goodland, 1995; Goodland and Daly, 1996; DEAT, 1998³¹). Effective participation also involves the respect and attention given to the opinions, ideas and perspectives of locals; and the provision of information to the community, allowing them to shape projects (DEAT, 1998; Mog, 2004). Local government should thus have a commitment to working with citizens and groups within the community to find sustainable ways to meet their social, economic and material needs, and improve the quality of their lives (KwaZulu-Natal Planning and Development Commission, 2010a).

Important aspects of democratic governance are open, transparent, and more effective management processes, as well as more effective negotiation. The formation of supportive relationships and solid partnerships is also vital in working towards a sustainable future. Responsiveness and pro-activeness on the part of local government is important, and the progress of a city must be monitored, evaluated and reviewed regularly to enable continual improvement,

³¹Couch and Dennemann, 2000; Patel, 2000; Bassett *et al*, 2002; Schwabe, 2002; Swyngedouw *et al*, 2002; Agyeman and Evans, 2003; Flyvbjerg *et al*, 2003; Folke *et al*, 2003; McCarthy, 2004; Mog, 2004; Newman, 2005; Gibson, 2006; Swilling, 2006; Roberts *et al*, 2009; KwaZulu-Natal Development and Planning Commission, 2010; Moolla, 25/08/2010; Scott, 22/04/2010; Maharaj, 11/07/2011.

based on accountability, transparency and good governance (Satterthwaite, 1999; Bassett *et al*, 2002; Bruzelius *et al*, 2002³²).

Effective participation and democratic governance were lacking in all three of the projects. This reflects the lack of participation, accountability and transparency which is encountered in many mega-projects (Swyngedouw *et al*, 2002; Flyvbjerg *et al*, 2003; Ehrenfeucht, 2004³³). Flawed participatory and consultation processes were highlighted for each project, which in the case of the stadium was primarily due to the pressures of the 2010 process which required the project to be fast-tracked by the SPU (Albert, 20/04/2010; Foster, 05/05/2010; Robbins, 22/04/2010³⁴). This highlights the framework of exceptionality which allows mega-projects to bypass official channels through the use of special agencies (Swyngedouw *et al*, 2002; Gellert and Lynch, 2003; Jones and Moreno-Carranco, 2007). In the case of the proposed mall, stakeholders were marginalised, and the development was presented to traders as a “fait accompli”, which resulted in the matter being taken to court, and the project subsequently being put on hold (Albert, 2009; Comins, 2009; Dorasamy, 2009³⁵). In the Point Development, issues arose as it was felt that the developers did not consider the concerns and ideas of the public, did not listen to their own specialists, and ignored local knowledge (Scott *et al*, 2006; Albert, 2009; Johnson, 2009³⁶).

Various concerns have also arisen surrounding governance regarding the projects. Although some applauded the decision to build a new stadium, others highlighted it as a political decision, as it was made by a combination of local politicians, bureaucrats, corporate interests and members of SAFA, and was considered a “vanity project” conceived with the aim of lining the pockets of a politically connected few (Bird, 2009; Robbins, 22/04/2010; Sole, 2010³⁷). This highlights mega-projects as elite playing fields, whereby an urban future is shaped in line with the aspirations of the most powerful segments of society (Swyngedouw *et al*, 2002). The use of “bully tactics” employed in attempting to

³² Lungo, 2002; McCarthy 2003; Mog, 2004; Newman, 2005; Roberts *et al*, 2009; Albert, 20/04/2010; Robbins, 22/04/2010; Sim, 30/04/2010.

³³ Lehrer and Laidley, 2009.

³⁴ Sim, 30/04/2010; Maharaj, 2011.

³⁵ Kockott, 2009b; KwaZulu-Natal Provincial Government, 2009; Makhaye and Memela, 2009; Naran, 2009b; Naran, 2009c; Robbins and Skinner, 2009; Skinner, 2009; Dorasamy, 2010; Albert, 20/04/2010; Maharaj, 2010; Moola, 25/08/2010; Robbins, 22/04/2010; Sim, 30/04/2010; Sole, 2010; Maharaj, 11/07/2011; Mbonambi, 2011; www.ddp.org.za; www.ins.onlinedemocracy.ca; www.ipetitions.com; www.streetnet.org.za; www.abahlali.org; www.iolproperty.co.za; www.property24.com.

³⁶ Naidoo, 2009a; Vassilaros, 2009; Broughton, 2010; Clarke, 2011; Save Vetch’s Association, 2011; www.sailingkzn.org.za.

³⁷ Maharaj, 11/07/2011.

persuade the Sharks to move from the Mr Price Kings Park Stadium to Moses Mabhida was also noted (Bird, 2009; Tanner, 2009; Albert, 20/04/2010³⁸).

In terms of the mall it was suggested that the Municipality handled the proposal in a manner which was in contravention to their reputation for progressive and inclusive urban management initiatives and negotiations with traders, and this included the use of bully tactics and taking a dictatorial stance against them (Skinner, 2008; Comins, 2009; Dorasamy, 2009³⁹). According to Roothren Moodley, a member of the Warwick Junction Precinct Plan Stakeholders Forum, the city council “steamrolled” their plans onto citizens and Pat Horn, co-ordinator of Durban-based street vendor association StreetNet International, said the Municipality had “completely and stubbornly refused to meet” with them for some time (www.ins.onlinedemocracy.ca). Plate 7.11 shows a confrontation between traders and Metro Police outside the EMM, as traders demand it be opened.



Plate 7.11: Metro Police guard the entrance to the EMM as traders demand it be opened (Dorasamy, 2009).

The city’s role as developer and regulator in the Point Development resulted in concern as it was felt that they were not able to be as rigorous in terms of sustainability as they would be otherwise, and they therefore did not fully consider the associated social and environmental issues (Johnson, 2009; Sim, 30/04/2010). This would also have been the case if the proposed mall had been approved, as the local state was directly involved in the development. This reflects one of the criticisms of mega-projects, where governments are in conflict in their dual roles as developer and regulator (Bassett *et al*, 2002; Bruzelius *et al*, 2002; van Marrewijk, accessed 10/05/2011). Various other governance aspects of the Point Development have caused concern, including the use of bully tactics when dealing with the watersports clubs in the area. A number of court cases

³⁸ Robbins, 22/04/2010; Scott, 22/04/2010; Sim, 30/04/2010; Sole, 2010; Maharaj, 11/07/2011; Maharaj, 2011; www.durban.gov.za.

³⁹ Kockott, 2009c; KwaZulu-Natal Provincial Government, 2009; Makhaye, 2009; Naran, 2009a; Robbins and Skinner, 2009; Skinner, 2009; Zulu, 2009; Foster, 05/05/2010; Maharaj, 2010; Moodley, 2010; Padayachee, 2010; Rajah, 2010; Robbins, 22/04/2010; Saib, 2010a; Saib, 2010b; Saib, 2010c; Saib, 2010d; Saib and Bowman, 2010; Maharaj, 11/07/2011; www.abahlali.org; www.ddp.org.za; www.ipetitions.com; www.streetnet.org.za.

were subsequently filed against the developers, resulting in the approval process being reviewed, and a consequent delay in the SCH construction until the present (Albert, 2009; Carnie, 2009; Mbonambi, 2009a⁴⁰).

Decision-making that involves stakeholder participation is stipulated in the city's policy documents (eThekweni Municipality, 2011), and the Municipality prides itself on its reputation for actively engaging as many of its citizens as possible (Sutcliffe, 2009). According to Hoosen Moolla (25/08/2010), Acting Head of iTRUMP, a bottom up approach is better than dictating from the top down; and according to Richard Dobson, former Head of iTRUMP; if people are included in the processes, and their urban uses and preferences are recognised, then they will start to buy into the city (www.thepropertymag.co.za (a)).

However, there is a lack of participation and democratic governance in current planning in the city, and within these projects (Albert, 2009; Albert, 20/04/2010; Maharaj, 11/07/2011). A top down approach to decision-making is also applied (Maharaj, 11/07/2011); and public-private partnerships are playing a role in compromising democratic governance, as public resources are inevitably diverted from projects that favour the poor, disadvantaged and marginalised towards supporting the needs of big business (Maharaj, 2010). This illustrates the failure of deliberative approaches in the face of power in mega-project development; and the role of bureaucracy whereby certain groups influence the development of these projects, despite any objections (Steinberg, 1987, cited in Van Der Westhuizen, 2007; Flyvbjerg *et al.*, 2003; van Marrewijk, n.d.). These projects also reflect some of the drivers behind mega-projects, whereby they are viewed as tangible and monumental, and able to provide political benefits (Steinberg, 1987, cited in Van Der Westhuizen, 2007; Ehrenfeucht, 2004), resulting in participation and democratic governance being side-lined.

Urban regeneration in the city therefore lacks the incorporation of the principle of participation and democratic governance at any meaningful level, severely affecting the achievement of a sustainable city, as the citizens of a city are fundamental to its success.

7.2.8 Preservation of cultural and architectural heritage, and distinctiveness

Heritage is recognised in sustainability as highly significant to any plans for the future, making it important to preserve cultural and architectural heritage within a city. Heritage buildings and sites enhance a city's distinctiveness, giving it a unique character and making it more attractive and

⁴⁰ Naidoo, 2009a; Broughton, 2010; Carnie, 2010; Gounden, 2010; Jones, 2010; Carnie, 2011a; Carnie, 2011b; Naidoo, 2011; Save Vetch's Association, 2011; www.southafrica.info.

marketable. The protection of culture and heritage is thus important in terms of the economic competitiveness of an area in the long term, and any projects which adversely affect these aspects might be inherently unsustainable. It is therefore necessary to minimise the disturbance of landscapes or sites that constitute heritage, preserving them in order to maintain historic and cultural identity, as well as economic competitiveness. Restoration rather than redecoration is therefore advised, as well as the re-use or recycling and conservation of buildings, and using or adapting existing facilities rather than building from scratch; while re-energising the city precinct (DEAT, 1998; Satterthwaite, 1999; McCarthy, 2004⁴¹).

This principle is evident in the Moses Mabhida Stadium and the Point to some extent. The stadium has a role to play in enhancing the cultural heritage of soccer and sport within the city; while the Point has played an important role in the recycling and restoration of old, abandoned buildings which have historical or architectural value (Jenvey, 2008; Gounden, 2010; Iyer, 03/08/2011). It has also been suggested that the development of the SCH could play a role in enhancing and developing the heritage of boating, adding to the distinctiveness of the city (Iyer Rothaug Collaborative, 2006).

There are however some areas of contention surrounding the Point, as for some Vetch's Bight is considered part of the city's cultural heritage, as it has a long history and provides a space which community members have been enjoying for many years (Scott *et al*, 2006; DAEA, 2009; Johnson, 2009⁴²). This has formed the main point of resistance from stakeholders in this project, resulting in extensive contestation.

The proposed mall however, would have resulted in the destruction of some of the city's unique cultural and architectural heritage. The EMM which is situated on the site of the proposed mall was established in 1910, and includes third and fourth generation traders, as well as forming an important part of the city wide fresh produce distribution chain. It thus has a unique historical significance and provides a critical landmark of the city's social history and heritage (Attwood, 2009; Comins, 2009; Chapman, 2009⁴³). According to Amafa Built Environment Department Head, Ros Devereaux, the real heritage is in the use of the market (Maharaj, 2010). Furthermore,

⁴¹ Newman, 2005; Ugwu and Haupt, 2007; Iyer, 03/08/2011; www.oneplanetliving.org.

⁴² Vassilaros, 2009; Gounden, 2010; Scott, 22/04/2010; Pravin Amar Development Planners and Common Ground, n.d.

⁴³ Dorasamy, 2009; Kockott, 2009b; KwaZulu-Natal Provincial Government, 2009; Mercury reporters, 2009; Naran, 2009b; Naran, 2009c; Robbins and Skinner, 2009; Skinner, 2009; Albert, 20/04/2010; Maharaj, 2010; Moolla, 25/08/2010; Saib and Bowman, 2010; Mbonambi, 2011; Dobson, n.d.; www.abahlali.org; www.ins.onlinedemocracy.ca; www.ipetitions.com; www.l2b.co.za; www.property24.com; www.streetnet.org.za.

Amafa has earmarked it for preservation due to its architectural significance (KwaZulu-Natal Provincial Government, 2009; Skinner, 2009; www.l2b.co.za). All of these factors contribute to the distinctiveness of the city, and the mall would thus have involved the neo-liberalisation of a historical area, resulting in the marginalisation of local history, culture and a way of life (Boomgaard, 2009; Dorasamy, 2009; Maharaj, 2010⁴⁴). This reflects the renovation of historic colonial centres which many malls are causing, due to justifications of economic development and urban blight (Gordon, 1997; Jones and Moreno-Carranco, 2007). Plate 7.12 depicts a sign held by a trader in one of the protests against the mall highlighting the significant and unique heritage of the market. Plate 7.13 shows the centenary celebrations of the EMM which occurred in 2010. Both of these images highlight the significant heritage of the Warwick market, which would have been replaced by a mall.

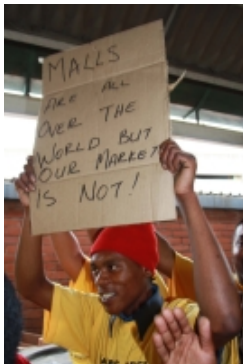


Plate 7.12: A trader expressing the significant heritage of the market (Palitza, n.d.).



Plate 7.13: The centenary celebration of the EMM (Saib, 2010d).

It can thus be determined that the stadium may enhance the city's cultural heritage, and the Point has played a role in preserving its architectural heritage. However, the SCH at the Point threatens the cultural heritage of the area, and the mall proposal would have resulted in the destruction of some of the city's most unique cultural and architectural heritage. This principle is thus addressed in some elements of the projects, however once again the pursuit of entrepreneurial strategies appears to outweigh the value of cultural assets in the city, thereby affecting the achievement of sustainability.

7.2.9 Promote diversity, vitality and choice

Diversity, vitality and choice are important aspects of a sustainable city. This includes the encouragement of mixed and compatible uses, and localisation of facilities and services. The right balance of commercial and retail enterprise, and socially-oriented community facilities is required

⁴⁴ Scott, 22/04/2010.

in order to safeguard the interests of local people, promote the destination for visitors and tourists, attract investment, and cause regenerative effects in terms of increased vitality and sustainability (McCarthy, 1998b; Satterthwaite, 1999; Marshall, 2001b⁴⁵).

All of the projects incorporated multi-functionality and complexity, which Iyer (03/08/2011) highlighted as crucial underlying principles of all of the developments. The proposed mall integrated mixed use to a limited extent, as it was proposed as including predominantly retail offerings and a taxi rank for the provision of transport; as well as restaurants; and facilities such as those noted in 7.2.1, which are associated with service provision (KwaZulu-Natal Provincial Government, 2009; Maluleka, 2009; Omar, 2009). The stadium and Point have integrated mixed use to a greater extent as they incorporate a greater range of activities, including retail, education and leisure, which will enhance their long term sustainability, and promote ongoing activity. The Point is the project incorporating the most diversity, as it incorporates offices and apartments as well as these components (Iyer Rothaug Collaborative, 2003, cited in Gounden, 2010; Enslin, 2004; Robbins, 2004b⁴⁶). Plates 7.14, 7.15 and 7.16 show various aspects incorporated within the Point Development. However, the diversity presented is framed in a particular post-modern and neo-liberal model, and hence it does not reflect the diversity of South Africa.



Plate 7.14: Part of the Point Development



Plate 7.15: Canals in the Point (www.hotelandrestaurant.co.za).



Plate 7.16: Part of the Point Development

These aspects highlight the characteristic of mega-projects as the ultimate in mixed-use environments (Lehrer and Laidley, 2009). Thus, diversity, vitality and choice have been incorporated into the mega-projects, although to varying degrees, and within a post-modern frame which does not reflect the local diversity of the area. This principle is consequently relatively

⁴⁵ Swyngedouw *et al*, 2002; McCarthy, 2003; McCarthy, 2004; Carmona, 2006; Lehrer and Laidley, 2009; Gounden, 2010.

⁴⁶ Carnie, 2009; Cole, 2009; Dardagan, 2009b; Dardagan, 2009c; Jasson da Costa, 2009; Maennig and du Plessis, 2009; Naidoo, 2009a; Durban beachfront's, 2010; Gounden, 2010; Hennig, 2010; Moolla, 25/08/2010; Sole, 2010; Iyer, 03/08/2011; Maharaj, 11/07/2011; Brink, n.d.; www.cup2010.info; www.durban.gov.za; www.fifaworldcup.gov.za; www.laurusco.com; www.sacities.net; www.sailingkzn.org.za; www.sa2010.gov.za; www.southafrica.info; www.unemp.org.za.

important in urban regeneration and planning in Durban, and provides an opportunity to promote a more sustainable city. However, the incorporation of local diversity is an aspect which requires further consideration.

7.2.10 Ensure integration

Integration is an important aspect of a sustainable city. It is thus necessary to find the best fit between an infrastructure project and the city, ensuring that they are integrated into the fabric of the city and have strong connections with other locations. Integration will assist in the avoidance of creating isolated islands of modernity in the middle of poor areas, or the generation of new exclusive zones; while promoting the unification of the urban fabric and social cohesion (McCarthy, 1998b; Marshall, 2001b; Lungo, 2002⁴⁷).

Specific attention was paid to urban design in the planning of the stadium, and it was thus important to ensure that the stadium was not a building set in isolation, but formed a meaningful part of the city with regard to its network of urban connections (Maennig and du Plessis, 2009; Iyer, 03/08/2011). This resulted in linkages underneath the freeway, as well as enhancing the stadium's link to the beach and the Golden Mile through a pedestrian promenade which stretches from the stadium to uShaka (Hennig, 2010; Sim, 30/04/2010; Sole, 2010⁴⁸). The stadium also incorporates a train station, which will allow connection and integration with other areas of the city. The proposed mall also had the potential to be integrated into the city as Warwick Junction is the primary transport node in Durban, and the new Warwick flyover has improved the connection to the city (Skinner, 2009; Jenvey, 2010; Moolla, 25/08/2010⁴⁹).

While the stadium is quite well integrated, and the mall had the potential to be; there are concerns that the Point is too isolated (KwaZulu-Natal Provincial Government, 2009; Albert, 20/04/2010), and has become an "island" in the city (Robbins, 22/04/2010), or an "urban cul de sac" (Iyer, 03/08/2011). It is integrated to the stadium and the beachfront via the walkway mentioned (Durban beachfront's, 2010; Gounden, 2010), however the development has been undertaken in a piecemeal and fragmented way, and it thus appears the connection between that space and the rest of the city has not been taken seriously (Robbins, 22/04/2010). This highlights the tendency for mega-projects to be isolated and disconnected from the general dynamics of the city (Swyngedouw *et al*, 2002; Jones and Moreno-Carranco, 2007). This may also be a result of the

⁴⁷ McCarthy, 2003; McCarthy, 2004; Gibson, 2006; Gounden, 2010; Hale, 2010; KwaZulu-Natal Planning and Development Commission, 2010a; Priemus, 2010a; Priemus, 2010b.

⁴⁸ Iyer, 03/08/2011.

⁴⁹ Scott, 22/04/2010; www.durban.gov.za; www.l2b.co.za.

reasons noted in 7.2.6, including the focus on 2010, the recession and the shift of development to the north.

Integration is consequently an aspect which is incorporated into urban regeneration in most cases, allowing for the projects to impact on their adjacent areas, and creating the potential for revitalisation (McCarthy, 2003; Gounden, 2010). However it is not always entirely successful, as in the case of the Point. Further consideration therefore needs to be given as to how urban regeneration projects can be integrated into the fabric of the city in order to promote a more sustainable city.

7.2.11 Promote economic growth and employment creation

Economic growth and regeneration is a basic feature of any city, and has the potential to enable cities to enhance themselves, and to compete in local, provincial, national and global economies. It is therefore vital that a diverse and robust economic structure is developed, and that economic growth fosters a range of adequate and sustainable employment opportunities, and other spin-offs. Projects should thus create employment, and provide both short and long term economic gain (Satterthwaite, 1999; Couch and Dennemann, 2000⁵⁰).

The stadium and its precinct have had an impact on economic growth through attracting tourism, as well as providing temporary and permanent employment before and during the World Cup, as well as presenting ongoing employment opportunities thereafter (Savides, 2009a; www.cup2010.info; www.southafrica.info). However, the nature of the employment during construction was a concern to some, as much of it was short term, and wages were often low (Gerretsen, 2009a; Gerretsen, 2009b; Mbewa and Cole, 2009⁵¹).

The Warwick Mall had the potential to fulfil a number of requirements for the inner city, as it would have provided growth and employment in the construction phase as well as thereafter, creating approximately 680 permanent jobs, as well as a number of part time jobs. The development would also have provided growth opportunities and graduation to more formal and bigger business opportunities (Comins, 2009; Kockott, 2009a; KwaZulu-Natal Provincial Government, 2009⁵²). Fear was however expressed that the development would have resulted in

⁵⁰ Swyngedouw *et al*, 2002; Agyeman and Evans, 2003; McCarthy, 2004; Pope *et al*, 2005; Roberts *et al*, 2009; Scipioni *et al*, 2009; Foster, 05/05/2010; KwaZulu-Natal Planning and Development Commission, 2010a; Houghton, 2011; Iyer, 03/08/2011; www.oneplanetliving.org.

⁵¹ Ndlovu, 2009; Tanner, 2009.

⁵² Luthuli, 2009; Moolla, 25/08/2010; Saib, 2010c; Moonsammy, 12/09/2011.

thousands of job losses within not only the EMM, but Warwick market as a whole, particularly in a recession (Kockott, 2009b; KwaZulu-Natal Provincial Government, 2009; Skinner, 2009⁵³).

The Point Development offers a wide range of economic gains for the city, most notably those relating to stimulating new economic activity and promoting tourism, which uShaka has already achieved; increases in consumer spending and investment; increases in property and land values, and consequent increases in rates revenue; as well as those relating to job creation, whereby employment is currently provided within the development, with the potential for further employment in the SCH (McCarthy, 2000; Enslin, 2004; Robbins, 2004b⁵⁴). Many of these benefits have however not been realised due once again to the slow progress of the completion of the development, as a result of the factors noted in 7.2.6, such as delays in planning and the Environmental Impact Assessment (EIA) process, as well as the shift of the city's development focus to the north.

There are also concerns that some economic benefits may be lost with the construction of the SCH, such as the economic value from national and international sporting events which currently take place at Vetch's Bight, and the economic value of the surfing industry, as well as the loss of current jobs (Scott *et al*, 2006; Save Vetch's Association, 2011; Pravin Amar Development Planners and Common Ground, n.d.). Further concerns arose that the new activities associated with the SCH would be in competition with those currently occurring at Wilson's Wharf and the Durban Marina, and would thus have negative impacts on these businesses (Scott *et al*, 2006).

The stadium and the Point have thus both contributed to economic growth and employment creation, while the mall had the potential to do the same. As was noted however, the extent to which each of them has, or could have done this, is uncertain. The stadium offered limited employment opportunities and its impact on economic growth and employment creation is uncertain; the Point SCH will result in some job losses and a loss of economic gain to other businesses, and the Point's contribution to economic growth has been limited. The mall would have resulted in job losses as well as affecting a market which currently plays a significant role in the city's economy. Urban regeneration in the city thus concentrates on promoting economic

⁵³ Dorasamy, 2010; www.ins.onlinedemocracy.ca.

⁵⁴ Iyer Rothaug Collaborative, 2006; Padayachee, 2006; Scott *et al*, 2006; Give uShaka, 2009; Johnson, 2009; Makhathini, 2009; Naidoo, 2009a; Naidoo, 2009b; Develing, 2010; Gounden, 2010; Scott, 22/04/2010; Sim, 30/04/2010; Carnie, 2011b; eThekweni Municipality, 2011; Maharaj, 11/07/2011; Moonsammy, 12/09/2011; Brink, n.d.; Pravin Amar Development Planners and Common Ground, n.d.; www.durban.gov.za; www.durbanpoint.co.za (a); www.laurusco.com; www.sacities.net; www.southafrica.info; www.thepropertymag.co.za (b).

growth and employment creation, but is not always successful in achieving this to a satisfactory extent, thereby affecting the achievement of a more sustainable city.

7.2.12 Ensure economic viability

Economic viability is an important factor for a sustainable city, and projects should be economically viable in the long term. It is therefore imperative that they are managed well, in terms of ensuring that they are occupied or utilised, that people and business have a fair advantage in making use of the facility, that they are income generating, and have sufficient funds for maintenance. These factors must be addressed in order to guarantee that the project does not become a ‘white elephant’ (Lungo, 2002; McCarthy, 2004; Cashman, 2006⁵⁵).

Post-World Cup revenues for the approximately R3.4 billion stadium were estimated at R24.5 million per annum, and the stadium has generated income due to its mixed use nature. R600 million had been raised through tourists visiting the stadium up until June 2010, and the stadium has hosted a number of events and concerts, as well as various soccer matches, including those of the two anchor clubs, Lamontville Golden Arrows and AmaZulu Football Club (Daradagan, 2009b; Kockott, 2009c; Spar Women’s, 2009⁵⁶).

There have however been concerns as the project went over budget, and concerns that it was “financially illogical” as there was an existing stadium which could have been upgraded (Albert, 20/04/2010; Foster, 05/05/2010). There have also been concerns that no consideration was given to the viability of the stadium in terms of operational and maintenance costs; and many contended that it was likely to become a ‘white elephant’ and a burden on taxpayers, particularly if other sports codes do not use the stadium, giving it a constant cash flow. This is especially relevant, as the estimated revenues of the stadium were based on the inclusion of rugby, and as noted in section 7.2.6, neither rugby nor cricket have been included. It is now known that it is going to cost ratepayers and taxpayers R28 million a year to maintain the stadium, highlighting that economic viability was not effectively considered (Albert, 2009; Easton, 2009; Hannam, 2009⁵⁷). This reflects a concern surrounding the construction of stadiums, as they are highly specialised facilities that have limited use after an event such as a World Cup, for which the Moses Mabhida Stadium was built (Matheson, 2006).

⁵⁵ Ugwu and Haupt, 2007; Moolla, 25/08/2010; Scott, 22/04/2010; Moonsammy, 12/09/2011; Digby, n.d.

⁵⁶ Venter, 2009; Goldstone, 2010; Khumalo, 2010; Mbanjwa, 2010; Moolla, 25/08/2010; Savides, 2010b; Savides, 2010d; Seale, 2010; Sole, 2010; Waterworth, 2010; Maharaj, 2011; www.mmstadium.com.

⁵⁷ Rajbansi, 2009; Tanner, 2009; Albert, 20/04/2010; Develing, 2010; Gerretsen, 2010; Omar, 2010; Robbins, 22/04/2010; Savides, 2010e; Scott, 22/04/2010; Seale, 2010; Sim, 30/04/2010; Sole, 2010; Maharaj, 2011; Maharaj, 11/07/2011; Moonsammy, 12/09/2011; www.cup2010.info.

The Warwick Mall was to be a private development of approximately R400 million, complimented by the contribution of a taxi rank by the eThekweni Municipality (Jenvey, 2008; Comins, 2009; Kockott, 2009a⁵⁸). The economic viability of the mall would have however been partially dependent on its ability to generate income, which is in turn dependent on the attraction of customers (Moolla, 25/08/2010). This would be related to the affordability of the mall components in terms of rent and cost of products, particularly relating to the existing users of the area. Therefore in order for the mall to be economically viable, it would have needed to provide goods, service and facilities at an affordable rate. It is questionable whether it would have done this as, as stated in 7.2.4, costs of a range of goods would have increased by over 100 percent in the Spar; and it is uncertain what rates would have been charged. Plates 7.17, 7.18 and 7.19 show the current traders and their goods in the EMM.

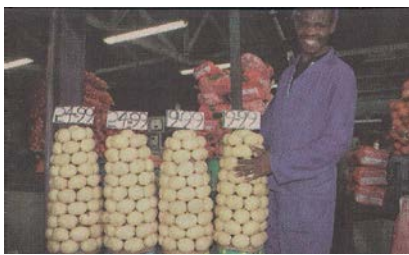


Plate 7.17: A trader with his goods (Johnstone, 2010).



Plate 7.18: Part of the EMM (www.marketsofwarwick.co.za).



Plate 7.19: Part of the EMM (www.marketsofwarwick.co.za).

A number of issues have been identified in terms of the economic viability of the Point Development. Although the R750 million uShaka Marine World attracted more than 4.2 million paying guests up until 2009, the large crowds it had hoped to attract have not materialised, and it has experienced high operating deficits, resulting in it requiring subsidies from the local state. Up until 2010, R60 million of ratepayers funds had been used for this purpose, resulting in it becoming a burden on citizens (Albert, 2009; Cole, 2009; Give uShaka, 2009⁵⁹). Investment in the area has also been slow, and only a fraction of the apartments are occupied (McCarthy, 2000;

⁵⁸ KwaZulu-Natal Provincial Government, 2009; Palitza, n.d.; www.durban.gov.za.

⁵⁹ Jasson da Costa, 2009; Mbanjwa, 2009; Mbonambi, 2009b; Plater, 2009; Vassilaros, 2009; Develing, 2010; Maharaj, 2010; Robbins, 22/04/2010; Scott, 22/04/2010; Sim, 30/04/2010. Maharaj, 11/07/2011; Naidoo, 2011; www.durbanpoint.co.za (b).

Robbins, 2004a; Jasson da Costa, 2009⁶⁰), with many consequently believing that the Point has failed to “take off” (Gounden, 2010; Robbins, 22/04/2010; Scott, 22/04/2010⁶¹). It has further been noted that the level of success of the Point is directly linked to the levels of return on the initial public investment of uShaka, and fundamentally tied to the attainment of the SCH (Scott *et al.*, 2006; DAEA, 2009; Brink, n.d.). However, uShaka is struggling financially and the SCH has not yet been constructed, resulting in the economic viability of the Point being compromised. This reflects the long time scale which many mega-projects have, and the slow progress which characterises many of these projects, resulting in them failing to be completed within the original implementation timelines (Flyvbjerg, 2003; Cornelissen, 2008; Diaz Orueta and Fainstein, 2008⁶²).

The economic viability of all of the projects is consequently debatable. The stadium and the Point both have some aspects which contribute towards their economic viability; however many factors have put them under pressure, and the viability of the previously proposed Warwick Mall was also considered to be tenuous. The stadium and the Point have also both suffered from cost overruns and benefit shortfalls, and had the Warwick Mall been approved, it may have met the same fate. This highlights the inaccurate forecasts which are characteristic of mega-project development, and result in the viability of projects being misleading, and projects therefore being highly risky (Flyvbjerg, 2003; Ehrenfeucht, 2004; Flyvbjerg, 2008). Economic viability is therefore not considered effectively in the city’s urban regeneration strategies. In order for the city to become more sustainable, economic viability of development is a major consideration which should be effectively incorporated into planning and urban regeneration.

7.2.13 Promote more sustainable and efficient forms of transport

Encouraging an eco-efficient transport network, that is well integrated into urban forms and produces environmental benefits, is a major aspect of making a city more sustainable. It is therefore important to discourage the use of motor vehicles; encourage the use of public transport by providing an effective, attractive and affordable public transport system; and to prioritise walking and cycling (Couch and Dennemann, 2000; Agyeman and Evans, 2003; McCarthy, 2004⁶³). This principle thus contributes to ecological sustainability through the reduction of

⁶⁰ Naidoo, 2009b; Albert, 20/04/2010; Robbins, 22/04/2010; Sim, 30/04/2010; Moonsammy, 12/09/2011; Save Vetch’s Association, 2011; Brink, n.d.; www.eprop.co.za (b); www.hotelandrestaurant.co.za; www.pwr.co.za.

⁶¹ Iyer, 03/08/2011; Maharaj, 11/07/2011.

⁶² van Marrewijk *et al.*, 2008.

⁶³ Carmona, 2006; Swilling, 2006; Scipioni *et al.*, 2009; Hale, 2010; KwaZulu-Natal Planning and Development Commission, 2010; KwaZulu-Natal Planning and Development Commission, 2010b; Iyer, 03/08/2011; Digby, n.d.; www.oneplanetliving.org.

pollution, and social sustainability by providing more convenient and affordable transport options for the poor and disadvantaged.

In the design of both the stadium precinct and the Point, the lead urban designers, Iyer Urban Design Studio, asserted that it was important for the projects to be scaled to the human scale (Iyer Rothaug Collaborative, 2003, cited in Gounden, 2010; Iyer, 03/08/2011). A Kings Park Railway Station has been constructed as part of the stadium precinct, creating a public transport network allowing visitors direct rail access to the stadium (www.durban.gov.za). The Point also incorporated the notion of de-emphasising a car dominated environment through promoting walking and cycling, and as noted in 7.2.2, the Point incorporates promenades and walkways which ensure pedestrian movement (Iyer Rothaug Collaborative, 2003, cited in Gounden, 2010). The People Mover bus has also been incorporated into the area since the World Cup. A pedestrian link between Masabalala Yengwa Avenue, and the beach was also created, to offer a safe, enjoyable walk from the beach to the stadium precinct, and cycling has been promoted from the stadium around the beachfront (Brink, n.d.; www.durban.gov.za).

The idea for the Warwick Mall emerged around the notion of reducing and reorganising traffic and public transport in the area, and upgrading commuter facilities and modes; through the construction of a taxi rank on the top level of the mall (Jenvey, 2008; Comins, 2009; Kockott, 2009a⁶⁴). The mall was proposed in an area which is already highly pedestrian, however it may have enhanced the safety of walking through improving traffic flow, and the incorporation of security measures.

There have however been criticisms that there is limited pedestrian traffic, as the dominant mode of travelling around the stadium precinct is by car (Maharaj, 11/07/2011), and that besides the railway station there has been no effective public transport restructuring associated with the stadium (Robbins, 22/04/2010). The main form of transport which is used to get to the Point is also most likely private motor vehicles, as those who utilise the Point are predominantly middle to upper income citizens, and as noted in 7.2.2, the surrounding area is somewhat dangerous resulting in people driving there rather than walking.

The incorporation of sustainable transport modes is therefore a principle which the city is attempting to incorporate into many of its mega-projects. Although it is not always entirely

⁶⁴ KwaZulu-Natal Provincial Government, 2009; Moolla, 25/08/2010; www.l2b.co.za.

successful due to a range of factors, it appears to be an important element of urban regeneration within Durban, thus promoting a more sustainable city.

7.2.14 Minimise pollution and waste; and maximise energy efficiency

In order to become more sustainable, it is vital for a city to reduce local pollution (noise, air, water, land), and protect air and water quality. It is therefore necessary to reduce waste; reduce greenhouse gas emissions; minimise energy use and maximise energy efficiency, through measures such as the use of solar power; and to use water more efficiently. Generating energy from renewable resources or waste; encouraging reuse and/or repair; promoting recycling and the use of recycled products; as well as the development of green buildings are further aspects which may contribute to a more sustainable city (Brugmann, 1997; Couch and Dennemann, 2000; Marshall, 2001b⁶⁵).

The stadium implemented a ‘greening’ strategy, for which it won a gold award in the Impumelelo Innovations Award Trust’s 2010 Sustainability Awards (Sebake, 2008; Khan, 2010). Environmentally sustainable principles were thus entrenched in the project, and water use was reduced by seventy four percent, through interventions such as the provision of rainwater capture and pitch-water recycling systems (Dardagan, 2010; <http://urbanchoerography.net>; www.unemp.org.za). Energy efficiency was also addressed through interventions such as LED technology; and the stadium’s carbon footprint was reduced by thirty percent. Waste was minimised and recycled, as more than 400 tons of steel, 40 000 bricks, 10 000m³ of concrete, topsoil and grass were recovered from the old soccer stadium, and used in the construction of Moses Mabhida (Sebake, 2008; Buthelezi, 2010; Dardagan, 2010⁶⁶).

It is uncertain whether the Warwick Mall would have incorporated any such measures, and the Point appears to have incorporated some interventions into its planning, such as a monitoring program to minimise pollution from the SCH (Pravin Amar Development Planners and Common Ground, n.d.). The stadium thus seems to be the most progressive in terms of this principle, allowing it to contribute to sustainability in this way, while the Point may do this to some extent. The greening of the stadium was however done as per FIFA’s requirements for stadia to be

⁶⁵ Agyeman and Evans, 2003; Swilling, 2003; McCarthy, 2004; Mog, 2004; Swilling, 2006; Ugwu and Haupt, 2007; Scipioni *et al.*, 2009; KwaZulu-Natal Planning and Development Commission, 2010a; Sim, 30/04/2010; Iyer, 03/08/2011; Digby, n.d.; www.oneplanetliving.org.

⁶⁶ Foster, 05/05/2010; Khan, 2010; Sim, 30/04/2010; Sole, 2010; Moonsammy, 12/09/2011; www.cup2010.info; www.unemp.org.za.

developed in an environmentally sustainable manner, and funding was provided by the Danish Embassy (Sebake, 2008; Sebake and Gibberd, 2008; Sim, 30/04/2010).

This principle is thus one which is increasingly being incorporated into urban regeneration development projects in the city, such as the Moses Mabhida Stadium and others including the King Shaka International Airport, which have adopted a green economy or green building approach. Urban regeneration which incorporates this principle is increasing, and therefore contributing to a more sustainable city. It is however a costly endeavour and therefore plays a role where it is specifically required or where funding is available.

7.2.15 Maintain ecological integrity

Sustainability acknowledges that all life has intrinsic value and is interconnected, and that biodiversity and ecological integrity form part of the irreplaceable life support systems upon which the earth depends. It also recognises that to plan for the common good, equitable distribution of public resources is required to ensure the maintenance of ecosystem functions and to provide a shared resource available to all. It is thus vital to ensure that environmental assets and resources are not compromised, in order for a city to be sustainable (Brugmann, 1997; Newman, 2005; Roberts *et al*, 2009⁶⁷).

The maintenance of ecological integrity involves the conservation and maintenance of resources; promoting the stability and healthy functioning of balanced and diverse ecosystems, as well as socio-ecological system integrity; promoting resilience; and encouraging and protecting biodiversity and natural habitats, through appropriate land use and integration into the built environment (Goodland, 1995; Goodland and Daly, 1996; DEAT, 1998⁶⁸). The carrying capacity of the environment must be considered; biotic support must be included, such as the provision of open spaces and linkages between them; and the precautionary principle must be adhered to, to ensure prevention of environmental damage. It is also suggested that development should be constructed on 'brownfield' sites, leaving 'greenfield', or undeveloped land, untouched (Satterthwaite, 1999; McCarthy, 2004; Roberts *et al*, 2009⁶⁹). In essence, any human activity should avoid affecting the functioning of ecosystems and the environment; and if possible development should enhance the functioning of ecosystems.

⁶⁷ KwaZulu-Natal Planning and Development Commission, 2010a; Robbins, 22/04/2010; Sim, 30/04/2010.

⁶⁸ Satterthwaite, 1999; Couch and Dennemann, 2000; Agyeman and Evans, 2003; Berkes *et al*, 2003; Davidson-Hunt and Berkes, 2003; Folke *et al*, 2003; Swilling, 2003; McCarthy, 2004; Mog, 2004; Pope *et al*, 2005; Gibson, 2006; Swilling, 2006; Digby, n.d.; www.oneplanetliving.org.

⁶⁹ Digby, n.d.

Both the stadium and the mall were planned on brownfield sites which had been previously developed, which contributes to the maintenance of ecological integrity (www.unemp.org.za). As such, their impact on further aspects of ecological integrity was minimised. The interventions for the stadium which were discussed in 7.2.14, such as the minimisation of water consumption, contribute to maintaining ecological integrity, as they allow for the conservation of resources. One other aspect which can be noted in terms of the stadium is that it incorporated indigenous plants in eighty percent of landscaping, as well as plant species which provide food and shelter for indigenous birds, insects and other urban wildlife (<http://urbanchoreography.net>; www.unemp.org.za). According to Julie May Ellingson, former Head of the SPU, the environment and its issues were integral to the development of the stadium (Dardagan, 2010). The incorporation of this principle within the development of the mall is uncertain, as the impacts in this regard are unknown.

The Point however presents somewhat of a different scenario, particularly in the case of the proposed SCH. The ecological component of the EIA identified that the SCH could cause potential significant impacts on the ecology of the reef by Vetch's beach; or could result in the loss of the reef. Various parties are also concerned as they consider any damage to the ecological integrity to be unacceptable, and assert that a lengthy construction period will have a negative effect on the reef and the beach (Johnson, 2009; Vassilaros, 2009; Gounden, 2010⁷⁰). There were further concerns that the ecological issues are not being given as much consideration as they should be, and WESSA was concerned that it will set a troubling precedent with increasing future development of environmentally sensitive coastal land (Naidoo, 2009b). This illustrates the possible negative ecological impacts which may result from mega-project development (Gounden, 2010).

This loss of ecological value was however not considered critical with the incorporation of mitigatory measures (Scott *et al*, 2006; DAEA, 2009; Johnson, 2009⁷¹), and the ecological impacts were thus not considered to be highly significant in the EIA; which rather highlighted the social issues as critical.

The maintenance of ecological integrity appears to be another principle which is considered to some extent in urban regeneration. It is important for the city to further incorporate this principle into urban regeneration, as compromising the long term sustainability of the ecological aspects

⁷⁰ Save Vetch's Association, 2011.

⁷¹ Robbins, 22/04/2010; Scott, 22/04/2010; Pravin Amar Development Planners and Common Ground, n.d.; Weerts, n.d.

which are present, will ultimately result in negative effects on the social and economic systems which depend on them.

7.2.16 The reflection of principles for “good built environments”

The built environment must be well-designed and built, and principles for good built and natural environments must be reflected in planning, development and management of the city, including implementing effective environmental management procedures and enforcement mechanisms. Ideas from best practice should be incorporated into the design of the built environment; high quality architecture and urban design should be strived for; developments should be environmentally friendly in terms of building and design; and local materials and technology should be used wherever possible. Concentration (high densities) should also be encouraged where appropriate in order to reduce urban sprawl, and create a compact city (Couch and Dennemann, 2000; Lungo, 2002; Gellert and Lynch, 2003⁷²).

A number of the elements which contribute to “good built environments” can be observed for each project, and some will be discussed in this section. The stadium incorporated high quality architecture and design, as the intention was to produce an iconic landmark for the city. It has been established as one of the most modern and eye-catching sports facilities in the world, and the design has been applauded (Alegi, 2008; Daradagan, 2009b; Maennig and du Plessis, 2009⁷³). Another element for which it won the President’s award mentioned in 7.2.16, is for the contemporary landscape design which was executed on a “bold scale with continuity of approach, aesthetic appeal and response to local place and function clearly visible” (www.worldlandscapearchitect.com). Plates 7.20 and 7.21 provide images which emphasise the iconic nature of the stadium in the city.

⁷² McCarthy, 2004; Swilling, 2006; Sebake and Gibberd, 2008; Roberts *et al*, 2009; Foster, 05/05/2010; KwaZulu-Natal Planning and Development Commission, 2010b; Iyer, 03/08/2011; Digby, n.d.; www.oneplanetliving.org.

⁷³ Savides, 2009b; Airey, 2010; Coetzee, 2010; Coppola, 2010; Foster, 05/05/2010; Hennig, 2010; Parsons, 2010; Savides, 2010c; Scott, 22/04/2010; Seale, 2010; Sim, 30/04/2010; Sole, 2010; Maharaj, 11/07/2011; www.durban.gov.za; www.southafrica.info; www.wiehahn.co.za.



Plate 7.20: Moses Mabhida (Dardagan, 2009c).

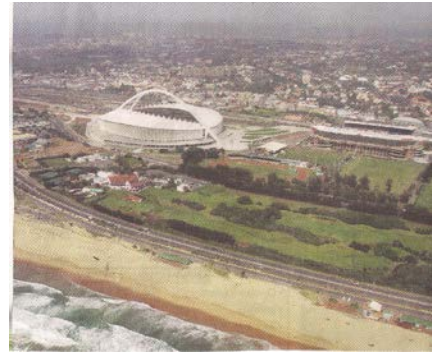


Plate 7.21: The stadium
(www.fifaworldcup.durban.gov.za).

Furthermore, the stadium sourced ninety percent of furniture locally, as well as eighty five percent of materials (www.unemp.org.za). It is also environmentally friendly in terms of building and design, as discussed in 7.2.14, and incorporated some best practice principles in this regard. An environmental management plan is also in place to ensure efficient management of the stadium (www.unemp.org.za).

According to some, the Warwick Mall would have been a bold and aesthetically pleasing use of space (Jenvey, 2008). However others feel it was essentially an enclosed box with blank facades, which local architects describe as "inappropriate form", contributing nothing to the streetscape (www.abahlali.org; www.streetnet.org.za). The design of the building incorporated wide walkways, allowing the accommodation of the large volumes of commuters that pass through the area. The shopping centre also had four different entrances in order not to restrict any flow of commuter movement between the various transport nodes (www.durban.gov.za). These elements would have contributed to high quality urban design, although the appearance of the mall was not acceptable to all. Other elements cannot be commented on as the project was not developed.

There are a number of iconic buildings which have been developed within the various elements of the Point precinct, and high quality streetscapes, open spaces and squares have been incorporated (Iyer Rothaug Collaborative, 2003, cited in Gounden, 2010; Cole, 2009; Gounden, 2010⁷⁴). The waterfront is also considered unique, as it is the only one in the world on a beach (Scott *et al*, 2006); and uShaka was awarded the international THEA Award for exceptional design in the marine park category (www.durban.gov.za). These aspects are examples of high quality architecture and design. However, in 2009, uShaka required a R15 million loan for urgent maintenance and repairs due to poor design choices and the use of inappropriate materials during

⁷⁴ Scott, 22/04/2010.

construction (Mbonambi, 2009b). The Point also incorporates high density buildings, as opposed to lower densities (Iyer, 03/08/2011).

In each of the projects, some aspects of this principle have been incorporated; although for the proposed Warwick Mall it is unsure what other elements may have been included. Therefore the different aspects of this principle appear to be important in urban regeneration, although the extent to which they are incorporated varies from project to project. The extent to which they contribute to sustainability consequently varies within the city.

7.4 Incorporation of the sustainable city principles into mega-projects and urban regeneration

The preceding analysis highlights that some of the principles of sustainable cities are being incorporated into the development of these mega-projects, while the extent to which this is done varies between projects, and is limited in some cases. There are also a number of principles which are not effectively considered, or are disregarded to a large extent. This is particularly the case concerning many of the social principles, such as social justice and intragenerational and intergenerational equity; and this often occurs where political decisions have been made surrounding the projects. Consequently, sustainability has not been incorporated into these mega-projects to a meaningful or significant extent, and urban regeneration in the city is therefore not effectively incorporating sustainability.

Durban, as stated in Chapter Four, is a developing city with a unique history. Globalization and neo-liberal urban restructuring have had an important influence on the city's development, and neo-liberal characteristics are thus evident within the city. It has consequently become a site of competitiveness, engaging in partnerships with the private sector in order to develop urban infrastructure, including mega-projects; and attract investment via strategies such as hosting major sporting events. The city thus aspires to position itself among a world hierarchy of competitive metropolitan areas, and consequently subscribes to a neo-liberal pro-growth approach to development, whereby trickle-down effects from economic growth will provide benefits to the poor and marginalised (Pillay and Bass, 2008).

The hosting of the 2010 FIFA World Cup in the city also resulted in unique opportunities to fast-track development such as the Moses Mabhida Stadium, due to the short timeline involved. These pro-growth strategies have thus resulted in the side-lining of sustainability goals in urban regeneration within the city, as the economic imperative of competing on the world stage has

eclipsed all others. Any resulting sustainability which may be achieved is therefore weak (Owens, 1994; Gibbs *et al*, 1998; Ekins *et al*, 2003; Gończ, 2007).

It has been determined that sustainability is evident in the rhetoric of policy and planning within Durban, and there is therefore a strong ‘theoretical’ base for its implementation, and the move to a more sustainable city. The preceding analysis however, highlights that its practical interpretation and implementation remain problematic in urban regeneration strategies, such as these mega-projects, within the city. The exclusion of these sustainable city principles and thereby the exclusion of sustainability will have harmful consequences for the long-term development of the city, and the local government must therefore carefully consider the way in which urban regeneration and development are proceeding. This requires a shift to the practical application of the normative policy and planning sustainability goals, whereby the principles of sustainable cities are incorporated to the greatest extent possible in urban regeneration endeavours such as mega-projects in order to ensure a more sustainable future in the long term.

7.5. Summary

The incorporation of sustainability is vital to ensure the long term development and success of the city of Durban. As urban regeneration plays a significant role in the current development of the city, it is important to determine the extent to which sustainability is incorporated into regeneration strategies. This has been achieved through the development of sixteen core sustainable city principles, which have allowed the assessment of the incorporation of sustainability in urban regeneration, through the lens of three mega-projects.

Although some of the principles are evident in the development of these mega-projects, it has been determined that sustainability has not been included to a significant extent, and therefore that urban regeneration in the city does not critically consider and incorporate sustainability goals. The future of the city thus requires a shift from a sustainability rhetoric to its dominance in practical application.

The following chapter presents the conclusion, which provides an explanation of the way in which the objectives of the study were achieved. The relationship between urban regeneration and sustainability in the city is discussed, and the consequences for the development of the city are explored. The relevance of the study is presented, and suggestions are made for similar future studies.

Chapter 8

Conclusion

Urban regeneration and sustainability are two agendas which have emerged in parallel within policy and planning in the city of Durban, KwaZulu-Natal. The determination of their relationship, and what this means is therefore crucial for understanding the current and future development of the city. This chapter presents the conclusions of the study.

8.1 The study

The focus of this study was the contemporary urban regeneration landscape within the city of Durban, which has incorporated the development of a number of large scale mega-projects, encompassing locally strategic or entrepreneurial approaches. Parallel to this was the introduction of the concept of sustainability within the policy and planning rhetoric of the city, which incorporates social, ecological, economic and governance elements. These two agendas of urban regeneration and sustainability therefore emerged in parallel within the city, and formed the focus of this study.

The aim of the study was therefore to use mega-projects within Durban as a lens through which to explore the relationship between urban policy and regeneration, and the achievement of sustainability goals. Three mega-projects which have played an important role in the city were thus identified and described. The definition of mega-projects as large-scale (re-)development projects, which incorporate a mix of commercial, residential, retail, leisure, industrial, and infrastructure uses, and are developed primarily in the inner city, was used to identify these projects, as well as a number of other characteristics. The three projects which were identified were the Moses Mabhida Stadium which was planned and constructed for the 2010 FIFA World Cup; the Warwick Mall which was proposed in one of the city's major transport hubs, Warwick Junction, but was subsequently put on hold in 2011; and the Point Development, which is being developed as a world-class waterfront complex.

The main policy and planning documents within the city were examined, and fundamental goals and objectives which guide urban regeneration and sustainability were identified, in order to provide the policy context for the two agendas. This allowed for an understanding of the way in which these two agendas are being undertaken in Durban.

Interviews, relevant documents, reports, international literature newspaper articles and internet sources were used to gather information, which was subsequently analysed. The data collected predominantly from the interviews and some other sources enabled the identification of the dominant themes of urban regeneration and development within the city, and the role played by mega-projects

as an urban regeneration strategy. The dominant discourses in the city were therefore identified, as well as the incorporation of urban regeneration and sustainability within the city's policy and planning documents. Urban regeneration was identified as an important agenda within Durban in terms of re-imagining the city; and thereby enhancing its competitiveness, as well as its ability to attract investment and tourism.

The role of mega-projects within urban regeneration was recognised, and their dominance in the urban landscape was illustrated. It was further acknowledged that these projects appear to incorporate elements of being locally strategic, which involves upgrading areas through local regeneration, and the promotion of further development within the city; or entrepreneurialism, which is concerned with enhancing the competitiveness of the city, and attracting international tourism and investment. These mega-projects may also incorporate elements of both of these to varying levels. These themes were therefore identified as having distinct features, but also as being connected and reinforcing within their development roles.

A final theme concerning sustainability in Durban was examined, and it was determined that sustainability is a meaningful concept for the city which has emerged as an element of mainstream development planning. There are however many difficulties in pursuing this novel concept, and although it appears to be evident in much of the city's rhetoric, its practical implementation has met many challenges. It therefore requires increased incorporation into the city to ensure a sustainable future.

Sixteen sustainable city principles were thereafter developed from various literature sources, the interviews which were conducted, policy and planning documents, and the ideas of the researcher. The characteristics of the three mega-projects were subsequently investigated in terms of their relation to the sustainable city principles, using data from the interviews, newspaper articles, relevant documents, and internet sources. This allowed for reflection on the incorporation of sustainability within urban regeneration in the city.

The realisation of these objectives thus allowed for the extent to which urban policy and regeneration of urban space within the city of Durban is concerned with the goals of sustainability to be determined, and the aim of the study to be met.

8.2 The relationship between urban regeneration and sustainability in Durban

The relationship between the agendas of urban regeneration and sustainability is complex, yet it is vitally important that it is understood in the current era of neo-liberal urban restructuring, where social and ecological concerns are in conflict with the promotion of growth and competitiveness.

Elements of urban regeneration and sustainability were identified within the city's policy and planning documents, including the Long Term Development Framework (LTDF), the Integrated Development Plan (IDP) and the Central Spatial Development Plan (CSDP) within the Spatial Development Framework (SDF), thus highlighting that the planning goals and objectives within the city are concerned with the implementation of both of these agendas within development.

The importance of urban regeneration, as an element of urban restructuring within Durban, is evident in the current development and planning landscape which has emerged in the city. Mega-projects have consequently become an important tool of urban regeneration, as they achieve the aims of re-imagining the city and enhancing its attractiveness and competitiveness, while promoting development in the city. These projects include developments such as sports precincts, shopping malls and waterfronts which formed the focus of this study, in the form of the Moses Mabhida Stadium, the previously proposed Warwick Mall and the Point Development. The definition of mega-projects is however contentious, and there may not be agreement concerning the classification of these projects as "mega". However for the purposes of this study, they were classified as such using the chosen definitions.

These mega-projects which have been implemented in the city, and particularly the inner city, have demonstrated locally strategic and entrepreneurial approaches intended to enhance the economic competitiveness of the city in a globalized economy, and to further development at a local level. The three projects were identified as incorporating components of both of these approaches to varying degrees; thereby aiming to transform or enhance an area of the city, through forming part of a broader plan, and thus promoting further change and development, through a locally strategic approach; and to attract investment and tourism, and become more attractive through an entrepreneurial approach.

The Moses Mabhida Stadium was identified as predominantly forming part of an entrepreneurial approach through the focus on becoming internationally competitive; and the Warwick Mall was recognised as being primarily a locally strategic project aimed at regenerating the Warwick area. The Point Development was considered to equally incorporate aspects of each approach, with the intention to be a catalyst for further development in the city, while aiming to provide an internationally attractive waterfront environment.

These locally strategic and entrepreneurial approaches in mega-project development appear to be similar to the concepts of flagship and prestige projects, which were identified in Chapter Three. Flagship projects are aimed at encouraging growth within specific areas, and therefore have common elements with the locally strategic projects which attempt to promote growth in particular areas of the city. Prestige projects are a type of flagship project which are aimed at promoting economic growth,

attracting investment, and enhancing the image of a city at the local, national and international level. The entrepreneurial projects which have been identified also embody these goals. The Moses Mabhida Stadium and Point Development would therefore be considered prestige projects, while the proposed Warwick Mall would have been identified as a flagship project. The mega-projects within Durban which were investigated can thus be identified as predominantly prestige projects which occur within the frame of flagship developments.

It has however become evident that the focus on mega-projects in the city is one which is not supported by all citizens. Many criticisms have been raised regarding this development agenda, as it is felt that these large scale projects do not provide the trickle down effects to the poor and disadvantaged citizens which they pledge, and often result in these citizens being pushed out of certain areas. They are thus also criticised for their effect on increasing social polarisation in the city, and for the lack of participation which is included in their planning and development.

Sustainability was recognised as an important concept for the city, however it was noted that its practical implementation has been somewhat lacking within development. It is evident within the policy documents and rhetoric of the city; and some aspects of it were also considered to be addressed within the three mega-projects which were investigated, in terms of the incorporation of some of the sustainable city principles. However it was considered that many of the sustainable city principles were not adequately incorporated, or were not addressed to a significant degree in this urban regeneration strategy. It can therefore be concluded that sustainability is not effectively addressed within urban regeneration in the city, particularly with regard to mega-project development.

Ravetz's (1996) spectrum of sustainability for urban areas which was discussed in Chapter Two provides a relevant starting point for the determination of what level of sustainability cities have achieved, and what further initiatives are required to enable them to move along a path to becoming more sustainable cities. Durban's commitment to sustainability in terms of their urban regeneration strategies results in the city being situated at the weaker levels of sustainability in Ravetz's spectrum, as the focus has been on the more 'superficial' elements of sustainability, and the higher levels of the spectrum have therefore not been reached. Durban thus appears to incorporate weak sustainability.

Weak and strong sustainability represent paradigm shifts of differing proportions, and as trade-offs are still being made between economic development and environmental considerations, as well social needs, it appears the city has not moved beyond weak sustainability (Owens, 1994; Gibbs *et al*, 1998; Ekins *et al*, 2003; Gończ, 2007). The city must therefore attempt to pursue strategies which focus it towards the higher level of Ravetz's spectrum, and therefore stronger sustainability. This further shift to strong sustainability includes a focus on all human activities within the urban system; and requires

a recognition that socio-political systems and the economy are embedded within ecosystems, and that good governance is required to regulate the relationship between these components, as well as the integrity of these relationships (Owens, 1994; Ravetz, 1996; Ekins *et al*, 2003; Gibson *et al*, 2008).

It thus appears that despite the emergence of urban regeneration and sustainability as parallel agendas within the city, there has been a lack of co-ordination between them and an imbalance in action, resulting in greater emphasis given to achieving urban regeneration, particularly pro-growth economic regeneration, than to sustainability (Couch and Dennemann, 2000). The neo-liberal pro-growth agenda has thus become dominant in the way in which urban regeneration is undertaken within the planning and development landscape of the city, due to the need and desire to compete in the global economy; and sustainability has consequently been side-lined.

They are therefore currently conflicting, rather than mutually reinforcing agendas within the city. This may result in negative impacts on the development of the city in the long term, and it is therefore imperative that sustainability is included to a greater extent within planning and development. Strong sustainability may be difficult to achieve in the context of a developing country such as South Africa, but there is still a need to strive towards it to ensure a more sustainable city and future.

8.3 Relevance of the study

This study has contributed to the production of knowledge concerning the nature of large scale economic developments, or mega-projects, as an element of urban regeneration within the city of Durban, as well as to the debate surrounding whether the city's pro-growth urban regeneration regime is contributing to the long term success of the city through the incorporation of sustainability concerns.

It also provides examples of the specific sustainable city principles which should be incorporated within a city's development and urban regeneration strategies, such as mega-projects, in order for the city to be more sustainable in the long term. This study therefore also contributes to the ability of cities to become more sustainable.

Future studies surrounding the role of mega-projects as an urban regeneration strategy, or the relationship to sustainability in Durban, could investigate various other projects within the inner city. They may also focus on projects occurring in other areas of the city, such as specific development occurring in the North and the South, including the King Shaka International Airport and the proposed port expansion.

The investigation of mega-projects occurring in other cities in KwaZulu-Natal could provide an analysis of what is occurring in the province in terms of these two agendas. Mega-projects being implemented in other cities such as Cape Town and Johannesburg may also provide insight into the urban regeneration and sustainability processes occurring within South Africa, as well as allowing for a comparison between these cities.

In order to determine the extent to which sustainability is being incorporated in the planning and development of the city, a future study could also investigate the relationship between sustainability and mega-projects which are focused on pro-poor initiatives within Durban.

Further studies of interest may involve an investigation of the way in which to improve the performance of mega-projects in terms of sustainability, as well as exploring the way in which decisions concerning these projects are made within cities such as Durban.

Given that cities hold the key to the future, with more than seventy percent of the global population expected to be living in cities by 2030 (UN-HABITAT, 2008); it is critical that a balance is achieved between economic growth and urban regeneration, and sustainability, particularly in the face of current challenges such as climate change. This research has shed some light on the relationship between these two agendas in the city of Durban, South Africa; and has highlighted how difficult it is for sustainability to have a significant impact in the context of the contemporary neo-liberal global economy. In order for sustainability to be placed firmly on the regeneration agenda, a fundamental change in the culture and priorities of cities is required, with a greater emphasis being placed on a broad and long term strategic view that includes social, economic and ecological dimensions.

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Appendix A: Questionnaires from the interviews conducted

a) Questions for Don Albert

Section A: Strategic Projects in Durban

1. The planning and development landscape of Durban has shifted in the past few years.
 - a. How would you describe the development of Durban over the past five years?
 - b. Who do you feel has been driving this development, and for what purpose?

2. Durban has established a strategic project unit, mainly focusing on the 2010 World Cup. How would you define a strategic project?

3. Do you feel there is a focus on strategic projects within Durban? Please name what you think are the main strategic projects that have been undertaken in the past three years.

Section B: Strategic Projects

4. Would you define the following as strategic projects?

Projects	Yes/ No	Explain
MM		
Warwick		
Point		

5. As an architect, did you have any involvement in the projects? If so, what was your involvement?

Projects	Yes/ No	What was your involvement?
MM		
Warwick		
Point		

6. Who is/was the key driver behind the projects?

Projects	Key drivers
MM	
Warwick	
Point	

7. On what principles or ideas were the projects developed?

Projects	Principles/ Ideas upon which were developed
MM	
Warwick	
Point	

8. What are the goals of the project? And what do you perceive to be the role of the projects within the city of Durban?

Projects	Goals of project	Role of the project within Durban
MM		
Warwick		
Point		

9. What do you feel were the key challenges associated with the projects?

Projects	Key challenges
MM	
Warwick	
Point	

10. Do you feel the projects align with the policy and goals of the city? Please explain.

Projects	Yes/ No	Explain
MM		
Warwick		
Point		

11. What critical issues have been traded off in decision-making around the projects?

Projects	What critical issues have been traded off?
MM	
Warwick	
Point	

12. Has your view/ conception of the project changed over time? If so how and why?

Projects	Yes/No	How and why has it changed?
MM		
Warwick		
Point		

Section C: Sustainability:

13. Durban has incorporated a notion of sustainability into its policy documents and rhetoric about development. What do you understand by sustainability?

14. Is sustainability a meaningful and realistic concept for planning and development in Durban?

15. Is it pursued within the planning/ restructuring of the city? Do we see evidence of it within the current strategic projects? Explain.

16. Do you feel these projects fit within the framework of sustainability? If so, how?

Projects	Yes/No	How?
MM		
Warwick		
Point		

17. What are the key sustainability concerns which should be included in projects of this nature?

b) Questions for Dianne Scott and Glen Robbins

Section A: Strategic Projects in Durban

1. The planning and development landscape of Durban has shifted in the past few years.
 - a. How would you describe the development of Durban over the past five years?
 - b. Who do you feel has been driving this development, and for what purpose?

2. Durban has established a strategic project unit, mainly focusing on the 2010 World Cup. How would you define a strategic project?

3. Do you feel there is a focus on strategic projects within Durban? Please name what you think are the main strategic projects that have been undertaken in the past five years.

Section B: Strategic Projects

4. Would you define the following as strategic projects?

Projects	Yes/ No	Explain
MM		
Warwick		
Point		

5. As a planner/ social scientist/ development researcher, did you have any involvement in the projects? If so, what was your involvement?

Projects	Yes/ No	What was your involvement?
MM		
Warwick		
Point		

6. Who is/was the key driver behind the projects?

Projects	Key driver
MM	
Warwick	
Point	

7. On what principles or ideas were the projects developed?

Projects	Principles/ Ideas upon which were developed
MM	
Warwick	
Point	

8. What are the goals of the projects? And what do you perceive to be the role of the projects within the city of Durban?

Projects	Goals of the project	Role of the project within Durban
MM		
Warwick		
Point		

9. What do you feel were the key challenges associated with the projects? Was there any resistance encountered, and from whom?

Projects	Key challenges?	Yes/ No	From whom?
MM			
Warwick			
Point			

10. Do you feel the projects align with the policy and goals of the city? Please explain.

Projects	Yes/ No	Explain
Moses Mabhida		
Warwick Mall		
Point		

11. Did the project undergo an EIA? Did this have any impact on the project? Explain.

Projects	EIA?	Impact: Y/N?	Explain
MM			
Warwick			
Point			

12. What critical issues have been traded off in decision-making around the project?

Projects	Critical issues traded off
MM	
Warwick	
Point	

13. Has your view/ conception of the project changed over time? If so how and why?

Projects	Yes/No	How and why has it changed?
Moses		
Warwick		
Point		

Section C: Sustainability:

14. Durban has incorporated a notion of sustainability into its policy documents and rhetoric about development. What do you understand by sustainability?

15. Is sustainability a meaningful and realistic concept for planning and development in Durban?

16. Is it pursued within the planning/ restructuring of the city? Do we see evidence of it within the current strategic projects? Explain.

17. Do you feel these projects fit within the framework of sustainability? If so, how?

Projects	Yes/No	How?
MM		
Warwick		
Point		

18. What are the key sustainability concerns which should be included in projects of this nature?

c) Questions for Vicky Sim

1. You worked as a planner in the city. Please reflect on planning (its discourses, approaches, practices) within the eThekweni Municipality.
2. The planning and development landscape of Durban has shifted in the past few years.
 - a. How would you describe the development of Durban over the past five years?
 - b. Who do you feel has been driving this development, and for what purpose?
3. Durban has established a strategic project unit, mainly focusing on the 2010 World Cup. How would you define a strategic project?
4. Do you feel there is a focus on strategic projects within Durban? Please name what you think are the main strategic projects that have been undertaken in the past three years.
5. Would you define the following as strategic projects? Explain.
 - Moses Mabhida
 - Warwick Mall
 - The Point Development
6. Who is/was the key driver behind the projects? What are the goals of the projects?
7. Do you feel the projects align with the policy and goals of the city? Please explain.
8. Has your view/ conception of these projects changed over time? If so how and why?
9. Durban has incorporated a notion of sustainability into its policy documents and rhetoric about development. What do you understand by sustainability?
10. Is sustainability a meaningful and realistic concept for planning and development in Durban?
11. Is it pursued within the planning/ restructuring of the city? Do we see evidence of it within the current strategic projects? Explain.

12. Do you feel these projects fit within the framework of sustainability? If so, how?

- Moses Mabhida
- Warwick Mall
- The Point Development

13. What is the agenda/ goals for the city in the next five years? What will the city be focusing on?

d) Questions for Nina Foster

1. The planning and development landscape of Durban has shifted in the past few years.
 - a. How would you describe the development of Durban over the past five years?
 - b. Who do you feel has been driving this development, and for what purpose?
2. Your research has focused on mega-projects. How would you define a mega-project?
3. Durban has established a strategic project unit, mainly focusing on the 2010 World Cup. How would you define a strategic project? Or do you think all mega-projects can also be defined as strategic projects?
4. Do you feel there is a focus on mega-projects/ strategic projects within Durban? Please name what you think are the main mega-projects/ strategic projects that have been undertaken in the past three years.
5. Do mega-projects form part of a suitable development path for the city of Durban?
6. Would you define the following as strategic projects? Explain.
 - Moses Mabhida
 - Warwick Mall
 - The Point Development
7. What do you perceive to be the role of the projects within the city of Durban?
8. Do you feel the projects align with the policy and goals of the city? Please explain.
9. Has your view/ conception of these projects changed over time? If so how and why?
10. Durban has incorporated a notion of sustainability into its policy documents and rhetoric about development. What do you understand by sustainability?
11. Is sustainability a meaningful and realistic concept for planning and development in Durban?

12. Is it pursued within the planning/ restructuring of the city? Do we see evidence of it within the current mega-/strategic projects? Explain.

13. Do you feel these projects fit within the framework of sustainability? If so, how?

- Moses Mabhida
- Warwick Mall
- The Point Development

e) Questions for Hoosen Moolla

Section A: Strategic Projects in Durban

1. The planning and development landscape of Durban has shifted in the past few years.
 - a. How would you describe the development of Durban over the past five years?
 - b. Who do you feel has been driving this development, and for what purpose?
2. Durban has established a strategic project unit, mainly focusing on the 2010 World Cup and a number of mega-projects.
 - a. How would you define a mega-project?
 - b. How would you define a strategic project?
3. Do you feel there is a focus on mega-projects within Durban? Please name what you think are the main mega-projects that have been undertaken in the past three years.

Section B: Warwick Mall

4.
 - a. Would you define the Warwick Mall as a mega-project? Please explain.
 - b. Would you define the Warwick Mall as a strategic project? Please explain.
5. What is your role/ involvement in the project?
6. Who is the key driver behind the project?
7. On what principles or ideas was the project developed?
8. What do you perceive to be the role of the project within the city of Durban?
9. What have been the key challenges associated with the project? Has there been there any resistance encountered, and from whom?
10. Has the project undergone an EIA? Did this have any impact on the project? Explain.
11. What critical issues have been traded off in decision-making around the project?

12. Has your view/ conception of the project changed over time? If so how and why?

Section C: Sustainability:

13. Durban has incorporated a notion of sustainability into its policy documents and rhetoric about development. What do you understand by sustainability?

14. Is sustainability a meaningful and realistic concept for planning and development in Durban?

15. Is it pursued within the planning/ restructuring of the city? Do we see evidence of it within the current mega-projects? Explain.

16. Do you feel this project fits within the framework of sustainability? If so, how? What are the key sustainability concerns which should be included?

f) Questions for Brij Maharaj

Section A: Mega-projects in Durban

1. The planning and development landscape of Durban has shifted in the past few years.
 - a. How would you describe the development of Durban over the past five years?
 - b. Who do you feel has been driving this development, and for what purpose?

2. Durban has established a strategic project unit, which was largely focused on the 2010 World Cup and a number of mega-projects.
 - a. How would you define a mega-project?
 - b. How would you define a strategic project?

3. Do you feel there is a focus on mega-projects within Durban? Please name what you think are the main mega-projects that have been undertaken in the past three years.

Section B: Strategic Projects

4. Would you define the following as mega-projects?

Projects	Yes/ No	Explain
Moses Mabhida Stadium		
Warwick Mall		
Point Development		

5. Did you have any involvement in the projects? If so, what was your involvement?

Projects	Yes/ No	What was your involvement?
Moses Mabhida		
Warwick Mall		
Point		

6. Who is/was the key driver behind the projects

Projects	Key driver?
Moses Mabhida	
Warwick Mall	
Point	

7. On what principles or ideas were the projects developed?

Projects	Principles/ Ideas upon which were developed?
Moses Mabhida	
Warwick Mall	
Point	

8. What do you perceive to be the role of the projects within the city of Durban?

Projects	Role of the project within Durban?
Moses Mabhida	
Warwick Mall	
Point	

9. What do you feel were the key challenges associated with the projects? Was there any resistance encountered, and from whom?

Projects	Key challenges?	Yes/ No	From whom?
Moses Mabhida			
Warwick Mall			
Point			

10. Do you feel the projects align with the policy and goals of the city? Please explain.

Projects	Yes/ No	Explain
Moses Mabhida		
Warwick Mall		
Point		

11. Did the project undergo an EIA? Did this have any impact on the project? Explain.

Projects	EIA?	Impact: Yes/No?	Explain
Moses Mabhida			
Warwick Mall			
Point			

12. What critical issues have been traded off in decision-making around the project?

Projects	What critical issues have been traded off?
Moses Mabhida	
Warwick Mall	
Point	

13. Has your view/ conception of the project changed over time? If so how and why?

Projects	Yes/No	How and why has it changed?
Moses Mabhida		
Warwick Mall		
Point		

Section C: Sustainability:

14. Durban has incorporated a notion of sustainability into its policy documents and rhetoric about development. What do you understand by sustainability?

15. Is sustainability a meaningful and realistic concept for planning and development in Durban?

16. Do you feel it pursued within the planning/ restructuring of the city? Do we see evidence of it within the current strategic projects? Explain.

17. Do you feel these projects fit within the framework of sustainability? If so, how?

Projects	Yes/No	How?
Moses Mabhida		
Warwick Mall		
Point		

18. What are the key sustainability concerns which should be included in projects of this nature?

g) Questions for Nathan Iyer

Section A: Strategic Projects in Durban

1. The planning and development landscape of Durban has shifted in the past few years.
 - a. How would you describe the development of Durban over the past five years?
 - b. Who do you feel has been driving this development, and for what purpose?
2. Durban has established a strategic project unit, which was largely focused on the 2010 World Cup and a number of mega-projects.
 - a. How would you define a mega-project?
 - b. How would you define a strategic project?
3. Do you feel there is a focus on mega-projects within Durban? Please name what you think are the main mega-projects that have been undertaken in the past three years.

Section B: Point Development

4. Would you define the Point Development as a mega-project? Would you define it as a strategic project? Explain.
5. What was your role/ involvement in the project?
6. Who was the key driver behind the project?
7. On what principles or ideas was the project developed?
8. What do you perceive to be the role of the project within the city of Durban?
9. What were the key challenges associated with the project? Was there any resistance encountered, and from whom?
10. Did the project/s undergo an EIA? Did this have any impact on the project? Explain
11. What critical issues have been traded off in decision-making around the project?

12. Has your view/ conception of the project changed over time? If so how and why?

Section C: Sustainability:

13. Durban has incorporated a notion of sustainability into its policy documents and rhetoric about development. What do you understand by sustainability?

14. Is sustainability a meaningful and realistic concept for planning and development in Durban?

15. a. Do you feel this project fits within the framework of sustainability? If so, how? b. What are the key sustainability concerns which should be included?

h) Questions for Soobs Moonsammy

1. You work as a planner in the city. Please reflect on planning (its discourses, approaches, practices) within the eThekweni Municipality.
2. The planning and development landscape of Durban has shifted in the past few years.
 - c. How would you describe the development of Durban over the past five years?
 - b. Who do you feel has been driving this development, and for what purpose?
3. Durban has established a strategic project unit, which was largely focused on the 2010 World Cup and a number of mega-projects.
 - d. How would you define a mega-project?
 - e. How would you define a strategic project?
4. Do you feel there is a focus on mega-projects within Durban? Please name what you think are the main mega-projects that have been undertaken in the past three years.
5. Would you define the following as mega-projects? Strategic projects? Please explain.
 - Moses Mabhida
 - Warwick Mall
 - The Point Development
6. Did you have any involvement in the projects? If so, what was your involvement?
7. Who is/was the key driver behind the projects? What are the goals of the projects? (In your opinion)
8. Do you feel the projects align with the policy and goals of the city? Please explain.
9. Has your view/ conception of these projects changed over time? If so how and why?
10. Durban has incorporated a notion of sustainability into its policy documents and rhetoric about development. What do you understand by sustainability?
11. Is sustainability a meaningful and realistic concept for planning and development in Durban?

12. Is it pursued within the planning/ restructuring of the city? Do we see evidence of it within the current strategic projects? Explain.

13. Do you feel these projects fit within the framework of sustainability? If so, how?

- Moses Mabhida
- Warwick Mall
- The Point Development

14. What is the agenda/ goals for the city in the next five years? What will the city be focusing on?

Appendix B: Sustainability principles

Social	
Vibrant culture	Creation of a place where socializing, education, politics, and commerce can take place.
Active, inclusive and safe	Social and cultural aspects. Safety in public places
Accessibility	Accessibility for all groups
Preservation of heritage	Preservation of a city's cultural heritage
Social justice	Reduction of environmental hazards, and attending to those citizens who face the greatest risk; The inclusion of marginalized populations Fair for everyone
Facilities/ amenities	Providing facilities that make city environments more pleasant, safe and valued by inhabitants
Quality of space	Ensuring every person has sufficient area and quality of space

Economic	
Economy	Link local production with local consumption Improve environmental awareness of local businesses Thriving economy A diverse and robust economic structure must be strived for, and a range of employment opportunities must be provided
Employment	Increase employment

Ecological	
Pollution	Air quality reduce local pollution (noise, air, water, land)
Energy	Maximise energy efficiency Generate energy from renewable resources or waste
Waste	Reduce waste Encourage reuse and/or repair Encourage recycling or recycled products
Resources	Conservation of resources Protecting natural landscapes with important ecological and/or aesthetic value True value must be placed on resources
Wildlife and open spaces	Encourage use of open space for community benefit, encourage plant and animal life

Governance	
Community participation	Participation and transparency within decision-making processes encourage local action and decision making involve the community in developing the proposal Take into account under-represented groups
Well-run	The management of cities must be open, accountable and effective Responsiveness and proactiveness
Consideration of sustainable city principles	Principles for good built and natural environments must be respected and reflected in planning, development and management of the city The formulation of goals that are rooted in a respect for both the natural environment and human nature and that call for the use of technology in an appropriate way to serve both of these resources The placement of high values on quality of life
Service provision	Well-served, by the services provided within the city A range of social and economic infrastructure must be offered by the city, including water, energy and power, health and education services It is essential for a city to develop and manage an effective internal transportation system and linkages
Integration	Seek to combine the social, economic and environmental Seek to integrate the efforts of partners involved

Couch and Dennemann (2000)

<p>Transport (More efficient forms of)</p> <p>(a) encourage walking and cycling</p> <p>(b) encourage use of public transport</p> <p>(c) discourage use of cars or lorries</p>	<p>Buildings and land use</p> <p>(a) provide local amenities</p> <p>(b) improve access for disabled</p> <p>(c) reuse/conservate buildings</p>
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Mog (2004)

- participation
- The respect and attention given to the opinions, ideas and perspectives of locals

- The degree of control locals have in setting goals, making decisions, planning, implementing, and evaluating the program
- The extension to the community not only of information, but also the capacity to solve problems on their own through appropriate means of assessment, analysis, and experimentation

Process-oriented criteria for evaluating the approach of sustainable development programs

1. Character of participation
2. Success and nature of institution- and capacity-building efforts
3. Diversity, multiplicity and adaptability of ideas promoted by the program
4. Accounting for heterogeneity, diversity and dynamism (in population)
5. Understanding and use of local knowledge, skills, initiative and constraints
6. Recognizing the influence of external conditions, markets and policies

Outcome-oriented criteria for evaluating sustainable rural development projects

Economic

- Reduce inequality—improve intra- and intertemporal wealth,
- Reduce poverty—quantitatively and qualitatively enhance income, employment, productivity
- Increase access to efficiently functioning markets and market information;

Socio-political

- Cultural acceptability—of the projects goals and methods, as well as the changes, technologies and policies promoted;
- Policy support—promote policies favorable to projects goals or tailor interventions to work within existing policy structure
- Facilitate learning and knowledge-sharing—to empower individuals and communities,
- Institutional flexibility/adaptability—to ensure resilience and continued relevance both within the program itself and among the organizations it helps create or strengthen
- Facilitate a process of social change—to improve attitudes, values, awareness, and behaviors as they relate to the goals of sustainable development
- Organize communities and mobilize local resources—material, human, financial, institutional, political, and cultural—toward the achievement of project objectives;

Ecological

- Maintain ecological integrity—by promoting the stability and healthy function of balanced and biodiverse (agro-)ecosystems

—Protect and/or increase biological and genetic diversity (particularly of indigenous species)

—Protect air and water quality—prevent both point source and nonpoint source pollution

Scipioni *et al* (2009)

Environmental	Economic	Social:	Economic
Waste	Unemployment rate	Public transport	Employment in projects
Electrical energy consumption	Tourist arrivals	Sport and recreation facilities	
Recyclable waste	Hotel use rate	Public parks and gardens	

Pope *et al* (2005)

Criteria (linked to principles):

- Provides both short and long term economic gain
- Increases access, equity and human rights in the provision of material security and effective choices
- Does not highly threaten biodiversity and ecological integrity, and builds life support systems
- Reduces ecological footprint while improving quality of life
- Builds up community and regions sense of place and heritage protection
- Provides conservation benefits and net social-economic benefits
- Ensures there are acceptable levels of risk with adaptation processes for the worst case scenarios
- Brings change and a sense of hope for the future as it is linked to a broader strategic vision

Gibson (2006)

Criteria:

- Socio-ecological system integrity
- Livelihood sufficiency and opportunity
- Intragenerational equity
- Intergenerational equity
- Resource maintenance and efficiency
- Socio-ecological civility and democratic governance

- Precaution and adaptation
- Immediate and long term integration

Ugwu and Haupt (2007)

<i>Economic</i>	<i>Environmental</i>	<i>Social</i>	<i>Resource utilisation</i>	<i>Health and safety</i>	<i>Project mngt/ admin</i>
Direct cost	Land use	Cultural heritage	Site access	Occupational 4	Contract
Indirect cost	Water	Public access	Material availability	Public	Procurement method
	Air	Public perception	Type		
	Noise		Constructability		
	Ecology		Reusability		
	Visual impact		Quality assurance		
	Waste management				

Satterthwaite (Roelofs, 1996; UN Centre for Human Settlements, 1996; Brugmann, 1997; Satterthwaite, 1997; Robins and Kumar, 1999; Girardet, n.d.).

Human needs-ecological, social, economic and governance factors-	adequate employment	high education	quality	good housing
vibrant culture	sharing of wealth	safety in public places		supportive relationships
equal opportunities	freedom of expression	diversity and vitality		respect for the environment
human health	conservation of resources	accessibility for all groups		creation of a place for socializing, education, politics, and commerce can take place
cultural development	good air quality			

The achievement of a high quality city environment for all of its citizens is vital, and includes:

- Providing facilities that make city environments more pleasant, safe and valued by inhabitants
- Ensuring every person has sufficient area and quality of space
- Protecting natural landscapes with important ecological and/or aesthetic value
- Preservation of a city's cultural heritage

Social justice:
reduction of environmental hazards
attending to those citizens who face the greatest risk
inclusion of marginalized populations
participation and transparency within decision-making processes

Roberts *et al* (2009)

A sustainable city will contain a sustainable community which must be:

Active, inclusive and safe, in terms of its social and cultural aspects

Well-run, in terms of governance

Environmentally sensitive, when considering environmental aspects

The built environment must be well-designed and built

Well-connected, in terms of transportation and connectivity

Well-served, by the services provided within the city

It must have a thriving economy

It must be fair for everyone, therefore there are important equity considerations

A ninth component may be considered as 'place-making'

Components of a sustainable city:

- True value must be placed on resources, and cities must not sell themselves too cheaply reducing the value placed on the resources, natural and human, that they use
- A city must develop and manage an effective internal transportation system and linkages
- A range of social and economic infrastructure must be offered, including water, energy and power, health and education services
- A diverse and robust economic structure must be strived for, and a range of employment opportunities must be provided
- Principles for good built and natural environments must be reflected in planning, development and management of the city, including implementing effective environmental management procedures and enforcement mechanisms
- Cities must be safe, socially cohesive and inclusive
- The management of cities must be open, accountable and effective

The second set of principles regards the application, management and maintenance of activities across a city. These principles represent the politics and implementation element, and concern the realisation of the first set of principles, in order to achieve a sustainable city; including:

- Strategic thinking must be utilised to provide a clear vision and strategy to guide the planning, development and management of a city
- Solid partnerships must be established, including the contribution of all stakeholders in planning and managing a city
- Citizens must be involved in the development of policy and in the range of implementation actions
- Actors and stakeholders involved in the planning, development and management of a city must have access to the necessary skills and knowledge
- The progress of a city must be monitored, evaluated and reviewed regularly

Digby (n.d.)

‘Green’ or ‘sustainable’ development - revolve around infrastructure projects, and may contribute to the realisation of a sustainable city. A development should:

Use or adapt existing facilities rather than build from scratch	Be financially viable
Environmentally friendly in terms of building and design	Minimise adverse impacts on nearby residents
Protect and encourage native vegetation	Be constructed on ‘brownfield’ sites, leaving ‘greenfield’, or undeveloped land, untouched
Include an effective public transport system	Minimise waste and encourage recycling
Minimise energy use, eg use solar power and avoid high energy usage such as air-conditioning	Minimise water use
Allow low-income groups to benefit	Have affordable housing
Minimise pollution	Be inclusive: benefit and include all members of the community

Carmona (2001)

Key principles of sustainable development

Futurity (protecting the needs of future generations)

Diversity (enhancing and maintaining natural capital)

Carrying capacity (to ensure activities can be accommodated in perpetuity)

Precautionary principle (to ensure prevention of environmental damage)

Equity (reflecting a need for resource sharing)

Participation (to allow sustainability to work as a process)

‘Polluter pays’ principle (ensuring that those responsible pay for the consequences of their actions)

Principles of sustainable urban design:

Stewardship (application of a long-term regeneration vision); resource efficiency (such as enhancing public transportation); diversity and choice (including encouragement of mixed uses, and localisation of facilities and services); human needs (such as encouraging socially mixed communities); resilience; pollution reduction (such as including tree planting); concentration (encouraging high densities where appropriate); distinctiveness (such as maintenance of historical identity); biotic support (such as provision of open spaces); and self-sufficiency (for instance, encouraging inclusive consultation and participation).

McCarthy (2004)

1. Economic regeneration

Potential to regenerate local economy? –how many jobs? Spin-off effects affecting viability of local economy?

Many projected economic benefits related to tourism- fragility of such employment, given that it is dependent on external demand, must be considered.

2. Stewardship (application of a long-term regeneration vision) and Resilience

Importance of tourism and related functions as potential catalysts for social and economic development are recognized (in policy).

Integrated approach to tourism development, with linked and complementary attractions, as opposed to haphazard and uncoordinated development. Tourism plan created

Policy context therefore applies principles of stewardship by means of a long-term integrated vision.

Proposals also apply principle of resilience by maximizing the re-use of historic buildings and facilitating the compatibility of potential future changes in use.

3. Diversity and choice (including encouragement of mixed uses, and localisation of facilities and services)

Encourage new and compatible mixed uses?

Right balance between commercial/ retail enterprise and social-oriented community facilities- safeguard interests of local people

Regenerative effects in terms of increased vitality and sustainability (due to mixed use)?

However do these facilities preclude local people? Increased choice is therefore somewhat artificial

Take into accounts needs of local people?

4. Human needs

Uses shared with local people?

Connections with local community- physically, socially and functionally?

Judd (1999): tourism development can lead to 'tourist bubbles' which comprise "tourist reservations... as artificial segregated environments devoted to consumption and play, while substantial areas of the city outside the tourist bubble fester with physical decay, crime and poverty" (p 53). Such areas reduce social cohesion by creating 'islands of affluence' that contribute to racial, ethnic and class tensions.

Green (2001): shows how social polarization can be exacerbated by projects which fail to integrate disadvantaged communities. This is related to the issue of gentrification and higher land and property prices, since 'the complementarity between leisure, luxury residential and elite employment land uses may be sufficient to shut out other claimants (to the waterfront), if not to the urban economy as a whole'.

Provide employment and attract people back into the area? Cater primarily for users of the marina etc? Existing residents may effectively be excluded, and existing uses catering for local people may be forced to close.

Provision of social facilities

Lead to displacement (partly due to increased land and property values) and gentrification?

5. Distinctiveness (such as maintenance of historical identity)

Critical to aim for distinctiveness. Distinctive due to unique historical heritage- does project erode heritage due to the fact that many of its tourism-related components are found in many other cities around the world?

Fainstein and Judd (1999): new concentrations of tourism-related uses can lead to increasingly standardized and homogenized environments.

Insertion of tourism-related uses may lead to loss of identity- Cottonera marina replicates other such facilities throughout the world.

If projects is too large, may be considered too large to allow the maintenance of the historic and cultural character of the area.

Cumming (2002) suggests that, while there is a need for the introduction of new services and amenities, these should not be of a scale and character that is detrimental to the historic built fabric.- restoration rather than redecoration

6. Self-sufficiency (for instance, encouraging inclusive consultation and participation)

Incorporates consultation and participation, communication- lack thereof

Points of contention

7. Concentration (encouraging high densities where appropriate), resource efficiency (such as enhancing public transportation), pollution reduction and biotic support (such as provision of open spaces)

How does it fare in terms of these aspects?

Roberts (2000) in McCarthy (2004) suggests that a contemporary definition of urban regeneration itself should incorporate sustainable development as an integral element. (already in theory 1)

Hence he proposes such a definition as:

Comprehensive and integrated vision and action which leads to the resolution of urban problems and which seeks to bring about a lasting improvement in the physical, social and environmental conditions of an area that has been subject to change.

Importance of tourism and related functions as potential catalysts for social and economic development are recognized (in policy) (McCarthy, 2004).

Interviews

Look at competing demands of communities- what do they want

Public consultation and participation

(Maharaj)

- Social acceptability, social sustainability
- Incorporating people into planning

Environmental sustainability – biophysical environment -> to what extent is it affected?

- Public spaces – kinds of spaces being created -> will they be dead (exclusive) or living acting spaces?
- Any sustainable development would have to take cognisance of not only the economic elite, but ordinary people as well.
- It must be socially acceptable
- Needs to be more thoroughly deliberated in public forums
 - has been a very top down, political process
- How proud are ordinary people of the 3 developments?
 - It's our money, we live here
 - Will it be used? What are the benefits? Financial viability? Who will use it?
 - Who will benefit? Benefits go to wealthy people. Who will lose?

- For strong sustainability, need more public participation (All projects have been rushed through)

(Scott)

- Proper, transparent
- Publicly scrutinise the development process – if controls are not open to public accountability, there is no way to know what is really going on, or to monitor it
- There is lawful, legal development protocol

(they are floating above legal requirements -> they are flouting the rules)

(Albert)

intergenerational equity, we shouldn't make decisions which compromise future generations ability to survive and thrive in the world

2 But a lot of it needs to be about democratic processes and effective negotiation

Don't compromise environmental assets and resources now so that they can't be of benefit to society and so they can't sustain themselves in future.

- Public participation
- Ability to ensure that these large scale projects do fit more coherently into a set of sustainable commitments by the city
- Open transparent processes, which involve not just post decision of consultation, but lots of engagement upfront about things
- Sense of place and of neighbourhood
 - a major failing is that they are very much geared towards an influx of people for short periods of time that come from outside, use space and disappear, don't create a vibrant basis for neighbourhoods to be formed or to develop
 - have very little in the way of genuine public resources and assets

(Robbins)

Managed in the sense that we deal with the day to day issues, in terms of the maintenance of this infrastructure; ensure that they are occupied, they're being used; that they're income generating; and people and business have a fair advantage in making use of the facility.

- So they don't end up as a white elephant

Sufficient funds for maintenance

So in terms of sustainability, the key issue here would be that there needs to be appropriate consultation with all stakeholder groups in projects. When you have extensive consultation with the people that are going to be occupying those projects, in the design stages, in the implementation stages, then you'll find that those projects become very successful and there are no problems.

Income generating

Economically viable

(Moolla)

high density housing, compact cities, public transport driven, walkable cities, recycling as part of system, a complete ecosystem in itself, has access to open space and productive landscapes economy, livelihoods, poverty; recycling old buildings,; re-energising the city precinct, reusing , density, public transport, public space; intergenerational equity

Historical and architectural value

recycling old buildings, recycling the old city, the services that were there
denisification

Beyond green building, it's about publicness, public transport, human well-being, spirit etc- much wider

But in a city, we are urban beings- this is our habitat- constantly need to improve this habitat and make it function better-> you can't make it function better without doing anything.

Do things to improve public transport- reduce emissions, reduce dependence on private cars, make public transport attractive; introduce green spaces into the city- want them to become part of our daily existence, be in touch with nature; but you build hard edges to it- build density around it

(Iyer)

Impact on environment, provided sustainable jobs, positive impacts

Sustainable jobs

Positive env impacts

Use of local technology

(Foster)

What doing must be able to endure- socially, environmentally and financially

Need to utilise and can endure

Sustain env- difficult

Achieve a balance- private sector; small, poor etc; Employment creation; Recycling

Energy efficiency; Economic viability

(Moonsammy)

As long as we are striving to be more environmentally sustainable on a biophysical environment side, and trying to think of peoples' needs, and the impacts on individuals' lives more in decision-making, that obviously strengthens sustainability

Need to maintain a certain standard from an environmental protection point of view, whether that means water quality, or green space or protecting your dunes or whatever that is

Energy efficiency

Open process

(Sim)

One Planet Living (www.oneplanetliving.org)

One Planet Living is a vision of a sustainable world, in which people everywhere can enjoy a high quality of life within the productive capacity of the planet, with space left for wildlife and wilderness. Organisations around the world are using the one planet living approach to take measurable steps towards genuine sustainability. From zero carbon buildings to procurement policies that support the green economy, one planet living solutions are cost-effective, creative, inspirational and replicable.

1. Zero carbon: Making buildings more energy efficient and delivering all energy with renewable technologies
- 2 Zero waste: Reducing waste, reusing where possible, and ultimately sending zero waste to landfill
- 3 Sustainable transport: Encouraging low carbon modes of transport to reduce emissions, reducing the need to travel
- 4 Sustainable materials: Using sustainable and healthy products, such as those with low embodied energy, sourced locally, made from renewable or waste resources
- 5 Local and sus food: Choosing low impact, local, seasonal and organic diets and reducing food waste
- 6 Sus water: Using water more efficiently in buildings and in the products we buy; tackling local flooding and water course pollution

7 Land and wildlife: Protecting and restoring existing biodiversity and natural habitats through appropriate land use and integration into the built environment

8 Culture and heritage: Reviving local identity and wisdom; supporting and participating in the arts

9 Equity and local economy: Creating bioregional economies that support fair employment, inclusive communities and international fair trade

10 Health and happiness: Encouraging active, sociable, meaningful lives to promote good health and well being

KZN Planning and Development Commission: Sustainable urbanization guidelines to manage growth

Open space and green cities

Inclusion of marginalised residents

Community consultation and participation

Ecosystems

NEMA

Sustainable development requires the consideration of all relevant factors including:

- Disturbance of ecosystems and loss of biological diversity are avoided, or minimized and remedied
- Pollution and degradation of the environment at avoided, or minimized and remedied
- Disturbance of landscapes and sites that constitute the nation's culture heritage is avoided, or minimized and remedied
- Risk averse and cautious approach is applied
- That negative impacts on the environment and on people's environmental rights are anticipated and prevented, or minimized and remedied

Environmental justice must be pursued so that adverse environmental impacts shall not be distributed in such a manner as to unfairly discriminate against person, particularly vulnerable and disadvantaged persons.

Decisions must take into account the interests, needs and values of all interested and affected parties, and this includes recognizing all forms of knowledge, including traditional and ordinary knowledge.

The social, economic and environmental impacts of activities, including disadvantages and benefits, must be considered, assessed and evaluated, and decisions must be appropriate in light of such consideration and assessment .