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2022
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Challenges of Public Participation in Climate Mitigation Projects with focus on Cosmo City Climate Proofing Programme

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This Research Report is submitted in partial fulfillment of the requirements for the degree of Masters of Science in Development Planning in Wits School of Architecture and Planning.

Johannesburg, 2014

Declaration

I, the undersigned hereby declare that this is my own piece of work, except where the references have been acknowledged. I further declare that this research has not been submitted to any institution of higher learning.

_____

Mbhekiseni, Roy Makhoba

Acknowledgements

First and foremost, I am thankful to **Almighty God** for being merciful with me by keeping my body and flesh intact to this moment and for giving me courage to deal with all trials and tribulations in my life. My words of gratitude are extended to all staff members of the **School of Architecture and Planning** for their academic guidance and support through this rigorous journey – 'I thank you all'. Special thanks to both my supervisors, **Margot Rubin and Dr Krisno Nimpuno**, as well as MSc Development Planning Programme Director, **Amanda Williamson** for believing in me, despite challenging circumstances that I went through in completing this project.

A big word of thanks also goes to **Aly Karam**, who was the face of the Planning Department when I started this degree. He was encouraging and made me see that the value this degree (MSc. DP) was going to add to my future career prospects.

A lot of thanks also go to my late father**, uXamukavinjelwa.** I want to say, despite the fact that you may no longer be around to see me finishing this degree, I will and forever treasure your creativity and fatherly advice you used to give us your children while you lived. It is true that education is not only accessed through formal schooling. Your wisdom was so exceptional despite the fact that the misfortunes of your childhood deprived you the opportunity of even accessing the formal education.

To my mother – **iNtombi ka Bhiva** your firm belief in education, your unwavering support and iron discipline you practiced on me during my teen years made me focus on education and nothing else. You have been the pillar of my strength in the whole journey of my life.

To **Simon Mporeji**, you proved to me that friends are those who stick with you when 'days are dark'. I thus thank you for your support in proof-reading and editing this research. I say 'Ra*!!!! moshima nyana wa mo' Pedi.*

Lastly, I thank my siblings and my children who have been a beacon of hope, without whom I may not have stretched myself this far.

I say '**Ukwanda kwaliwa nguMthakathi'** to all of your who have been on my side through this long and strenuous journey.

Abstract

The City of Johannesburg (CoJ) like other municipalities in South Africa piloted a climate change intervention programme in Cosmo city, called Climate Proofing Programme, with the aim of rolling it out to other housing projects in the municipality. This research aimed to investigate how inclusive public participation was in the implementation of the programme. The study was a qualitative design that used semi-structured interviews with sampled residents of Extension 2 and 6, where the CCCPP was piloted. Semi-structured interviews were also conducted with city officials. Additionally, the researcher made use of the observation method during interviews with councillors and managers of the CoJ and a manager of a donor organisation. In identifying participants for this research, random sampling was used to reach the targeted community respondents. Purposive sampling was used to collect interview data from the managers and councillors.

The research found that the project was pre-determined by the officials in a bid to secure funding that had been provided by the donor. As a result, no proper steps were followed to ensure authentic public participation. The project was not aligned with municipal planning instruments like the Integrated Development Plan (IDP) and accompanying institutional structures like ward committees which are the legislative mechanisms that encourage public participation in planning. Where officials endeavoured to engage the community, their public participation style was selective. The main problem appears to be that officials were not accountable to councillors regarding implementation of this project. Similarly, even the local councillors failed to provide political leadership towards implementation of CCCPP, because it was donor-driven.

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List of Acronyms

ADB	Asian Development Bank
AMD	Acid Mine Drainage
ANC	African National Congress
BCRTEE	British Columbia Round Table on the Environment Economy
BnG	Basa nje Ngomagogo
BNG	Breaking New Ground or Comprehensive Plan for Housing Delivery
BRT	Bus Rapid Transit system
CBA	Community Based Agencies
CBP	Community Based Programme
CCCPP	Cosmo City Climate Proofing Programme
CDM	Clean Development Mechanism
CECCS	City's Energy and Climate Change Strategy
Codevco	Cosmo City Development Consortium
CoJ	City of Johannesburg
CoP	Conference of Parties
CPUCP	Climate Proofing of Urban Communities Program
Cosatu	Congress of South African Trade Unions
DANIDA	Danish International Development Agency
DBSA	Development Bank of Southern Africa
DWEA	Department of Water and Environmental Affairs
ECA	Environment Conservation Act
EIA	Environmental Impact Assessment
EMP	Environmental Management Plan
EIPP	Institute of European Public Participation
EPCP	Eskom's Power Conservation Phase
FACC	Framework for Adaptation to Climate Change
FL	Compact fluorescent lamps
GDACE	DEPARTMENT OF AGRICULTURE, CONSERVATION AND ENVIRONMENT
GDS	Gauteng Development Strategy
ICLEI	International Council for Local Environmental Initiatives

IDP	Integrated Development Plan
I&AP	Interested & Affected Parties
IMEP	Integrated Metropolitan Environmental Plan
IPCC	Intergovernmental Panel on Climate Change
KZN	KwaZulu-Natal
LA 21	Local Agenda 21
LEDs	Light Emitting Diodes
MDG	Millennium Development Goals
MSA, 2000	Municipal systems Act of 2000
NMBM	Nelson Mandela Bay Municipality
NEMA	National Environmental Management Act of South Africa
NEPAD	New Partnership for Africa's Development
NGOs	Non-Governmental Organisation
NMBM	Nelson Mandela Bay Municipality
NIMBY	Not in My Back Yard
PHP	Peoples Housing Process
RDP	Reconstruction and Development Programme
RoDs	Record of Decisions
RSA	Republic of South Africa
SADC	Southern African Development Community
SWH	Solar Water Heater
UAP	Urban Agriculture Programme
UEM	Urban Environment Management
UK	United Kingdom
UNAP	United Nations Action Plan
UN	United Nations
UNDP	United Nations Development Program
UNCED	United Nations Conference on Environment and Development
UNFCC	United Nations Framework Convention on Climate Change
WB	World Bank
USA	United States of America
WLMP	Water Loss Management Programme

CHAPTER 1
INTRODUCTION

1.1 Introduction

The process of public participation in planning and governance decision making is the bedrock of democratic society (Burke, 1968; Pretty, 1995 cited in Sansom-Sherwill, 2006). It is against this background that these scholars view public participation as an indispensable tool for democratic governance. Public Participation is a governance process and tool that assists governments to achieve development results by ensuring that stakeholders understand and meaningfully participate in decision making, resources allocations and activities that affect their lives (Asian Development Bank (ADB), 2012). In most development settings, the stakeholders fall into three main groups – government, the private sector and civic society (*ibid.*). Civil society is the realm of public participation as compared to government and private sector, because this entity are the actual beneficiaries directly affected by development. Therefore, the community and civic society need to be actively involved in their own development planning and any project implementation, so that they can influence and drive decision making in these processes (Holmes and Scoones, 2000). The involvement of the community assists in enhancing the sense of public ownership of decisions and policies. Such public engagement ultimately leads to reduced resistance and strengthens cooperation in planning process (*ibid*.). Public participation is a tool at the disposal of marginalised groups in communities, which affords them a voice regarding issues of governance that affect them (World Bank, 1996).

Madanipour, Cars and Allen (1998), as well as Harvey (1997), highlight that exclusion and marginalisation of city residents from accessing resources of the city is mainly based on gender, race and class, and in most cases, poorer groups of the community are spatially discriminated in the city. Their settlements are located on the outskirts of the city, with serious issues of service delivery involving water, electricity and sanitation, matters that should be priorities in municipal decision making. Since 'planning process takes place in the face of conflict' (Forester, 1987:434), scholars like Davidoff (1965) argue that the role of the planner should be that of advocacy. In that role, the planners should be in a position to exert their influence in defending the interests

of the marginalised (*ibid.*). The argument of this author is based on the understanding that developers/city officials are informed by the adage that 'Time is money', which they deliberately adopt to by-pass public participation, as they pursue tight project time-frames to report on their performance score cards. In this context, the role of the planner in public participation is to navigate between the divergent interests of role players and bring about creative and deliberative engagement amongst them (Forester, 1987). The planners' critical role is to influence all parties to be more vigilant about realistic expectations and the challenges that might be encountered in the planning process, and hence empower them with insight on how they can come up with workable development solutions.

Public participation in matters of service delivery is important in a democratic society as a mechanism that entrenches social cohesion between government and the citizens, particularly in the provision of quality and sustainable services. In South Africa, prior to 1994, the government suppressed all forms of public participation especially among the black communities (Public Service Commission, 2008). However, after 1994 the newly elected government committed itself to, and embraced a people-centred development approach and public participation following a constitutional imperative that people's needs must be responded to, and the public must be encouraged to participate in policy making (Public service commission, 2008). Understandably, this was because apartheid administration was concerned with entrenching racism and paternalistic approaches in service delivery (Moodley, 2007) and there was no legislative framework that emphasized public participation in development issues. That being the case, post-1994 South Africa has developed an advanced and progressive model of public participation that is entrenched by policy and legislative framework especially Local Government**:** Municipal Systems Act of 2000 (MSA 2000), which supports citizen engagement in local government (Harrison, Todes and Watson, 2008).

Section 4(2) of this Act (MSA 2000) states that 'a municipal council, within the municipality's financial and administrative capacity and having regard to practical considerations, has the duty to, amongst other things, encourage the involvement of the local community and to consult the local community' about:

- The level, quality, range and impact of municipal services provided by the municipality, either directly or through another service provider; and

- The available options for service delivery.'

Sihlongonyane and Karam (2003) argue that the legislation relating to public participation has introduced a new approach in planning that has seen the post-apartheid government making a decisive break with rational comprehensive planning models which did not encourage engagement between community and the government.

Public Participation has the potential to enable government to address devastating effects of climate change, one of the key responsibilities and challenges that must be addressed side by side with the developmental mandate of service delivery, both of which rests on the shoulders of the local municipality. Chikulo (2011) views the challenge facing the local government its capability to link the objectives of reconstruction, redress and facilitation of local economic development, with those of climate change priorities within a sustainable development framework. This research therefore looked at how the research community was able to meaningfully take part in the decision-making process owned by the city, when it implemented the Cosmo City Climate Proofing Program (CCCPP). The other aim is to investigate the extent to which scientific rationalism was applied by the city officials in the process and to find out if this programme could have been better implemented.

1.2 Clarifying the main concepts of the research

(a) Public Participation

The issue of public participation is topical in South Africa's governance arenas. As expected, at the core of this concept are still many controversies that are engendered by different interpretations. Arnstein (1969) expatiated on the rhetoric use of this term in development planning. Few *et al.* (2006) contend that the normative nature of this concept means that it takes subjective forms when projects are implemented at community level. In the most practical terms, what is supposed to be a *participatory process* tends to be falsely presented by the bureaucrats to meet their own aims and objectives *(ibid.).* The bureaucrats tend to conduct the process through educating and informing the community so that they secure community's support for development plans, rather than create an enabling environment where the

community can genuinely voice their interests and aspirations about the plan (Sandercock, 1998a; Healey 1997).

The definition that will be adopted in this research is the one advanced by European Institute of Public Participation (EIPP). According to EIPP (2009) Public Participation is the deliberative process in which the interested or affected community, civil organisations and government actors are involved in project conceptualisation, and implementation to its finalisation, including evaluating its successes and failures. This definition implies that this process allows the local people a degree of control in setting goals, making decisions, planning, implementing and reviewing a programme (Hussein and Baranzini, 1990). Following that logic, public participation is not only the extension of informing and educating the community, but also gives them capacity to solve their own problems through appropriate means of assessment, analysis and experimentation (Owens, 1990).

(b) Climate change

Climate change, also known as global warming or the enhanced greenhouse effect, is caused by the rise in average global temperature due to increasing levels of greenhouse gases(GHG) in the earth's atmosphere (IPPC, 2001). Such emissions have resulted in changing climate and rainfall patterns as well as rising sea levels, flooding, droughts and extreme thunderstorms (Winkler, Spalding-Fetcher, Mwakasonda and Davidson, 2002 and Satterthwaite, 2007). Scientists have issued a cautionary warning, as a result, that much planning needs to be made especially within the next 5-10 years to cut global emissions to a minimum level, because the $0{,}13^0$ C temperature increase that has occurred in the last decade if unchecked, will have drastic effects on planet earth (IPPC, 2001).

(c) Climate change mitigation

Mitigation refers to actions taken to reduce the concentration of greenhouse gasses like carbon dioxide (CO_2), methane (CH_4), and nitrogen oxide (N_20) in the atmosphere to minimise the severe impacts of climate change (Urban Africa, 2012; Earthwatch Institute, undated). The United Nations (UN) defines mitigation in the context of climate change, as a human intervention to

reduce the sources or enhance sinks for greenhouse gases. Examples include using fossil fuels more efficiently for industrial processes or electricity generation, switching to renewable energy (solar energy or wind power), improving the insulation of buildings, and expanding forests and other 'sinks' to remove greater amounts of carbon dioxide from the atmosphere.

In countries where climate change management has advanced, mitigation also involves reducing the emissions of green gases at the source which can take many forms like building a wind farm instead of a coal-fired power plant, reducing the number of aeroplane/ship/car journeys, avoiding deforestation, creating more energy efficient, energy neutral, or even energy producing buildings, appliances and vehicles (Earthwatch, undated). However, the most practical method of mitigation that proves to be cost-efficient is by sequestering greenhouse gases out of the atmosphere through planting more trees that absorb CO_2, capture and store it in factories and power plants (UN Habitat, 2011). There are still other major research activities to develop measures that have no secondary impacts on the environment when they are implemented as it is currently happening with the geo-engineering options of pumping chemicals into the ocean and upper atmosphere (Urban Africa, 2011). DBSA research conducted in 2011 proved that mitigation activities afford decision makers the opportunity to understand the carbon footprints of specific areas, mostly cities and subsequently to determine the best possible interventions that they can undertake to reduce greenhouse gas emissions.

(d) Climate change adaptation

Many definitions of adaptation can be found in the literature, but for clarity the definitions that are offered by Smit, Burton, Klein and Street (1999; 2000) and of the IPCC (2001) will be used. Smit, Burton, Klein and Wandel (2000: 223) refer to adaptation as the 'adjustment in ecological, social, or economic systems in response to actual or expected climatic stimuli and their effects or impacts.' According to the IPCC (2001:57), the term adaptation refers to changes in 'processes, practices, or structures to moderate or offset potential damages or to take advantage of opportunities associated with changes in climate.'

A clearer definition views adaptation as actions taken to reduce the negative consequences of changes in the climate. This can be done by switching to drought resistant crops, creating or

protecting a coastal buffer zone, developing an effective early warning system, building flood barriers, extending insurance or, if possible, leveraging any positive consequences that may result from such changes. This may take the form of growing climate sensitive crops like grapes in new areas, using land that was previously water-logged, as well as increasing water availability in certain places and times of year (www.urbanafrica.net, 2011). Smithers and Smit (1997) argue that in circumstances where societies are exposed to adverse climate conditions, the world should adopt adaptation strategies to adjust individual, group and institutional behaviour in order to reduce society's vulnerabilities to climate. Burton, Diringer and Smith (2006) argue that from its inception, global climate discourse has focused predominantly on mitigation—reducing greenhouse gas (GHG) emissions to prevent climate change. The next stage of the international effort must deal squarely with adaptation-coping with those impacts that cannot be avoided (*ibid*.). The reason for that is because adaptation is often seen as secondary to mitigation. However, the development of future policy needs to address this in order to ensure that the appropriate balance between adaptation and mitigation is achieved.

In 2007 the IPCC 4th Assessment Report highlighted that impacts and risks of climate change were more imminent and severe than previously thought. It ominously highlighted that between 2050 and 2100 climate change could have a disastrous impact on economies, society, security, development and social safety net systems, particularly in poor countries. Some of the climate change scenarios, specifically for Africa, point to the need for the content to prepare for warmer world (DBSA, 2011). Therefore, it is essential that actions such as building climate change resilience (i.e. adapting) take place in parallel with efforts aimed at mitigation (CoJ, 2009). This becomes more pivotal for Africa as the projections indicate that warming of the continent may indeed be greater than the global annual mean in all seasons (*ibid*.).

1.3 Background of the study

South Africa's post-apartheid dispensation has made it mandatory that in its planning processes, the government must implement public participation. Municipal Systems Act 32 of 2000 (Section 16-22) states clearly that a 'municipality must develop a culture of municipal governance that encourages and creates conditions for local community to participate in the affairs of the municipality' (http://www.afesis.org/Local Governance Articles, 2011). Section 4(2) of the same

Act further states that 'a municipal council, within the municipality's financial and administrative capacity and having regard to practical considerations, has the duty to, amongst other things, encourage the involvement of the local community and to consult the local community about the level, quality, range and impact of municipal services provided by the municipality, either directly or through another service provider; and the available options for service delivery and create conditions for local community to participate in the affairs of the climate change'.

Furthermore, as signatory to the United Nations Framework Convention on Climate Change of 1992 (UNFCC), South Africa – through its municipalities, is compelled by Article 6 of this Convention to develop a culture of municipal governance that encourages public participation (*www.ngopulse.org.revitalising Public Participation, 2009*). Regarding the new challenges of climate change, this means that South African cities have been further mandated to take an active role in addressing this challenge. This added mandate has been justified by the fact that cities are the main centres of global production, and therefore their industrial and human activities put more pressure on the state of environmental degradation (Mokwena, 2009). This has led many cities to become the key role players in climate change policy making in the last 20 years.

Public participation in the formulation of adaptive responses to climate change has become a prominent feature in the discourse on climate change, and has increasingly become a legal requisite at both local and global levels. The global and local legislative regimes of countries mandate governments to put public participation at the core their development in as far as dealing with adaptation to climate change is concerned (*www.tyndall.ac.za, 2006*). This is evident in Article 6 of the 1992 United Nations Framework Convention on Climate Change, which makes it compulsory for signatory countries to develop suitable city governance systems that promote and facilitate 'public participation to adequately respond to climate change and its effects' (*www.tyndall.ac.za, 2006*). The Third Assessment Report of the Intergovernmental Panel on Climate Change further articulates that the conditions listed for enhancing adaptive capacity include 'active participation by concerned parties, especially to ensure that actions match local needs and resources' (*www.tyndall.ac.za, 2006*).

The fact that public participation and climate adaptation are inherently dual responsibilities of the city means that the community on the ground needs to be actively engaged in decision making process beyond the normal routines of being voters. Mathekga and Buccus (2006) argue that if role players in government and civil society plan, implement programmes and projects together, the outcomes are likely to be responsive to the needs of the communities.

1.4 Aims of the study

The aim of the study is to investigate the level of public participation that the CoJ enabled in the implementation of the Cosmo City Climate Proofing Program (CCCPP), particularly how this programme generally reinforced the sense of responsibility and ownership people attach to their housing process. It also interrogated social integration that should have been fostered by collective action that people should have embarked on during conceptualisation of CCCPP and inherent maintenance process of their housing infrastructure in response to climate change vulnerability.

This kind of research is necessary in the context of urban planning processes where public participation is elevated as the foundation of a vibrant community that must continually take service delivery processes as their own responsibility (Mathekga and Buccus, 2006). The lack of public participation renders service delivery less effective to the people because it ends up failing to address their real needs (*ibid*.). Fakir (2006:3) takes a similar view and maintains that 'technocratic and instrumental' delivery of services causes most municipalities to lose confidence and legitimacy in the eyes of the public, because most of their planning decisions have no concern for public participation. The key issues here are public participation and climate change, as indicated by Human Sciences Research Council (2008) that the challenge of climate change has been on the global agenda for more than 20 years and its impacts filters down to municipal planning processes.

This argument therefore challenges planners and government decision makers to come up with new models of planning that will enhance their capacity to deal with their conventional mandate (which is delivering basic services) as well as to plan for challenges brought by climate change in the form of mitigation and adaptation (Chikulo, 2011:2). The local government is the face of the

whole government. Accordingly, Secular 95 of the 1996 Constitution effectively legislated that municipalities should institutionalise public participation processes in their development plans. That being the case, municipalities should be making attempts to link public participation with climate change because the latter is an integral development issue at this level.

1.5 Research rationale

This research is influenced by the fact that Cosmo City is celebrated as a sustainable human settlements project, particularly its successful address of social integration. As expounded by Charlton and Kihato (2006: 252-282), the Plan for the Development of Integrated Sustainable Human Settlement was formulated to augment the 1997 Housing Policy[1] that was showing signs of failure as it produced monolithic and spatially disintegrated housing projects. Dubbed as breaking new ground or 'BNG,' the principle of this housing policy was underpinned by the philosophy which envisions housing as a tool for job creation; which values property as a means for wealth creation and empowerment, whose ultimate objective is to leverage economic growth through sustainable human settlement development, whist supporting spatial restructuring at the same time (Department of Housing, 2004).

Despite the fact that BNG policy aimed to break away from the 1997 Housing Policy, it failed to address the ensuing challenges of climate change in the housing process (Phalatshe, 2009). The aim of this research was to interrogate how far the CCCPP tried to address public participation by addressing the pitfalls of the BNG through emphasising climate change elements like infrastructure resilience, skills transfer and economic empowerment in housing development. Huchzermeyer (2001), Moser and Holland (2002) argue that the international housing literature, which influenced the framing of BNG, is based on the principles of *enablement, transparency and participation.* Given that context, the planners and city bureaucrats were expected to support people's efforts to collectively deliver services. Their primary duty was to facilitate dialogue and participation of the community in all stages of project development.

1 This policy advanced the people-centred housing process that creates enabling institutional structures that makes public participation, skills transfer, empowerment, housing choice and social integration possible.

Active community involvement brings about leveraging of people's expert knowledge, which arises from their local circumstances, thereby signalling a shift away from government to governance (Fair, 2006). Therefore, this research identified a missing link in this climate mitigation project, between recommended best practice and the actual development needs of the people on the ground. The research thus argues that any project devoid of 'voice from the borderlands' as expounded by Sandercock by (1998a:42) will be found wanting. The main reason attributed to such failure is that there is high likelihood that such projects may have been imposed on the community (Healey, 1992; Chambers, 1995 and Feinstein, 2000), which ultimately tends to widen instead of narrowing injustice and inequality in communities (*ibid*.).

1.6 Problem statement

The problem of climate change is real and has become pertinent in the arena of planning and municipal governance. Climate change impacts on housing settlements, manifests itself in destruction of infrastructure like water and sanitation, roads, and other related issues such as food security and deforestation to name a few. Climate change is a human-induced phenomenon (IPPC, 2001) and therefore it is the duty of all of sectors of society to address it, particularly since it is the most pressing issue of the twenty-first century (OECD, 2008). Studies predict that if we continue on the 'present trajectory, global greenhouse gas emissions will increase by more than 50% by mid-century' (OECD, 2008:53). The above studies also predict that the consequence of these emissions will mean that the world temperatures will rise from 1.7 to 2.4^0 C above pre-industrial levels by 2050 and from 4 to 6^0 C or more in the long-term (*ibid*.).

To respond to the adversities of climate change, many cities have designed programs to curtail this situation. The City of Johannesburg in particular has introduced Climate Proofing of Urban Communities Program, as a pilot project to address climate change in the city *(http://www.C40 .org/casestudies/ city-of Jo'burg, 2011*). South African government intends to use this project in setting standards for packaging of Climate Proofing as a norm in all housing delivery projects that will be rolled out in the future. It has therefore become an important element of governance that municipalities have to deepen public participation as they deal with climate change, especially when taking into account the extent of the life- threatening impacts of climate change on communities.

Public participation is anticipated to make the public aware of their interface with climate and natural processes. This sort of awareness should give the public an informed platform from which to influence municipal planning decisions for the benefit of the environment. The South African literature on public participation according to Cleaver (1999), acknowledges that local communities have knowledge of their problems, needs and are therefore better placed to initiate solutions that can sustainably develop their residential areas. It is therefore through public participation that local governments can conceptualise programmes that are relevant to the affected communities and thereby avoid administrators' speculative projects — which in many respects are bound to fail and ultimately turn into white elephants (Matladi, 2008).

1.7 The main research question

The primary research question for this research is: To what extent has the CoJ taken into consideration public participation in implementing Climate Proofing in Cosmo City, as a response to impacts of climate change? This research question is underpinned by the fact that globally, there is a general acknowledgement that public participation is the guiding principle in service delivery (Roger *et al.*, 2011). The emergence of climate change as a local government mandate has increased the mandate of local government above that of service delivery. As such, the well-known service delivery mandates like housing are competing with climate change for municipal budget allocation. It is therefore not understandable why there has been less consideration of public participation in planning for climate change in Cosmo City human settlement development (Chikulo, 2011). Habermas (1987), Healey (1997) and Sandercock (1998a) assert that in order for planning to truly accommodate multiple voices, a robust and deliberative engagement must be emphasised for specific discursive outcomes to bring about fair amount of justice to all the citizens of the city. Public participation has also become very necessary in planning for climate change because it is also part and parcel of service delivery with which municipalities need to carry out their developmental mandate (*www.earth systemgovernance.org.za, 2009*).

1.8 Sub-questions

- How was the CCCPP programme designed to ensure that it featured public participation from the beginning to the end?

- To what extent have people participated in programme implementation to reinforce publics' sense of ownership and enhance their level of understanding of the programme?
- What elements in the programme design have ensured that there is continued sustainability of the project in terms of transferring skills, so that beneficiaries are empowered to maintain the project in the long run?

1.9 Brief outline of the report

Chapter 1 provides general introduction to the study topic and explains the key concepts that drive the study. It presents the rationale for conducting the study as well as the problem statement. The chapter also presents a main research question and sub- questions guide the study's enquiry.

Chapter 2 gives the context of the study. It starts by exploring the history of Cosmo Housing project, and then presents a broader picture of the physical geography and the nature of the infrastructure in the study area. Then follows the main focus, which is the CCCPP, especially its objectives. The programme objectives are put into sharp focus, through the main and sub-questions of this study. The key argument advanced in this chapter is that Cosmo City is one of those projects that was nationally elevated, as the symbol of fostering social cohesion through urban planning. But the social dialogue that preceded this project mirrors the imprints of apartheid social engineering, as the white community fought relentlessly to have this project aborted. Secondly, the planning system as evidenced by the prescriptions of the Gauteng Environment Department's Record of Decisions (RoD), further polarised the Cosmo City community as the decisions required the physical separation of housing styles following income levels.

Chapter 3 is literature review and gives an overview of South African housing development and its policy direction since 1994. It thereafter interrogates the concept of public participation and its challenges as expounded in Anstey's (1997) Ladder Theory of Public Participation. The theory explores the relationship between public participation and planning processes at city level. The vast information that forms this chapter is based on the review of different literatures to inform

the theoretical framework of this research. This is supplemented by reviewing media reports, searches on the internet and other relevant sources. The chapter also points out that the municipality is the focal point regarding undertakings to deal with city vulnerability to the impacts of climate change. The chapter further highlights that cities are the organisational structures where climate change effects are severely felt. The fact that the city is in the forefront of service delivery gives an urgency to invest more on research so that the city can come up with creative innovations in buffering its people and infrastructure from severe climate change disasters. Hence the significance of mainstreaming public participation because this process presents people the opportunity to come up with their situated solutions to their experienced living circumstances (Healey, 1997).

Chapter 4 presents the broader research methods and design that were employed in collecting the data. It further justifies the reasons behind the nature and selection of sample frame in the population studied. The chapter further explains the level of validity and reliability of the research tool, as well as the procedures that were followed during the gathering of data. In so doing, it further highlights the ethical issues and limitations in this study.

Chapter 5 presents the findings of the study. Qualitative data in the form of interviews and observations from the field study are used to generate an in-depth analysis of the extent of public participation in the climate planning programmes in Cosmo City. The chapter further analyses and discusses diverse perceptions of what constitutes public participation from the viewpoint of the study sample. Data analysis and discussion is informed by the different theories presented in Chapter 3, which is the theory chapter.

Chapter 6 deals with conclusions and recommendations. It makes recommendations for proper policy directions that should be taken by the City of Johannesburg in addressing public participation processes. Additionally, the research highlights the gaps that may have not been studied further due to budgetary and time constrains in this research project and explores points out research gaps that may be taken forward for future research.

CHAPTER 2
CASE STUDY

2.1 Introduction

This chapter starts by exploring the history of Cosmo Housing Project and impediments that almost made the project impossible. These include the opposition of white neighbouring land owners to accept the project around their settlements. The housing infrastructure of Cosmo City is discussed in the context of housing typologies, impacts of urban design form and the principle of social integration. It further gives a particular focus on CCCPP and further discusses the objectives that this programme aimed to achieve.

2.2 The historical background of Cosmo City

Cosmo City falls under Region C of the Johannesburg Metropole and its adjacent suburbs are Roodepoort, Randburg and north-western areas like Olivedale, Northriding and Juskei Park. Cosmo city was the first prototype of integrated housing in South Africa that was implemented under the prescripts of the Breaking New Ground Housing Policy of 2004. The area contains various housing typologies like fully-subsidised, credit-linked, bonded, as well as rental stock. The area covers 1,200 hectares and 50 hectares was set aside for open spaces development for parks and sports fields. The land belonged to Absa and was a bank repossessed property, which was wholly sold to Gauteng Provincial Housing Department in 2000. The provincial government and the City of Johannesburg (CoJ) coordinated the project and appointed Codevco, a partnership between Basil Read and the Kopano ke Matla Trust (a company that is wholly owned by Congress of Southern African Trade Unions (Cosatu)) as the developer of the project. Codevco began the township design process in 2001, with the Environmental Assessment process (EIA) being fast tracked in parallel, and hoped to start the project in the following year. But opposition towards the project was a major challenge. The Environmental Impact Assessment (EIA) encountered many objections and the Department of Agriculture, Conservation and Environment (GDACE) failed to resolve these by 2002. GDACE issued a negative draft RoD to Codevco, which the latter challenged successfully in the Constitutional Court. Subsequently, CODEVCO issued a positive EIA albeit with a stringent RoD. This process delayed the project by four months. In February 2003,

Codevco received another notice of motion by the concerned property owners to halt the project. Codevco returned to court and in February 2004, eventually won the court case and could start the Cosmo City development.

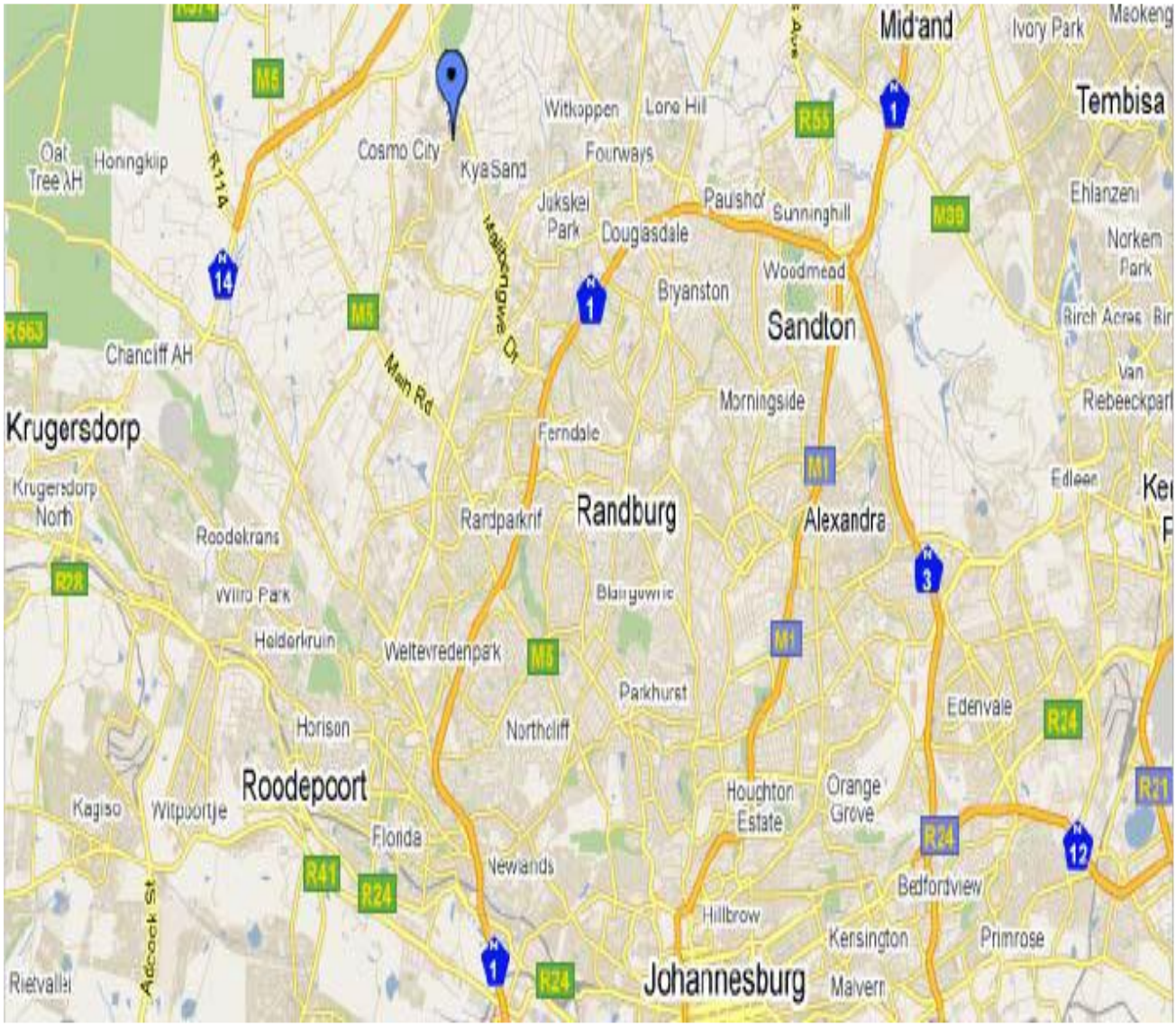


Figure 1: Location of Cosmo City on the map of Johannesburg
Source: Google Maps

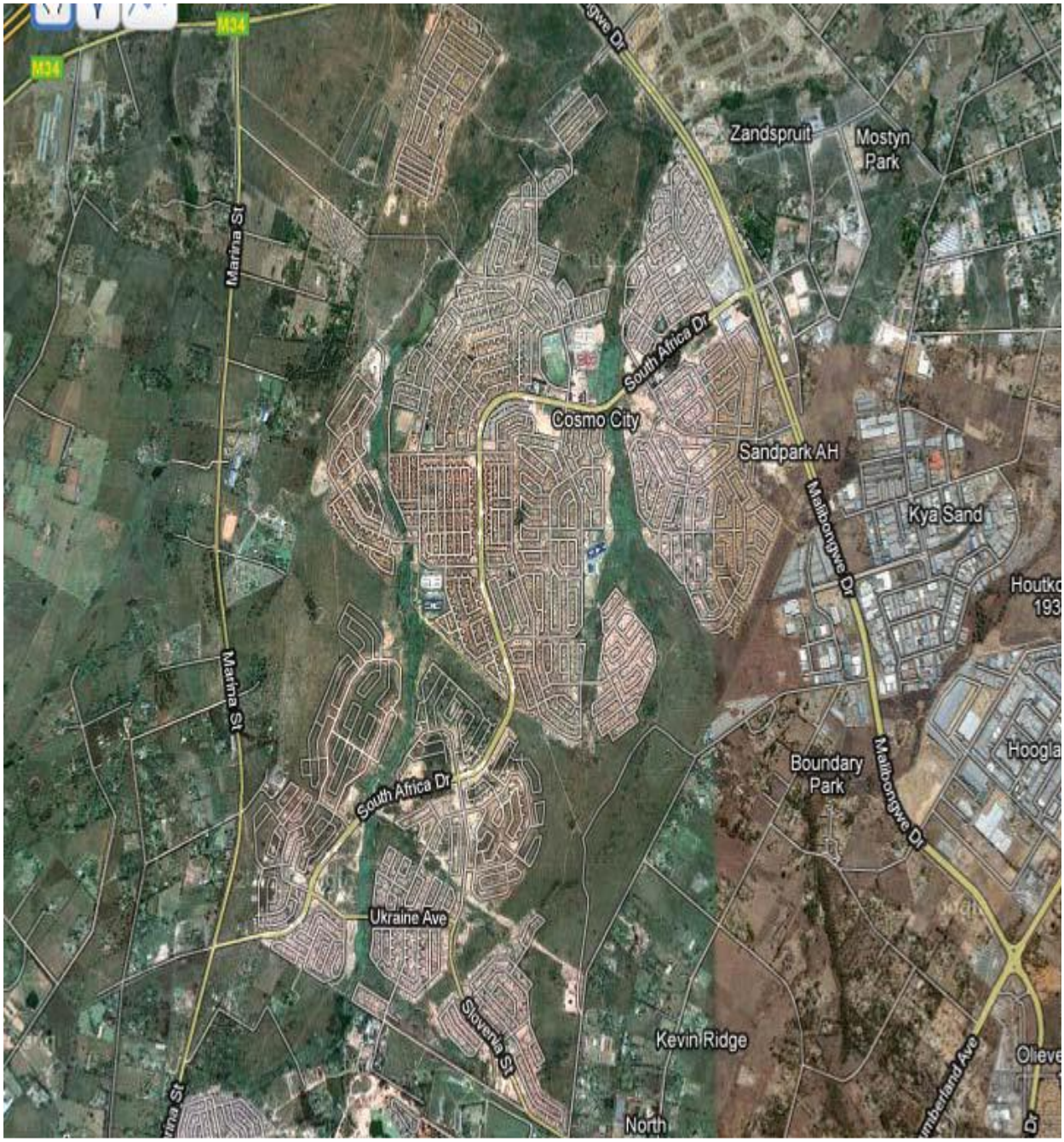


Figure 2: Site plan of Cosmo City
Source: Google Maps

Although the area is celebrated as integrated development, the housing typologies are separated by a fence—as per the conditions in the Record of Decision (RoD) prescribed by provincial environment department. Lemanski (2005) questions why the 'gated nature' of some housing developments can be classified as integrated neighbourhood and this applies to Cosmo City. In this settlement, 65% of land was allocated for Reconstruction and Development Programme (RDP) houses (that targeted poor beneficiaries relocated from Cosmo Farm, Riverbend and

Zevenfontein) who in terms of RoD were physically segregated from well serviced bond financed houses owned by high income groups.











Figure 3: Various Infrastructure in Cosmo City
Source: http://www.brdevelopments.co.za/project28.html.

2.3 Cosmo City Climate Proofing programme and its objectives

In 2007 the CoJ initiated a first phase of installation of 170 Solar Water Heaters (SWH) in 2007 in Cosmo in support of the Department of Energy's target of putting one million solar water heating units in low-cost housing in South Africa, within five years. The second phase of 'Climate Proofing of Urban Communities' started in 2008 where the focus was to build 700 Cosmo City low-income houses in CoJ's attempt to promote development that reduces the risks of climate change. The estimation by City of Johannesburg was that the installation of the Solar Water Heaters, compact fluorescent lights (CFLs) and insulated ceilings would result in an estimated saving of 58,641 tonnes of carbon dioxide emissions per year in Cosmo City, after it had done the energy audit in the settlement (City of Johannesburg, 2007).

Unlike the first, the second phase of the Climate Proofing project was expanded to involve the roll out of low-pressure Solar Water Heater (SWH) units, the installation of insulated Isoboard ceilings and distribution of compact fluorescent lamps (CFLs) to 700 low-income households in Cosmo City, as well as greening of streets with indigenous trees and fruit trees in the backyards (Phalatshe, 2000). Prior to project's commencement, an audit or a baseline and monitoring of Energy and Water Usage was conducted to measure energy and water consumption in low-income households at Cosmo City. The same was done post-implementation to compare energy and water efficiency interventions (www.iclei.org/africa,2008). The assumption was that these

measurements were used to determine the effects of renewable energy, insulation and energy efficiency interventions on energy and water consumption and indoor temperatures in the low-income houses. The data gathered there was going to be used in calculations of carbon savings arising from the project, in order to raise carbon finance in the carbon market and fund further energy efficiency and other climate proofing measures at Cosmo City. This was a pilot project and its scope was limited to extension 2 and 6 RDP houses, which was going to be extended to other extensions with time.

This project was funded by the Danish International Development Agency (DANIDA) under Clean Development Mechanism[2] and was supported by the Danish embassy as part of a R15 million climate change mini-programme for Johannesburg. The main objectives of the project were the following:

- Promoting more efficient uses of energy and encouraging energy conservation behaviour through the use of renewable energy and energy efficient technologies (*www.iclei.org/africa, 2008*).
- Enhancing residents' comfort and quality of life by improving the thermal comfort of homes (*ibid*).
- Contributing to job creation and skills development by requiring contractors to source the majority of their labour from the local community, ensuring Solar Water Heater (SWH) installers receive plumbing training, and setting up local community mechanisms for maintenance of the SWHs post installation (*ibid*).
- Assisting to build a healthier, more attractive and liveable environment for residents through greening by fruit and indigenous tree planting, simple landscaping of the individual stands and the promotion of community food gardening in schools (*www.iclei.org/africa, 2008*).
-

[2] The CDM incentivise emission-reduction projects in developing countries so that they can earn certified emission reduction (CER) credits, each equivalent to one tonne of CO2. These CERs can be traded and sold, and used by industrialized countries to meet a part of their emission reduction targets under the Kyoto Protocol. The mechanism stimulates sustainable development and emission reductions, while giving industrialized countries some flexibility in how they meet their emission reduction limitation targets. The CDM is the main source of income for the UNFCCC Adaptation Fund, which was established to finance adaptation projects and programmes in developing country Parties to the Kyoto Protocol that are particularly vulnerable to the adverse effects of climate change. The Adaptation Fund is financed by a 2% levy on CERs issued by the CDM (UNFCCC, 1992).

CHAPTER 3

LITERATURE REVIEW AND THEORETICAL FRAMEWORK

3.1 Introduction

This section gives a brief outline of South Africa's housing policy context, as well as the different definitions and models of participation. The controversies of the latter are further investigated, as they relate to the Cosmo City Climate Proofing Programme (CCCPP) implementation process. It will thereafter look at the key legislative and governance frameworks, especially Integrated Development Plan (IDP) as the nexus for coordinating practical implementation of the afore-mentioned to engender public participation in climate change programmes. The international instruments that give effect to public participation will also be discussed. The effects of climate change on cities will subsequently elaborated on, together with the roles that cities have to play in addressing climate change. Furthermore, an inquiry into the link that exists between climate change, sustainable development and Local Agenda 21 is presented. Lastly, the chapter presents literature review and theoretical framework surrounding public participation and climate change in relation to CCCPP.

3.2 The South African housing development context

The post-1994 South African housing development has been criticised for its quantitative drive to deliver houses and this scenario has gone unabated despite numerous policy adjustments to correct this 'development of housing settlements on the urban periphery' (Huchzermeyer, 2003:39). Following concerns of sustainability on the built environment, most studies have exposed how the South African housing policy has failed to take into consideration the resilience of housing and infrastructure to climate change (Baumann, 2003; Maluleke, 2003; Royston, 2003). These housing theorists are also concerned that housing delivery continuously fails to address issues like public participation, integration, job creation/skills transfer and culture of taking proper care to invest in houses.

(a) White Paper on Housing (1994) and Housing Act of 1997

The aim of the policy was to create an enabling environment for people to take control of their housing process so that eventually, they own houses in socially and economically integrated communities with adequate facilities and services. It states that

> Despite the constraints in the environment and the limitations on the fiscus, every effort will be made in order to realise this vision for all South Africans whilst recognising the need for general economic growth and employment as well as the efforts and contributions of individuals themselves and the providers of housing credit, as prerequisites for the realisation thereof (White Paper on Housing, 1994:18).

The policy intention according to Charlton and Kihato (2006) was to deliver a 'starter house' (with minimum building material and subsidy that only covers land and servicing costs) which the beneficiary needs to add on and consolidate over time (Turner, 1976).

This trend reinforced peripheral housing delivery, where mass housing was delivered in the far-flung urban nodes that have no economic opportunities (Huchzermeyer, 2011). The housing subsidy model became open to many interpretations, and that gave opened space for developers to provide poor standard housing and services (Charlton and Kihato, 2006). The ANC government perspective on housing was driven by the political urgency of the ruling party to deliver houses in large quantities, thereby ignoring the issues of quality control and incrementalism in housing (*ibid.*). Hassen (2003: 118) states that housing should be designed in a manner that promotes integration, co-ordinates public investment and creates linkages in business development, transport and leisure land-uses. The author reiterates that such housing delivery is geared towards developing settlements that restructure urban space and economy. The ANC government therefore failed to seize the opportunity to persuade the property market to reconfigure apartheid spatial form.

The White Paper on Housing (1994) and Housing Act of 1997 perpetuated racial and territorial fragmentation, because the housing subsidy system was informed by mass housing that reinforced high density development, which apart from producing dormitories and sterile living environments for the majority, reduced thresholds for business activity (Huchzermeyer, 2003). Whilst the above authors blame the impact the South African housing subsidy had on space economy of the country, others argue that it should be also partly blamed for the 'the culture of

entitlement that behests South Africans' (Nimpuno, 2013). It is further viewed as one of the reasons behind perennial 'wild cat strikes' that ravage the country, because it creates a culture of entitlement in South Africans. Following this logic, South Africans have been prompted by this subsidy to wait for hand-outs from government, rather than initiate housing for themselves. This tendency is also cited as one of the key factors that destroyed the People's Housing Process that government had initiated in 1998 (*ibid.*).

(b) People's Housing Process (1998)

Turner (1976) and Nimpuno (2013) argue that housing is a process rather than a product. Turner's (1976) observation was influenced by the Latin American experience where informal settlements dwellers had proved that that they had the capacity to consolidate their houses. The Latin American and lately some developing countries' informal settlement dwellers do not view the role of government as the provider of housing. Instead, they initiate their own housing process which instils a sense of responsibility in them to take charge of their development, because they are the best judges of their own needs (Nimpuno, 2003).

This is the philosophy that underpinned People's Housing Process (PHP of 1998) in South Africa. Although the government role in housing was still paramount, it nonetheless encouraged the increased role and participation of the beneficiaries in their housing process. The element of community participation in PHP aimed at working with NGOs, where people would be involved in planning and implementing construction of their housing through 'sweat equity'[3], meaning that the households could overcome affordability barrier and quickly access the house, without them being placed on a long waiting list. The PHP was aimed at stimulating people capacity of participating and contributing to their houses, as opposed to being passive recipients of housing. As the initiators and drivers of the process, people take ownership and use housing to upscale their existing livelihood strategies and improve their well-being. By using their own labour rather than paying someone else, these households make their housing subsidy and personal contribution go further by building better quality and/or larger houses on reduced cost. The problems of quality in previous housing delivery models could be attributed to the lack of

[3] The phrase refers to beneficiaries' labour to build their houses and offset the cost of National Housing Subsidy Scheme.

sustainability of these houses. Many of got torn down as a result of their failure to be resilient in the face of adverse climatic conditions.

(c) A Comprehensive Plan for Development of Sustainable Human Settlements (2004). (BNG)

After observing unintended consequences of previous housing problems[4], the Department of Housing developed a new policy in 2004 called BNG and the focus of this policy was to make housing as an asset that would encourage people to invest in in their houses and provide various housing options to a wide spectrum of income groups. It further aimed to reinforce integrated development of human settlement to bring about social cohesion, employment, skills transfer and economic development. However, Charlton and Kihato (2006) criticised the BNG, arguing that instead of bringing about 'second generation' policies, it maintained the status quo. This should be understood within the political context at the time BNG was introduced. During his 2004 State of the Nation address, the then President Thabo Mbeki announced that the Housing Department was expected to produce a new housing policy within three months. Although he did not say it, this move was necessitated by the fact that the ANC was rushing to incorporate the housing policy in its election manifesto (Huchzermeyer, 2008). The Housing Department made a travesty of the consultation process by not soliciting inputs from the built environment academia, the poor and the private sector (*ibid.).*

Housing discourse that was aimed at influencing policy was abundant (Harrison, Huchzermeyer and Mayekiso, 2003), but not taken into consideration, as evidenced by the promulgation of KZN Slums Clearance Act, 2007. This programme was challenged in the constitutional court by AbaHlali Basemjondolo in 2009 (Huchzermeyer, 2011). Academics like Huchzermeyer (2011) argue that eradication of informal settlements under BNG resonates with this case, as government's position suggests that informal settlements are dirty and evil. This understanding further prompts officials to do anything at their disposal to eradicate informal settlements since they associate informality with contamination of physical design of the city. What is noticeable is that this notion is in contrast to the idea of upgrading settlements through provision of services

[4] Peripheral location of low income human settlements like lack of participation, the poor workmanship, corruption and unabated housing backlog.

and tenure in order to integrate settlements into broader urban fabric to overcome spatial, social and economic exclusion, as espoused in Breaking New Ground policy of 2004 (Huchzermeyer, 2007).

3.3 Exploring the concept and definitions of Public Participation

Hunsberger, Gibson and Wismer (2005:5) highlight that 'sustainability is a cross-cutting issue that forms the base for all delivery mandates of the government'. In order to reinforce and bring about stability in its development strategies therefore, the government needs to gain buy-in and sense of ownership from the community regarding development (Clarke & Erfan, 2007). Public participation becomes the tie that brings the interests of the community and the ideals of government together in pursuit of community owned development initiatives (Healey, 1993). This position is based on the idea of what Harrison (in Tewdwr-Jones and Allmendinger 2002) calls the 'situated judgement' which means that local people are well-informed to take meaningful decisions about pertinent issues of their development. As a result, they are better positioned to come up with solutions that befit their needs. The role of the development agent in this process is to provide necessary tools towards solving local people's problems. The process of public participation should be based on a robust collaborative engagement between government and the community in reaching a consensus (Healey, 1993; Portney, 2005).

Kihato *et al*. (1998) argue that public participation has become prominent in planning discourse, because it is associated with the modes of participation like 'people centred' or 'people-driven' development. Most people view public participation as essential for any type of development because it is a barometer that measures the possibility of success or failure of the project. Sansom-Sherwill (2006) shares Kihato's view that indiscriminate use of the term has opened it to many interpretations, which also raises question as to what qualitative measure can be used to determine effective public participation in any given project. Authors like Renn *et al*. (1995:2) refer to public participation as 'forums for exchange that are organised for the purpose of facilitating communication between government, citizens, stakeholders, interest groups and businesses regarding a specific decision/problem'. This definition includes public hearings, public meetings, focus groups, surveys, citizen advisory committees, referendums (what is called Imbizo or Lekgotla in South African context) and commissions among other models.

The Report of the British Columbia Round Table on the Environment Economy (BCRTEE, 1994:2) suggests that 'public involvement is any systematic means, by which citizens and government exchange information, share viewpoints, identify issues, explore options and/or arrive at solutions regarding a government initiative'. It is indicated that this process ranges from conducting an opinion poll, distributing a policy paper for comment, to an intensive examination of issues in a multi-stakeholder process. World Bank (1993:16) defines the concept as 'a process in which stakeholders influence policy formulation, alternative designs, investment choices, and management decisions affecting their communities and establish the necessary sense of ownership'. Conyers and Hills (1994:213) equate public participation with decentralization, that is, dispersal of 'decision-making power among many individuals (or parts of an organisation) at lower levels in the spatial hierarchy – in other words, to individuals or groups located away from the spatial centre of decision-making authority'. These authors also recognise that the most critical political motivation for public participation is the local community's right to actively and meaningfully participate in making decisions about their development, and thereby becoming part of that process.

The last two definitions are relevant to this study because the effects of climate change are evident in our daily lives. These definitions mean that governments must not insist on using an instrumentalist approach to development (Michael, 1991). Instead, they must at all times try to accommodate the voice of 'the borderland'—which is the opinion of those who are not in positions of power (Sandercock, 1998:84). The most important aspect in these definitions is that different positions of all stakeholders must be taken into account in proper participatory development processes. These definitions also make it clear that people must not be assumed to be mere objects that fulfil the procedural requirement of the participatory process. Rather, they too must be key role players that are well equipped to influence decisions, so that those decisions are geared towards prioritising people's development needs.

Moodley (2007:9) asserts the fact that public participation should bring the varying interests of all players to one platform for any decision making to be fair and representative. Such an engagement helps all parties to understanding municipal priorities in wider perspective. It enables diverse parties to take responsibility for their own development and helps to break the

stereotypes that might have existed between these parties and the 'faceless bureaucracy' of the municipality (ibid.).

3.4 Controversies around Public Participation

As already alluded to, the literature of public participation has a many controversies, mainly based on two competing school of thought (Aylett, 2010). Such schools of thought are the Foucaldian concept of power relations and oppression, as well as Habermas's concept of institutionalised communicative rationality (Jenssen, 2008; McGee, Bazaara, Gaventa, Nierras, Rai, Rocamora, Saule Jr, Williams, and Zermenô, 2003; Pelletier, Kraak, McCullum, Uusitalo and Rich, 1999). According to Habermas (1987), public participation broadens political engagement, thereby equipping the community with argumentative skills that enable them to influence policy that guides quality decision making. This accordingly makes government transparent and accountable to the citizens because citizens are conscious of their rights and obligations which they have to protect against government and its elitist bureaucracy (CCCPP, 2005). In short, participation fosters truly deliberative forums as a foundation for creating an environment where participants acquire skills and organizing capabilities to interact more effectively with the state by participating more meaningfully in decision-making (Moodley, 2007).

In contrast, the Foucaldian theorists like Flyvbjerg and Richardson (2002) view participation in a negative perspective. According to them, participation perpetuates the existing status quo of social inequality. They argue that participation excludes the poor from meaningfully influencing decisions and exacerbates their position of powerlessness. They further argue that the participation process affords privilege to elites who are in a position to sway decisions to continuously protect their vested interests in government. Participatory processes are also understood as tools used by the state or development agencies to increase the efficiency of rolling out projects predetermined by them without truly empowering local residents to question the objectives which underpin those projects (Aylett, 2010:99). The state and the private sector accordingly use power at their disposal to access more resources and information so that they can sway decision-making to shape policies that are favourable to them (*ibid.).* As cited in Flyvbjerg (2002), Foucault argues that participation is inherently full of conflicts because of the power dynamics that emanate from peoples' fixed sectorial interests that they bring along to the participatory process. Ayllet (2010) suggests that due to the coexistence of these conflicting

controversies and definitions of the concept, clarity as to what is meant by participation can conveniently be depicted on the ladders of Arnstein (1969), Eyben (2003) and Wilcox (1994).

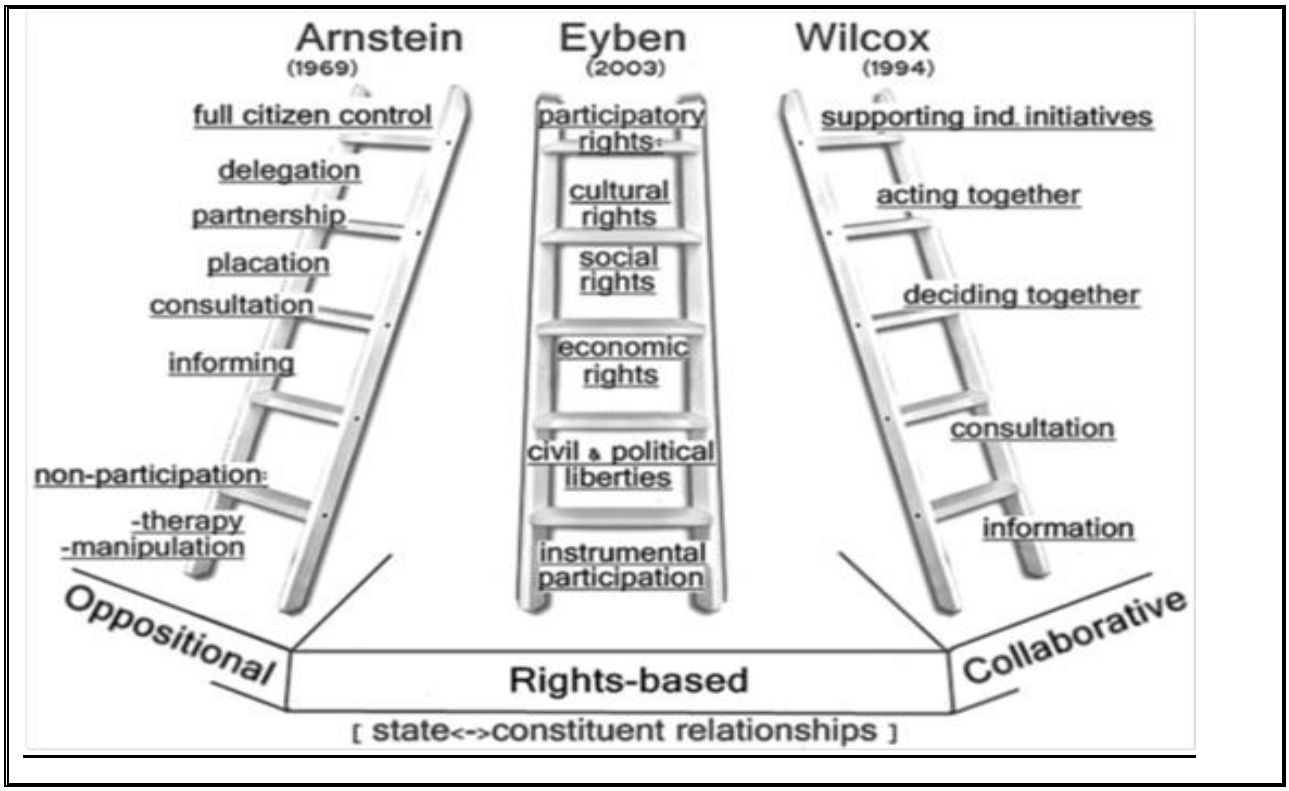


Figure 4: A Ladder of Citizen Participation.
Source: Arnstein (1969)

There are three authors (Arnstein, 1969; Eyben, 2003; Wilcox, 1994) who offer different models in the field of public participation. According to the aforementioned authors, public participation process moves up the steps of the ladder from undemocratic, authoritarian, and manipulative to a level where the voice of the public is accommodated by the authorities. As the movement process proceeds upwards, citizens increasingly gain power, control and autonomy in government decision making. The lower level of each ladder symbolises the nature of relationship that is based on mistrust between the state and society (*ibid.).*

Arnstein's (1969) analysis of participatory process explains that the lower end of the ladder is about manipulation and therapy (two forms of non-participation), and high up at the top is where people have achieved full control of participation in the ladder. When this ladder is juxtaposed with the context of apartheid South Africa, the insistence of the public to participate in decision making was viewed as resistance to suppression by those in power. This instance led to

confrontation between the masses and state, even on purely service delivery issues. From 1994 onwards, the above models portray a shift from the exclusive control of power that is vested in the hands of the state to a fierce confrontation between the powerful state machinery and the powerless masses on the ground. This shows that the models of participation have developed from very different contexts. Participation process has been modified both in the nature and the number of the rungs in the Arnstein ladder (see figure 3). Wilcox (1994) provides a model (that is an adaptation of Anstein's model) focused on UK-based community development work. It bases participation on five key steps in the ladder instead of emphasising conflict in participation process. This model appreciates collaborative consensus building as the fundamental basis for the relationship between communities and the state. Its essence is illustrative of Habermas's view of institutionalised collaborative rationality (Jenssen, 2008; McGee et al., 2003; Pelletier *et al.*, 1999).

The model advanced by Eyben (2003) is different from perception of participation as envisaged in the participatory approach of international development agencies like the United Nations Development Program (UNDP), the World Bank (WB) and Oxfam. According to Eyben (2003:102), the traditional technical and instrumental approach to participation (intended to increase the effectiveness of foreign aid), has been replaced by rights-based approach which gives high regard to the local political and development context. In this new model, the right to participation in development planning is significant for good governance because it is only through participation that communities can be offered an opportunity to exercise and enjoy their rights. This provides space for the public to determine where and how resources allocation can be directed towards addressing the most urgent development concern of a community. It ensures that the 'voices of the borderland' are incorporated into planning decision making (Sandercock, 1998).

In conclusion, these three models explain how public participation has evolved over different times to reflect social consciousness about public participation. These models reflect the struggles that have shaped planning practises in current contexts. The divergence of these three models in their approach to participation mirrors the debates of Foucauldian and Habermasian theorists on the role of power and consensus-building in decision making in the modern state (*ibid*.). According to Foucault, as cited in Rainbow (1994), every discourse or social institution is

embedded with power, which is mostly in the hands of the authorities. These are the kind of power relations that Flyvbjerg (2002) criticises for creating conflicts, because they motivate contest for control of power between the state and elites against the poor. On the other hand, Habermas (1993) views communicative rationality as an enabling tool that brings parties together with the aim of reaching consensus on the decisions and institutions that serve the general public, as compared to sectorial interests. Therefore, conflict is necessary because it bears 'communicative rationality' which is the root for the popular association between participation and consensus. Habermas (1993:10) is of the opinion that debate is a 'unifying, consensus-bringing force and it is central to the life experience of a human being'.

3.5 Key legislative and institutional framework supporting Public Participation

The advent of democracy in South Africa ushered in extensive new institutional reforms in local government between 1994 and 2000. These reforms have necessitated democratic policy making that enables the implementation of programmes between five-year municipal terms of office (Sangonet, 2011). Currently, the Municipal Systems Act (MSA) of 2000 requires that the Office of the Speaker must establish a public participation unit in the municipality. This unit's key function is to ensure that views of the public are taken into consideration in planning development and budget formulation so that these processes meet the needs of the public (*ibid.).*

The institutionalisation of public participation cannot be discussed without locating it within the context of the Constitution of South Africa, Act 106 of 1996. Section 195 of the RSA Constitution mandates municipalities to engage in public participation. This section states that the people's needs must be the guiding principle in any government planning and policy making and that this can be only achieved through the process of public participation. Chapter 7 of the Constitution further states that it is the objective of local governments to encourage the involvement of communities and community organisation in the matters of local government. Section 16 further states that a municipality must develop a culture of municipal governance that compliments formal representative government with a system of participatory governance. In essence, public participation is provided for in the Constitution through the establishment of representative and participatory democracy where public participation at local government is necessary for effective

local governance to enhance service delivery. Even when the municipality intends to pass a by-law, Section 160 (4) of the Constitution makes it compulsory that the public must be consulted.

The Municipal Systems Act of 2000 requires that municipalities 'develop a culture of municipal governance that complements formal representative government with a system of participatory governance' (Carrim, 2001:14). It further prescribes to municipalities that to achieve this purpose they must encourage and create conditions for the local community to participate in the affairs of the municipality and contribute to building the capacity of:

(i) The local community to enable it to participate in the affairs of the municipality and

(ii) Councillors and staff must encourage and promote community participation' (RSA Constitution, 1996: Section 16:1).

Carrim (2001) points to the fact that indeed there is much to suggest that the recent emphasis on public participation in local government has something to do with failure of the political representatives to govern as prescribed in the laws. This is simply because these institutions of participatory governance were established in 2000. However, the efforts to institutionalise them came some five years later following some country-wide spate of protests (*ibid*.).

The White Paper of 1988 on Local Government and especially the Municipal Systems Act of 2000, requires that municipalities develop mechanisms that uphold citizens' participation in policy initiation and formulation, and monitoring and evaluation of decision-making and implementation. However, it is really only the Municipal Structures Act of 1988 and the MSA of 2000 that brought about establishment of institutions that promote and cultivate a culture of participation at local government level. **The Municipal Structures Act (2000)** set up the various structures of local government including Ward Committees which the Municipals Systems Act outlines how they should be utilised (Carrim, 2001). The MSA (2000) provides for the establishment of Ward Committees in Category A and B municipalities[5], if the municipality so chooses. The government however, has insisted that ward committees must be made compulsory for all categories of municipalities (*http://www.afesis.org.za/Revitalising local government, 2001*).

[5] Municipalities can belong to one of three categories: metropolitan, district and local municipalities which are referred to in RSA Constitution as categories A, B and C).

Ward Committees are some of the institutional vehicles that were created by Municipal Structures Act (1998). A Ward Committee is made up 10 people who are elected from 'a diversity of interests in the ward, with women equitably represented' (Municipal Systems Act, 2000:24). The key role of the ward committees is to make recommendations on any matters that affect the ward, thereby creating a formal, unbiased communication channel between the community and the council (Friedman, 2005). This structure is also tasked with mobilising communities on municipal activities including services payment campaigns, development planning, budgetary process, and decisions about provision of services. On the question of creating unbiased communication structures for council and community, the actual purpose of genuine participation has not filtered down to the ground. The researcher's personal observation as a member of the ward committee in ward 57 of eThekwini Metro was that this committee tended to be run by members of the ward's ruling party and the ward councillors in neighbouring wards were the party chairpersons of their wards. In that context, the question of fair representation of the diverse interests of the community becomes defeated, because the committee becomes heavily influenced by party political interests.

3.6 The IDP as the nexus for Implementing CCCPP.

The South African Light Emitting Diodes (LED) Network (2013) recognises that municipalities are mandated in Section 10.2.6 of the National Climate Change Response White Paper to play a leading role in economic, social and environmental planning (*led.co.za/files, 2013*). It further argues that municipalities must do this with caution, ensuring that environmental sustainability and equity is achieved. As a result, a tool guide has been designed to ensure that municipalities are able to perform environmental assessments to determine their exposure to climate uncertainties (*led.co.za/sites/led.co.za/files, 2013*). This instrument shows how climate change issues can be encapsulated into the five stage IDP process, so that all departments or sectors develop climate change response strategies in their planning. The process is graphically represented in the 5(five) phases of the IDP and links into milestones and outputs in the IDP (*led.co.za/sites/led.co.za/files, 2013*).

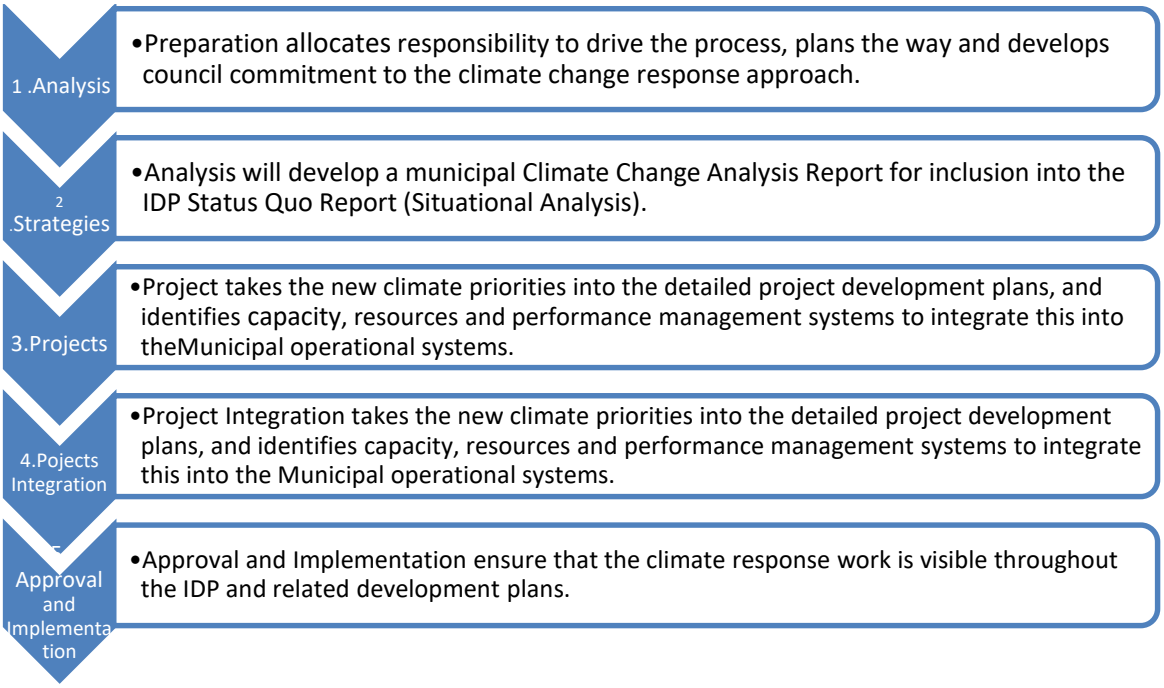


Figure 5: The model of integrating Climate Change into IDP in South Africa

Source: Adapted from South African LED Network Climate Change and IDP Toolkit (*led.co.za/sites/led.co.za/files, 2013*).

The CoJ 2006/11 IDP recognises the contributions made by natural resources in providing municipal services. The municipality further articulates that since 2007, it has adopted Community Based Planning as a model it will use in its IDP community engagement process. However, there is nothing that mentions how the City has integrated and aligned climate change into its IDP consultation processes. Secondly, the department that champions climate change, which is the Department of Environment, lists a number of projects that it deals with, but does not mention CCCPP. What is noticeable is that CoJ 2006/11 IDP is silent on the role of sector departments and how these sister departments are going to mainstream environmental issues and CCCPP in particular. The City's IDP, however, acknowledges that since environmental responsibility and accountability is not confined to one sector, some of the greatest challenges have been overall coordination, conflicting mandates and accountability by some stakeholders. Lastly, the whole CCCPP runs on a separate budget, and is not mentioned even in the IDP schedules for public consultations.

3.7 Rationale for Public Participation in climate change planning

The daunting challenge that is facing the South African government is to reconcile the mandate of meeting basic needs of the community whilst dealing with problems caused by climate change

on the other hand. Climate change places a huge burden on the financial resources of the local government, since this sphere of government is still expected to deal with social disparities engendered by the legacy of apartheid (Chikulo, 2011). The issue of climate change has been recognised as a development issues that needs to be addressed concurrently with service delivery (Tomlin and Hug 2006; Parry 2009). The local government needs to entrench a participative approach to planning in order to succeed in striking a balance between these two competing challenges (Few et al., 2006). It is also noted that public participation has developed strongly in the area of service delivery decision making, but is far less emphasized in the areas of climate change (*ibid.*).

Nonetheless, advocating public participation in environmental management and specifically in climate change is a logical and prudent exercise, because the efforts to deal with its impacts are likely to be addressed by local government rather than other institutions of government (Adger, 2001). Public participation therefore, has to be promoted both instrumentally, as a 'means' of ensuring decisions are better geared toward this objective, and as an empowering 'end' in itself to afford communities greater control over the decisions that affect their lives (Bloomfield, Collins, Fry and Munton, 2001; Nelson and Wright, 1995; Parkins and Mitchell, 2005).

At global scale, participation is enshrined in Article 6 of the 1992 United Nations Framework Convention on Climate Change, which calls for parties to promote and facilitate 'public participation in addressing climate change and its effects and developing adequate responses' (*http://cdm.int/stakeholder/roundtable/05/rt05.07pdf, 1992*). In the Third Assessment Report of the Inter-governmental Panel on Climate Change, the conditions listed for enhancing adaptive capacity include 'active participation by concerned parties, especially to ensure that actions match local needs and resources' (Smit *et al*., 2001:899). The United Nations Development Programme has also recently finalised 'Adaptation Policy Frameworks' for the formulation of climate change adaptation strategies (*ibid*). These guidelines emphasize stakeholder engagement at all levels of government, including 'grassroots stakeholder participation' (Wilbanks, 2003:150). The South African Constitution makes it clear that people have a right to an environment that is sustainable and not harmful to their lives. In order to achieve that, public participation has been mainstreamed and emphasised through policy making, EIA and IDP processes (Municipal Systems Act, 2000; Municipal Structures Act, 1998).

3.8 South Africa and SADC Climate policy direction

South Africa is a major economic player in the SADC region. Since its economic production is dependent on coal generation, it is far the highest emitter of greenhouse gas in the region (DEAT, 2007). By virtue of that, South Africa has been a pioneer in developing policy frameworks that articulate the position of SADC in the global climate change discourse (Richards, 2008). South Africa's recognition of the gross impact climate change has on developing African countries has prompted the country to take a very vocal stand even at global stage. Richards (2008:2) points out, for example, that the South African Department of Environmental Affairs and Tourism warned the G8 countries about dire climate change consequences should they fail to reduce carbon emissions by 80-90% below 1990 emissions level by 2050.

3.8.1 South African policy response to Climate Change

After rectifying UNFCCC and Kyoto Protocol in 1997, the ruling African National Congress (ANC) in its 2007 National Conference in Polokwane adopted a climate change resolution which states a strong intention to mitigate greenhouse gas emissions and to adopt a low-carbon growth path (Tyler, 2009:2). It further set up a National Committee on Climate Change which was to advise the DEA (as the lead department in as far as addressing climate change is concerned) and conducted sectorial studies under the auspices of Country Study Programme to assess the impacts felt by water, energy agriculture and forestry to mention a few relevant departments.
Through the Department of Environmental Affairs and Tourism (DEAT), the government further conducted a Long Term Mitigation Scenarios (LTMS) process, the aim of which was to chart the future policy direction for the country in responding to climate change. The strategic document gave rise to National Climate Response Strategy in 2004. According to Tyler *et al.* (2009) the aim of LTMS was to identify key technology options that South Africa should take in order to reduce its emissions through developing renewable energy, nuclear, and fuel efficiencies, and gas and electric powered cars. Despite all these attempts though, South Africa seems to experience challenges of turning its policies into fruition, largely because of shortage of proper skills. Additionally, there unwillingness of other government departments to mainstream climate change into their programmes and week capacity at local and provincial level to push the green

agenda forward (Richards, 2008). For example, some municipalities, except a handful in Gauteng metros, are failing to mainstream their Air Quality Management Plan in their IDPs (*ibid*.).

3.8.2 SADC policy response to Climate Change

SADC response towards climate change is viewed within the context of the region's commitment to Millennium Development Goals - which are to fight poverty, ensure food security and promote health (Barnard, 2014). This position is informed by numerous studies[6] which show that the continent and SADC contribute 0.1% and 3% respectively towards climate change (Richards, 2008). The SADC in particular bears the effects of climate change instigated by developed and developing countries, because it has poor adaptive infrastructure (Modi *et al.*, 2006; IPCC, 2007). This scenario has prompted the SADC region to pool it resources together to curb major contributors to climate change through generation of non-renewable energy like fossil gas (Kandjie *et al.,* 2006; Chishakwe, 2010; Pressend, 2011; Lesolle, 2012). The region developed the Southern African Sub-Regional Framework on Climate Change in 2010, the aim of which was to flag the energy sector as its area of emphasis regarding policy and implementation (*ibid*.). The region consequently drafted the SADC Climate Action Plan to make its plans feasible (Chishakwe, 2010). This program has as its base, the African Union's, All-NEPAD Action Plan of 2008 to. The All-NEPAD Action Plan laid a foundation for all African countries to synchronise their regional policies in an attempt to mitigate climate change (*ibid.*) Other interventions have yielded regional scale projects like the Inga Dam Hydropower Plant, Angola's Empresa Nacional de Electricidade, Namibia's NamPower and Botswana's Power (AECOM, 2009). At policy level, the SADC Secretariat initiated consultative engagement with national NGOs to draft the region's position paper in CoP 17 on how the member countries could access CDM funding to transform themselves into green economies (Pressend, 2011).

3.8.3 Climate Change Policy interventions at global scale

The first global intervention to address climate change started almost three decades ago with the 1985 Vienna Convention[7] and Montreal Protocol that set targets of 50% by 1999 in reduction

[6] For example, the SADC support programme on reducing emissions from deforestation and forest degradation(REDD) 2012-2015

7 This was an international framework for cooperation and information sharing to monitor ozone layer depletion.

of ozone-depleting chemicals[8] and created the Multilateral Ozone Fund in 1990 (Falkner, Stephan and Vogler, 2010). However, the most documented is the United Nations Conference on Environment and Development or Rio Summit on Sustainable Development of 1992 which culminated in the formation of the United Nations Framework Convention on Climate Change (UNFCC) (Rietig, 2012). Much as the Rio Summit outlined how countries should cut down on their green gas emissions[9], it was itself an attempt to reinforce Montreal commitments of 1990 which were envisaged to be achieved by 2000 but were themselves not legally binding (Falkner *at al.* 2010).

Since 1995, the UNFFC has been meeting annually, and calls these summits, the Conference of Parties (CoP), and the first such was dubbed CoP 1(*ibid*.). The 1997 Kyoto Protocol was a ground breaking negotiation because for the first time, countries were required to make legally binding commitments towards emission reduction targets (Depledge and Yamin, 2004). However, after heated debate in the conference, the UNFFC Secretariat made concession for voluntary emission targets based on common but differentiated and respective responsibilities (Falker *et al:*255). This opened up climate change politicking, as countries like the USA and Canada found an escape and then threatened to pull out of binding commitments in fear of economic costs they were going to incur (Olivier *et al.,*2012.). Such concession in climate talks relegated UNFCC into a toothless instrument and countries agreed on a five year flexible, but incremental approach towards meeting their emission targets. The following annual reviews of UNFCC negotiations were held in Bali in 2007, Poznan in 2008, Copenhagen in 2009 and Cancun in 2010. This was followed by Durban in 2011, Doha in 2012, Warsaw in 2013 and Bon in 2014.

3.9 The effects of climate change at municipal level

The issue of climate change has become one of the most challenging global environmental problems that governments have to deal with (*www.isse.ucar.edu/romero-lankao, 2008)*. This means that the lives and livelihoods of hundreds of millions of people will be affected by what governments and planners do (or not do) in urban centres with regard to climate change over

8 In the early 1980s, scientists discovered a hole in the ozone layer over the South Pole and research following that revealed that the ozone hole was created by a chemical reaction caused by chemicals such as chlorofluorocarbon ('CFC'), which were emitted in the air by industries.
9 This treaty was aimed at stabilizing greenhouse gas concentrations in the atmosphere at a level that would not impact the climate system-commonly believed to be around 2°C above the pre-industrial global average temperature.

the next 5–10 years (Satterthwaite *et al*., 2007). Many scholars have noted that the implications of climate change for the urban areas are exacerbated by the fact that many cities have developed without consideration of the risks that climate change will carry for these cities (Bigio, 2002; Wilbanks and Romero Lankao *et al*., 2007; Satterthwaite *et al.*, 2007; Hunt and Watkiss, 2007).

Climate change imposes many threats to the municipalities which include amongst others, storm surges that can flood coastal areas and prolonged hot weather that tends to be severe on the mainly paved areas of the city than surrounding areas (*http://www.isse.ucar.edu/romero-lankao, 2008).* This article further suggests that prolonged heat wave can exacerbate existing levels of air pollution, causing widespread health problems. Poorer neighbourhoods that may lack basic facilities such as reliable sanitation, drinking water or a dependable network of roads are especially vulnerable to natural disasters. The increases in the frequency and severity of floods and droughts, as well as declines in water quantities due to decreased precipitation pose profound consequences for cities in terms of both water resources and water systems, posing the threat of water-borne diseases and illnesses (*www.isse.ucar.edu/romero-lankao, 2008*). People most affected by these climate change consequences are the urban poor, because they are less likely to afford moving to better quality settlements or less risky urban spaces. These are usually the people who are least well served with adequate infrastructure and services (*ibid.*). It is the poor that bear the brunt of the problems and who are the most vulnerable to extreme weather events. Even if large portions of a city are flooded, middle-class and wealthy settlements are less affected due to their safe location and good infrastructure where they are located. The urban poor are more likely to live on hazardous sites, on undeveloped parcels of land that are mostly exposed to flooding and landslides. The urban poor are also more likely to live in settlements that lack infrastructure such as basic sanitation, flood barriers, storm-water drains or good roads for accessibility during emergencies (Allen *et al*., 2011). The IPCC fourth assessment (2007) highlights that the effects of climate change will result in more severe weather patterns worldwide. Since urban areas are densely populated and have built environments that are not planned following a natural ecosystem, the inhabitants are exposed to increased risk of weather-related disasters. The heavy storm surges lead to flooding of infrastructure which affects water availability and this encourages incidents of wildfires that

encroach on residential settlements as tends to be the case with the City of Cape Town in South Africa *(ibid.).*

Although all urban residents are affected by climate change, studies show that cities that are geographically located on low coastal zones are the most affected than those located on high plateau areas (Allen *et al.,* 2011). It is also argued that the urban poor are more likely to live on hazardous sites which are on or within underdeveloped parcels of land that are exposed to flooding and landslides (*ibid.*). These areas are the ones that are characterised by lack of infrastructure such as basic sanitation, flood barriers, storm-water drains or good roads for accessibility during emergencies. They are also the least likely to be covered by insurance when their assets are lost in climate related disasters.

3.10 Implementing Local Agenda 21: The role of the municipal government

Chapter 28 of Agenda 21[10] states that since many of the issues that were deliberated on during the Earth Summit have their roots in local activities and ways in which municipalities are governed, the participation and cooperation of local authorities will for that reason be a determining factor in fulfilling objectives of Local Agenda 21 (UNCED, 1992). Though climate change has an urban dimension, the climate change policy dialogue however, has taken more of a global focus (Allen, Boano and Johnson, 2011). The studies by ICLEI (2003) also reported that the UNFCCC focus, as enshrined in the Kyoto Protocol and the Cancún climate change conference in 2010, has neglected to mention how the policies designed at global level can be localised, since cities are the places where emissions from energy use, transport and industrial production proliferate. There is a general agreement among scholars that planning of infrastructure development and emergency services is the functional domain of cities, which makes them as key players in dealing with climate change (Gotelind and Kristine, 2008).

Sippel and Jenssen (2009) observe that there are many functions that cities can perform in order to tackle issues of climate management, like building resilient infrastructure, climate proofing,

[10] Agenda 21 is a commitment to sustainable development that was agreed to by many of the world's governments in Rio de Janeiro, Brazil, as a result it is called Rio Declaration. Nations that have pledged to take part in Agenda 21 are monitored by the International Commission on Sustainable Development, and are encouraged to promote Agenda 21 at the local and regional levels within their own countries. Agenda 21 addresses the development of societies and economies by focusing on the conservation and preservation of our environments and natural resources.

conversion of waste to energy projects, and standardising housing building codes. Gotelind and Kristine (2008) also point out the advantage of linkages and synergies between climate policy and sustainable development at local level as a motivator for cities to generate social and technological innovations which help in the reduction of climate vulnerability. This holds truth in particular for District and Metropolitan Councils in South African municipalities since they are endowed with high innovative and creative capacities to deal with climate change than national and provincial government (Mokwena, 2009). This supports the policy position of Gauteng Development Strategy (2005) which states that metropolitan regions should cease to see each other solely as competitors for industrial investment; instead, they should utilise these innovations as a common asset that draws them together to generate solutions for addressing climate change. Climate change incidences have forced cities to form alliances to cooperate at city to city level (either nationally and or globally) so that they can share their experiences of best planning practices which they are required to spread beyond their fixed geographical spaces (Gotelind and Kristine, 2008).

Many cities have become members of national and transnational city networks, ranging from the U.S. Mayors' Climate Protection Agreement and the Swedish 'Klimatkommunerna' network to the C40 Cities - an international network of the world's largest cities committed to tackling climate change out of this cooperative opportunity (*ibid*). Gotelind and Kristine (2008) mention CLEI's Carbon Disclosure Project as a key initiative of transnational city networks. This project proves that cities have the capacity to adopt and tailor-make their initiatives to achieve the Kyoto target. By doing this, cities are compensating for the inaction of their national governments who did not commit towards ratifying the Kyoto Protocol (e.g. the USA) and those that are unlikely to achieve their Kyoto commitment (e.g. Italy).

Additionally, many cities have conducted GHG emission inventories to analyse the potential for GHG reduction and subsequently measure their performance on this aspect (Växjö kommun 2008; Granberg and Elander 2007). Dodman (2009) share a similar view and identify local authorities as the sphere of government that is closest to the people whose capacity can best be exploited in addressing climate change. Therefore, the functions of cities like land use planning, infrastructure and housing development and others put them in a good position to come up with workable solutions of mitigating and adapting to climate change. Cities for that matter are the

relevant vehicle to use in 'mobilizing peoples' support for the type of economic and societal transformation that is crucial to achieve large emission reductions and for inclusive adaptation and mitigation policies' (Jones, Leach and Wade, 2000:210).

In managing climate change, cities are informed by communities' choices and experiences to design localised programmes that address local challenges (Lutsey, Sperling, and 2008:674). The concentration of people and business as well as high settlement densities in large cities also provide opportunities for technological innovations like production of renewable energy and climate resilient infrastructure (Jenssen 2009:183). Furthermore, cities can also be a breeding ground for policy innovations that offer a 'test market' for creative and experimental climate responses Lutsey & Sperling, 2008:674).

In conclusion, the localisation of planning agendas that deal with climate change is premised on Local Agenda 21(LA 21). LA 21 is a global plan of action for 'sustainable development' agreed to by most United Nations member nations at the United Nations Conference on Environment and Development (also called the Earth Summit or UNCED) held in Rio de Janeiro, Brazil, in 1992. The member nations agreed to aim for more sustainable and balanced development in order to minimise negative environmental impact on the earth (Republic of South Africa, 2002). The advantages of solutions that have been identified by LA 21 are that they have their roots in local activities and they emphasise the participation and co-operation of local authorities (Howlin, 1995:4). The LA 21 (United Nations Action Plan) aims to achieve global sustainable development in the 21st century and accordingly expected local authorities worldwide to draw up their Local Agenda 21 programmes to promote sustainable development at the local level before the end of 1996 (*ibid.*).

Lutsey and Sperling (2008:672) assert that it is appropriate for local authorities to align their development programs with LA 21, so that their local initiatives can act as an anchor for the national strategy especially as the national governments are well known for lagging behind with implementation of policies. The same author also maintains that the extent to which municipalities mainstream sustainability criteria (in services delivery) will be the yardstick to measure the progress of LA 21 on sustainable development. Local authorities have a key role to play in this regard, because of their wide-ranging responsibilities and functions in relation to the

environment, planning, development, housing and the provision of other physical and social services. The municipal development planning activities —like land use, waste disposal and water services, and their subsequent administration are the determining factors in cities' ability to strike a balance between environmental protection and climate change (Sperling, 2008).

3.11 Climate change initiatives by the three South African municipalities

The three South African cities chosen for this study have made many initiatives of glocalising (thinking and acting globally) their responses to climate change (Roberts, 2008). As Mokwena (2009) suggested, the cities are a laboratory where climate change and its effects can be studied and better understood, because these cities have major concentration of population and economic activities. Mokwena (2009) and Yamin (2007) further state that cities in general are major emitters of greenhouse gases (GHG), as they account for approximately 50 per cent of GHG emissions globally. Therefore, it is incumbent upon cities to fight the war against climate change within their geographical spaces considering also that they have huge investments in services and infrastructure planning (*ibid.*).

City of Cape Town

The South African local government that commenced the development of a comprehensive Integrated Metropolitan Environmental Plan (IMEP)[11] is City of Cape Town (Mokwena, 2009). This city has been equal to the task in ensuring implementation of IEMP through development of operational documents such as the City's Energy and Climate Change Strategy (2005) and the Framework for Adaptation to Climate Change in the City of Cape Town (2006) (*ibid*.). These initiatives show that the city made it clear that it aimed at mainstreaming climate change into all development plans. The advantage of the city in this crusade was that the councillors were very supportive of the administration. The momentum in the whole process was motivated by the agreed to fact that the city is susceptible to many climatic risks, since it is located on a low-lying coastal topography (*ibid.*).

[11] This is an overarching policy framework that the city has to develop, to ensure that its operational programmes are not in conflict with national and international regulations that deal with environmental and climate protection (Mokwena, 2009).

Regarding human settlements, its focus has been aimed at creating more green buildings and other efficient forms of cooling and heating methods which form part of the City's Green Building Guidelines that will in future require that new property developments use solar heating (*ibid*.). This forms part of the City's adaptation strategies to climate change, where attempts are being made to ensure that the built environment and other physical infrastructure are of such quality that is able to withstand changing weather patterns and increasingly extreme weather conditions. Another example of adaptation interventions can be seen in the municipality's policy of retrofitting ceilings in houses that did not have these to maximise the heating and cooling of such homes, many of which fall into the category of social housing (*ibid*.). It is therefore quite clear that the City of Cape Town has allocated more resources and expertise towards research and increasing local understanding of the risks and challenges posed by climate change, and is thus making an intensive effort to prioritise climate change in its development and policy programme.

eThekwini Metropolitan Municipality

EThekwini Metropolitan Municipality is severely vulnerable to climate change (eThekwini Municipality Environmental Management Department, 2007). Its geographic location on the ecologically sensitive eastern coast of the country and slope exposes it to sever climate change conditions like flooding and consequent loss to social and physical infrastructure (eThekwini Municipality Environmental Management Department, 2007). Mokwena (2009) asserts that the response of this city towards these concerns has prompted the municipality to conceptualise the mainstreaming of climate change across all the city's sector plans. It has therefore produced a range of policy documents and plans that outline the possible measures that should be taken in mitigating and adapting the city towards its prevalent climatic circumstances. The municipality has also published a report on climate change that lists its plans and current activities for mitigation and adaptation (*www.cps.org.za, 2009*).

The eThekwini Municipality has further identified the development of an efficient public transport system and increase in renewable energy sources in its climate change report (www.cps.org.za, 2009). It has further intensified projects that include the development of an energy strategy and action plan to guide municipal departments and major energy users on sustainable means of increasing their energy efficiency in line with National Energy Efficiency

Standards (*www.cps.org.za, 2009*). These projects include energy efficiency audits of municipal buildings and a landfill-gas-to-electricity project which was implemented in support of its Clean Development Mechanism (CDM).

Mokwena (2009) suggests that climate change mainstreaming and implementation of CDM projects are difficult. They are very complex and technical projects that are not easily understood by councillors who do not give them political support in council decision making platforms. In eThekwini, sister departments are seemingly failing to cooperate with the environmental department to mainstream CDM projects in planning processes, which renders these projects poorly embedded in community projects (www.cps.org.za, 2009). This situation is attributed to a lack of co-ordination between the various departments within the eThekwini municipality, a lack of co-ordination across the different spheres of government, weak co-operation and exchange of information between eThekwini and other municipalities in the province (www.cps.org.za, 2009).

Nelson Mandela Metro

The Nelson Mandela Bay Municipality (NMBM) started a low-pressure solar water heater project in a subsidised housing area of Zanemvula (www.nelsonmandelabay.gov.za, 2008). This project is part of the NMBM's response to Eskom's Power Conservation Phase which aims to reduce electricity demand (www.nelsonmandelabay.gov.za, 2008). The over-arching aim of the municipality was to ensure that it initiates a prototype project that would be taken up nationally to inform the housing policy that RDP houses in South Africa are built with a solar water heater factored into the budget. In other words, proper implementation of the Zanemvula project would make NMBM a proactive municipality in the formation of legislation that would concretise solar water heaters into subsidised housing law. There are several other similar projects that are running in South Africa (*www.nelsonmandelabay.gov.za, 2008*). Zanemvula has been designed as a pilot project intended to inform future up-scaled rollouts at a National level lobby, the standardisation of solar water heaters into the RDP house construction budget (www.nelsonmandelabay.gov.za, 2008). This means that the proper implementation and coordination of the Zanemvula project in the NMBM was to be the best practice project to enhance housing law in response to climate change. There are several other similar projects that are running in South Africa. The solar water heater rollouts of this kind are a promising initiative

towards carbon trading projects that form part of the 1997 Kyoto Protocol Clean Development Mechanism (CDM) (Douma, Massai and Montini, 2007; *www.idc.co.za, 2012*). However, one of the problems is that the process to qualify as a CDM project is expensive and lengthy. This is the reason why most of these CDM projects have not been traded in South Africa (*www.nelsonmandelabay.gov.za, 2008*).

3.12 Recap of this section

The attempts by NMBM show that cities must be very innovative in dealing with climate change, because they are at the forefront of service delivery. Burton *et al.* (2006) further suggest that planners and policy makers need to make a concerted effort to apply a dual approach of mitigation and adaptation in fighting climate change.

3.13. The main theoretical framework of the study

As has been outlined in Chapter 2, public participation approaches (models) and climate changes are highly contested topics (Aylett, 2010). In an attempt to address these vexing issues, theories from the following planning scholars have been borrowed to illustrate the controversies surrounding development planning, with specific reference to climate change. Habermasian collaborative or communicative rationality is one of them. This theory acknowledges power in societal relations because it focalises the positions held by the parties during engagement. This allows parties to explore their differences, and to ultimately find common ground that accommodates all affected stakeholders. Habermas (1984) puts forward that communicative or collaborative rationality is the key instrument in this instance and he further argues that this method of engagement creates opportunity for levelling the ground for extensive dialogue. This allows negotiations to be institutionalised and entrenched in the governance processes of the community. Also, the theory of environmental justice and the just city, are significantly in agreement with power and rationality, the latter advanced by Foucauldians like Flyvbjerg (1996, 1998, 2000) and Yiftachel, Alexander, Hedgcock, and Little (2001). The environmental justice and just city theories are advanced by MacDonald (2000) and Fainstein (2000), respectively.

3.13.1 Collaborative or communicative rationality

This theory draws from Habermas' theory of communicative actions and propagates the approaches of open and honest debate between civil society and the government (Habermas, 1984). The basis of this approach is that rationality emanates from an open and honest discursive engagement between parties. The communicative rationality is premised on the understanding that for any planning process to be credible and widely acceptable, a community must enter into dialogue to share their ideas and experiences of their planning problems. In this discursive process, the goals and plans of different actors are negotiated and co-ordinated through discussion in an attempt to reach a shared understanding (Healy, 1993, 1997, 2000; Innes, 1995). Scholars like Forester (2009), Healy (2000) and Innes (1995) also highlight the importance of participatory approach to planning. Habermas (1984) objects to strategic action, which he criticizes as creating chances for opportunistic individuals to manipulate interactions to achieve personal goals (Groot and Marleveld, 2000). Collaborative rationality also reinforces the establishment and formalisation of participative institutions as the end product to illustrate the ingeniousness of the actors as they engage each other for their common good. It places the planner at centre stage as the broker, who must exercise his practical wisdom, judgement, moral vision and emotional sensitivity to influence all the actors towards a common end (Forrester, 1999). This means that the paramount role of the planner in development program/projects is to neutralise power relations and conflict by utilising his /her expertise to achieve a consensus that is mutually acceptable to all the parties *(ibid.).*

3.13.2 Environmental justice and the just city approach

Hallowes and Butler (2000:18) declare that environmental justice is 'achieved where the relations between people, within and between groups of people and their environments are fair and equal and allowing all of them to achieve their aspirations without imposing unfair, excessive and irreparable burden or externalities on others or their environments, now and in the future'. The Just City Approach advocates for a spatial planning system that aims to afford a fair and equitable distribution of resources to its community (Fainstein, 2000). These theories resonate well with environmental planning history of South Africa where the government was working towards putting the interests of capital and minority above the majority. Khan (2002) gives a detailed account of what he called environmental racism, where the Durban Council purposefully

mixed residential land uses with heavy industry in the South Durban Basin[12] which resulted in health hazards posed to the local people. He further shows how the city imposed its master planning systems, despite the protests from the community and environmental groups. This project shows how the planning system crumbles if public participation has not been engendered in the planning process. Unjust planning processes show how a dominant discourse can be subjectively used by the authorities to infringe on human rights of the poor to clean, safe environment that is supposed to accord them the enjoyment of environmental goods that the city is endowed with.

3.13.3 Power rationality

Stein and Harper (2003:125) state that the planning process should be seen as a positive exercise in liberal democratic societies. They say that this should be a fair and legitimate process the aims of which are to produce environments that are better places for a decent and healthy living. However, the entrenched power relations in any society make planning produce far from ideal outcomes. A number of scholars that have written extensively about power, rationality and planning criticise planning for serving undesirable purposes (Davidoff, 1965; Friedman, 1973; Grasbow and Heskin, 1973).

Many of the Foucauldian planning theorists like Flyvbjerg (1996, 1998, 2002), Yiftachel (1999) and Yiftachel *et al.* (2001) refer to this as the 'dark side of planning,' which explains the extent to which power is embedded in development planning decisions. They appreciate the collaborative engagements and argue that it prevents the dominance of elites over the powerless people (Sandercock, 1998). They further warn that planners must at all times be vigilant and guard against the existence of power within participatory processes. The existence of power relations obscures the intentions of planning a just city that intends to produce a just city space that appreciates different planning perspectives (Sandercock, 1998; Sager, 2005). Planning theorists like Innes and Booher (2003) share the same sentiment and argue that the intricate nature of power relations that exist in public participation produces planning outcomes that are not inclusive of the voice of the poor. They further assert that governance is an upward process which

[12] The South Durban Basin (SDB) is an area approximately 4 km wide and 24 km long, extending from the Durban Central Business District (CBD) southward to Umbongintwini. It contains a mixture of industrial (including heavy industry, chemical storage facilities, sewage works and a number of smaller industries) and residential areas in close proximity to each other. This was allowed to develop as a result of poor planning practices.

has to be informed by what the people want. Governance is also no longer the sole responsibility of the government but involves fluid action and power that is distributed widely in society (*ibid*.).

Healy (1999) has a divergent on power rationality. He argues that in some situations, power relations in planning can yield positive outcomes as long as power is applied with a sense of fairness in mind. In explaining his position, he highlights that when parties enter into collaborative engagement, each of them comes with fixed positions about what perspective they believe should be adopted. As they continue to engage each other, their positions change in response to counter-engagement where they come to appreciate the reasons behind their diverse positions. In this discursive process, they appreciate the shifting of their stereotypically vexed positions to accommodate each other. In this deliberative process, the parties come to appreciate the fact that they have to work collaboratively as they come to understand that their sectional positions are not destructive to either side. This reciprocal process of discussion is used in shaping positive directions that contribute towards building the parties' institutional capacity, which is a combination of their social, intellectual and political capital (Cars, Healey, Madanipou & de Magalhaes , 2002; Chaskin, 2001; Gruber, 1994; Khakee, 2002). Healy (1999:56) says as 'this institutional capacity grows and spreads through collaboration into interlocking circles and networks, the civic capacity of a society grows and participants become more knowledgeable and competent and believe more in their ability to make and design a mutually inclusive development planning process'.

3.13.4 The voice on the borderlands or multiculturalism planning theory

The first president of democratic South Africa, Nelson Mandela, once proclaimed that 'South Africa belongs to all who live in it, whether you are black or white, man or woman, young or old, able-bodied or disabled'. These words were concerned with the diversity of the interests that form the political spectrum of the country. This was a government vision elevated by Mandela in his quest for nation building. Sandercock (1998a) recognises that multiculturalism needs to be elevated in planning because it celebrates diversity in planning. He further elaborates that this planning approach promotes the creation of planning space for minorities to penetrate the decision centres which are exclusive zones of the dominant group (*ibid*.). According to Sandercock (1998), this theory ensures that the 'voice of the borderlands' (those who are

sexually, ethnically, culturally, gender and racially excluded) is included in the decision making of governance. The South African experience shows that the concentration of power in the municipal council and its officials can be attributed to service delivery protest marches that are ravaging the country.

3.13.5 The influence of global legal frameworks and planning theories on National Environmental Management Act of South Africa (NEMA, 1998)

Post-apartheid South Africa has experienced a remarkable transformation in environmental legislation. The dramatic shift in environmental planning came with the enactment of Environment Conservation Act (ECA), Act No. 78 of 1997. This act was thereafter reinforced by the promulgation of the Environmental Management Act (NEMA) (Act No. 107 of 1998). Sowman, Fuggle and Preston (1995) show that NEMA was informed by many international legal frameworks. The ANC government in 1994, as part of its efforts to rectify social and environmental injustices of previous apartheid laws like the Group Areas Act and Bantu Administration Act, drafted NEMA (*ibid*). Some planning ideas in this document drew on global legal thinking, particularly how environment and development planning cannot be separated (Healey *et al.,* 1999). Specifically, the USA National Environmental Policy Act of 1970 (NEPA), Stockholm's Conference on Environment of 1972, the 1992 Earth Summit and other frameworks made a distinct impact on MEMA through their focus on social and environmental justice as underlying principles of environmental management.

(a) Communicative rationality

This communicative approach is underpinned by the need for public participation which compels development agents to ensure that the community who have the potential to be affected by a particular development raise their concerns regarding a development proposal. Communicative rationality theory reinforces the participatory principles in the NEMA Act of 1998 (Habermas, 1981; 1984; 1987). NEMA highlights the importance of public participation in environmental decisions by emphasising the necessity to include public participation at all levels of the decision-making (from policy, plan, to programme levels). It considers that the engagement with the Interested & Affected Parties (I&AP) in taking environmental decisions is an indispensable exercise. The adoption of a participatory process is evident in South Africa's post-apartheid

legislation as it deliberately involves the marginalized communities in decision-making that deepens participatory and environmental democracy Hoosen (2010). Public participation on environmental decisions should restrain from taking the form of just a 'two-way' form of communication. Instead, it should build continual partnership because the environment is part of the ecosystem and decisions concerning its development are a continual exercise (*ibid*.).

(b) Environmental justice and 'just city'

The enforcement of public participation by NEMA aims to address environmental justice by giving voice to those previously marginalized individuals to contribute to the decision-making process (Sandercock, 1998a). The compulsory introduction of Environmental Impacts Assessments in development planning indicates this fact. Environmental justice in many ways is rooted in 'just city' thinking because it implies that there must be a holistic and equitable sharing of environmental resources by all citizens irrespective of social class (Fainstein, 2000). Therefore, both theories undermine the neo-liberal environmental agenda that gives one group access to environmental goods. The inequitable share in the environmental resources mostly results in circumstances where communities have to carry environmental externalities imposed on them (Khan, 2002).

NEMA (1998) emphasises that Interested and Infected Parties (I&AP) (those likely to bear the costs of externalities of environmental degradation) must be accorded a dialogue opportunity through public participation, a vehicle that will guard against the environmentally degrading activities by industries. In the context of climate change management, the failure to deal with this problem can result in protracted suffering that may be endured by the poor in future. The living example of this are the environmental costs that are endured by Gauteng citizens due to decanting Acid Mine Drainage (AMD) in the Witwatersrand mining basin, which is the trail of underground mining that stretches from West Rand, Johannesburg to East Rand (City of Johannesburg, 2009).

Environmental justice has been included in policies of post-apartheid South Africa as a way of redressing the injustices that were brought about by the apartheid government's environmental legislation. The enforcement of public participation by NEMA is the key aspect that informs the EIA process (Hoosen 2010:39). NEMA identifies the public participation process as a tool that

aims to equip the marginalised so that they can be informed to influence environment decisions in their areas (DEAT, 2002). This helps to ultimately bring about an environmentally just city and ties together the environmental aspiration of all citizens of a community (Hallowes and Butler, 2000).

(c) Power rationality

The Constitution of the Republic of South Africa (1996) provides for environmental rights for South African citizens in Section 24, and the most important one, generally states that 'everyone has the right to an environment that is not harmful to their health and well-being' (Republic of South Africa, 1996). The theory of power becomes significant during the implementation of Environmental Impact Assessments (EIAs) as stipulated in Chapter 5, Section 24 of the NEMA. The objective of the EIA 'is to provide the competent authority with adequate information to make decisions which ensure that activities which may impact negatively on the environment to an unacceptable degree will not be authorised, and that activities which are authorised are undertaken in such a manner that the environmental impacts are managed to acceptable levels' (DEAT, 2006).

This principle assists in preventing the chauvinist attitudes of big corporations who can do anything in their power including bribing the leadership or the authorities so that they can authorise developments that negatively affect local communities. The power rationality as argued by Flyvbjerg (2002) can take many forms ranging from authorities manipulating the access to information and preventing a community from accessing resources. The principles of public participation are very important so that the potential environmental disasters that occurred in Durban South Basin can be avoided. In this development, the municipality granted the Record of Decisions (RoDs) in favour of Shell to erect its multi-million oil purification plant in the residential areas of Wentworth, Merebank and Isipingo (Hoosen, 2010).

(d) The voice on the borderlands or multiculturalism planning theory

The NEMA Chapter 1 sets a variety of principles that are aimed at promoting diversity and the rights of the disadvantaged groups. It further encourages that environmental management must place people and their needs at the forefront of development and that it must serve their

physical, psychological, developmental, cultural and social interests equitably. It also calls for the application of environmental justice to ensure that adverse environmental impacts are not distributed in such a manner as to unfairly discriminate against any person, particularly vulnerable and disadvantaged persons.

NEMA (1998) engenders equitable access to environmental resources, benefits and services to meet basic human needs. It also stipulates that environmental planning must give a great concern to human well-being. It calls for government to take special measures ensuring that all people are not unfairly discriminated in environmental governance. To effectuate that, it seeks the promotion of participation of all interested and affected parties in environmental management so that all people can have the opportunity to develop the understanding, skills and capacity necessary for achieving equitable and effective participation in the process.

3.13.6 Conclusion

The essence of public participation rests on allowing people to execute their most basic human right which is the right to participate in decisions regarding their future. The Bill of Rights in the Constitution and other supporting pieces of legislation allude to the right to participation. It can be assumed that the failure by the municipalities to implement public participation constitutes a breach of their legal responsibility to the people. The urgency that is brought by the need to address climate change in terms of Agenda 21 means that local governments must reinforce their institutions of public participation.

Since climate change is becoming one of the most important mandates of municipalities, it follows that it has to be implemented in tandem with public participation. Sippel and Jenssen (2009) argue that since climate change is a significant concern of cities, public participation must be made a key pillar of climate change programs in ensuring that all municipalities are working towards achieving the Local 21 Agenda. This frame of thought is in line with 'just city approach' which advocates for the deepening of the values of environmental justice. Fainstein (2000) argues that 'just city approach' promotes the ideas of good governance and enables every citizen to enjoy the benefits of being residents of a city. Habermas (1984) and other scholars like Healy (1999) advocate that for effective participation to take place, a collaborative and discursive

engagement is needed between and amongst the community. This engagement according to Healy (1999) helps institutionalise governance structures that give space for community to participate productively in making planning decisions.

The contested issues like climate change become vexed with sectional interests of the elite and the private sector, which scholars like Flyvbjerg (1996; 1998; 2000), Yiftachel (1999) and Yiftachel *et al*. (2001) refer to as the unfortunate 'dark side of planning'. This is a critical issue considering that where power relations are prevalent, the environment can be abused and external costs tend to be felt by the poor (Hoosen, 2010). Therefore, the institutions and legislative frameworks of participation are important in preserving environmental justice. These mechanisms assist in ensuring that the natural environmental goods of the city are equally distributed and enjoyed by all citizens. This becomes possible where the power and communicative rationality has matured and developed the capacity to build trust and mutual understanding within the community. The outcome of collaborative engagement is that sectorial interests within and amongst the community's divergent groups tend to converge towards common causes (Habermas, 1984; Gruber, 1994; Chaskin, 2001; Cars *et al*., 2002 and Khakee, 2002).

CHAPTER 4

RESEARCH DESIGN AND METHODOLOGY

4.1 Introduction

This chapter presents the research methodology, research instruments and procedures that were employed in collecting the data. It further discusses the research sample themes that help organise findings. This section goes further to explore the nature of limitations of the study. Ethical issues are thoroughly explored to underline the academic integrity of this research.

4.2 Research methodology

In 2007, the City of Johannesburg (CoJ) adopted a Community Based Planning process to strengthen public participation. To that effect, the IDP of the municipality made it categorically clear that this approach intended to define community needs as well as empower communities to make planning decisions at a local level that would contribute meaningfully to an equitable and spatially integrated city (CoJ IDP, 2012). This IDP also stipulates that Community-based planning (CBP) aims to further intensify the City's commitment to community consultation and participation in the IDP and Budget process so that a social contract is formed between CoJ and communities.

In order to explore the processes that CoJ adopted in implementing the Cosmo City Climate Proofing Programme (CCCPP), a qualitative research methodology was adopted in order to determine relations between public participation and climate change. Qualitative research is a common approach used in social science research to mirror the insiders' perspective on the social action around them (Babbie and Mouton, 2001). This research approach was also selected to solicit respondents' personal accounts of the subject, which was the ultimate aim of this research. The community sample was randomly selected and other respondents were selected through systematic sampling. Interviews were strengthened by participatory observation during interviews.

To secure official authorisation to conduct the interviews in the area, the researcher consulted directly with both the incumbent and the former Ward Councillor who also formed part of the

sample of the research. The researcher conducted interviews in Extension 2 and 6 of Cosmo City, which falls under Ward 100. The researcher personally conducted all face-to-face semi-structured interviews with city officials (in their offices) and residents of Cosmo City through home visits. This was done in order to get the community and the officials' perceptions on public participation in the CCCPP implementation process.

4.3 Research design

The research took an explorative and interpretative form nature because it is based on assessing the subjective views of the public and officials on the subject matter (Neuman, 2000). The research instrument used was an interview schedule – for both city officials and residents. These had different questions but both were semi-structured. This was done with the key aim of ensuring the freedom of the interviewees to give a broad and through account of their perspectives on the subject. In the process, follow-up questions were posed to clarify pertinent issues that emanated in the course of interviews.

Since the interviews were face-to face, the questions were grouped into thematic issues to create a logical sequence during analysis. The notes from the interview were recorded manually whist a voice recorder was used to capture full interviews. Most of the interviews were conducted at the participants' houses and the rest in safe, well-lit and ventilated venues suitable for the participants. Great effort went into accommodating the times suitable for participants. Each interview lasted no more than an hour (Greenstein, Roberts & Sitas, 2003).

4.4 Sampling process and data collection

Blanche and Durrheim (2002) maintain that sampling is the process of selecting cases of respondents to answer research questions, in the form of groups of people, individuals or archival documentations. During the community interviews, a random and systematic sampling approach was utilised because of time resources and constrains which did not allow for the coverage of 700 people (the total number of the beneficiaries of the CCCPP). Age, gender, disability and position were used as selection criteria for bureaucrats[13]. Interviewees from the

13 A collective term for all Officials and Councillors.

two communities had to be adults who were heads of households. The communities that formed part of the sample resided in Extension 2 and Extension 6, because Climate Proofing was implemented in these two Extensions. A sample of sixteen (16) community members divided into two sections was considered, meaning that each Extension was represented by eight (8) people.

A systematic sampling approach was also used in selecting Councillors, the CoJ Officials and Danida respondent who may be referred to as bureaucrats. It must be clarified that from the CoJ officials, only one Deputy Director, Project Manager and two Senior Environmental Specialists agreed to answer the questions. Lastly, a variety of academic studies, journals, the internet and archives (from city departments) were consulted widely to get rich information about the subject matter of this project. The international case studies were further consulted to get a deeper understanding and to explore alternative approaches taken by other countries in dealing with public participation and climate change in their cities.

4.5 Ethical issues

In keeping with the ethical considerations of the research, the researcher got ethical clearance from the University of the Witwatersrand. The researcher also informed the organisations concerned what the study was about and positively identified himself in each instance by producing his student identity card. Interviewees were assured of confidentiality and the researcher explained that the research was solely for academic purposes. It was also made clear to the participants that they were not compelled to take part in the research interviews, and that they could withdraw their participation at any time should they feel the need to.

Before the interview could take place, the respondents were notified that the responses would be recorded using a voice recorder for ease of transcribing the conversation. They were further assured that their identity would not be divulged and that the content of the interview was not going to be linked directly to a particular participant. The researcher is himself a resident of Cosmo City and has indirectly observed the project. Therefore, to prevent researcher bias, a reflexive approach was adopted to ensure that the researcher's views did not influence the findings of the study, and due consideration was taken to base the findings on the academic and theoretical underpinnings of the study.

4.6 Limitations of the research

The focus group should have been one of the data collection methods used, considering the complexity of the study question. However, that was impossible due to financial constraints, and that most Cosmo City people are normally not at home during the day time. Also, some of the key officials refused to grant interviews, for example, former Director of the Unit of Climate Change, City of Johannesburg who had at the time of interviews, left for another job (he had not been replaced) refused to grant the researcher a telephonic or electronic interview.

The other major limitations of the research particularly revolved around language barrier. The fact that Cosmo City is inhabited by people who speak mostly Sotho, Venda and Tsonga languages and the researcher is only fluent in Nguni languages was limiting. The researcher overcame that by securing a translator conversant in these languages the researcher is not fluent in. Lastly, some stakeholders could not be located. The reason is that when the project was initiated, some organisations that existed in the community quickly disbanded because the community was still developing, being composed of people from previously different areas.

4.7. Summary

This chapter has touched on research approach utilised in this study, which is qualitative. It also discussed data collection instruments and procedures, as well as the sample and its size. Ethical considerations were addressed and these include the principle of confidentiality, anonymity and right to withdraw from the study. Lastly, the limitations of the study were pointed out. They involved limitations of time, funding and inability to secure a broader sample.

CHAPTER 5
DATA PRESENTATION AND ANALYSIS

5.1. Introduction

In an attempt to establish the nature of community perception in the Cosmo City Climate Proofing Project, this section will give an analysis and interpretation of the data that was collected from the set of four (4) interview schedules directed at the councillors, community members, city officials and the donor official. The data drawn from the interviews was coded to assist in grouping corresponding views into themes (Creswell, 2014). The chapter has therefore been grouped into the following themes that are further subdivided into necessary subthemes. The key themes are: Stakeholder analysis, Project design, Participation plan (strategy), Power relations in decision making, and Access to meetings. The other key purpose of coding is to enable the researcher to assemble the collected data and create an inventory that may be revisited from time to time to interrogate and review the findings with the aim of improving the data findings (Creswell, 2014).

5.2 Theme 1: Stakeholder analysis

The CCCPP project was hastily introduced to the community and was predetermined as there was no proper consultation with the community. This was highlighted by one of the officials who said because the city was '*not going to risk losing this golden opportunity [funding], it had to act swiftly to come up with the project that met donor funding requirements'.* The community was then quickly approached, resulting in haphazard consultation in order to get public endorsement of the project so that city would not lose the funding presented by the donor. Only the communities in Extension 2 and 6 were consulted during initiation of the project. Since this was a pilot project, the other parts of Cosmo City should have been informed so that they would know that there was a project being piloted in other sections of their area. In this way, the officials made a general assumption that the community was homogeneous and immune from diverse or conflicting interests (Forester, 2009 and McLoughlin, 1969). This may be true in the Cosmo City community whose settlement infrastructure is not similar (as the case could have been that the project needs of the bonded houses were different to the RDP section).

This position is also confirmed by Asian Development Bank (ADB) (2012) which states that the representation during stakeholder analysis needs to be expanded, because any community has varied interests and experiences that may be positively used to contribute to a consultative process. Forester (2009) puts forward that the planner's role should at all times be geared towards deepening the deliberative democracy in civil society. The planners should consolidate participation by way of drawing all communities into one forum. This is also confirmed by Davidoff (1965) who argues that planners should be intermediaries between the conflicting interests of government and the community. This author also asserts that the planner should be more vigilant and lean towards advocating the interests of the public. Therefore, in order to make the planning profession relevant, the planner needs to be able to accept the local experiences of a community and augment them with his/her technical knowledge, so that an acceptable level of trust is developed between the planners and the community (Forester, 2009). Thus, the role of the planner should not be premised on his/her professional reflection only (Forester, 2009). Instead, it must be politically deliberative, meaning that it must nurture learning and reflection between engaging groups. The primary duty of the planner in this process should be to act as a bridge that mediates different points of view (Susskin and Ozawa, 1995).

5.3. Project design

The involvement of the community in the design process of a project is helpful to make the project more credible, effective and transparent, thereby 'increasing the probability of achieving the project outcome' (ADS, 2009:33). Regarding the CCCPP, the stakeholders were excluded in the project design phase and the consequences of that was the lack of consensus in charting the course of the project. Such projects are likely to suffer lack of ownership from the community and temper with sustainability of the project (*ibid.*). In the context of CCCPP, there is nothing to suggest that there was public participation in project design. The project was a 'signed and sealed product'. This was suggested by one of the city project managers who commented that 'the city was approached by Swedish government with an offer of funding to initiate a project that had to respond to the City of Johannesburg's climate mitigation policy intentions. The sponsor was very precise in laying down the principles that were to be followed. These principles are the ones that are strictly prescribed in the Gold Standard Local Stakeholder Consultation Guideline, and they

are very rigid to customise'. Community member No.3 also attested to this situation and said, 'To us we thought this CCCPP is like a give-away of RDP houses'. Thus, the community had become used to being informed when they were going to be provided with any development project.

The community members seemed to lack understanding of the linkage between CCCPP and climate change and were not informed of any benefits they were going to obtain from the project. Thus, the public participation in the design adopted a top-down approach. The city came to the community with a predetermined project proposal. This development sense defeats the possibility of success of the project considering that environmental governance matters are complex and full of conflicting community interests (Reed, 2008). This argument necessitates that public participation needs to be adopted from the conception of the community project and throughout implementation to allow for collective evaluation of that project outcome (*ibid.*).

Sandercock (1998a) also supports the idea that public participation should be seen as a process that must be underpinned by equity, trust and learning between all the parties. A bottom-up approach to planning needs to be motivated in such circumstances to enable fair community participation that can infiltrate power relations to achieve fair decision making in planning. This is the kind of participation that can make meaningful engagement. Such engagement limits comprehensive rationality and paves the way for 'other ways of knowing' (Habermas, 1994; Healey, 1998; Innes, 1995; Sandercock, 1998a). The collaborative approach to planning decreases the mushrooming of many white elephant projects that are abundant in most urban and rural areas because these were forced upon the community (Yiftachel, 200). The fact that knowledge is a 'situated phenomenon', should be taken seriously by government to ensure that the interests and knowledge of the local community inform the expert knowledge of the authorities (Flyvbjerg, 1996; Forester, 1999 and Richardson, 2002).

5.4 The participation plan/strategy

In development planning, the participation plan should be integrated with communication processes that guide stakeholders throughout the project. This process involves what channels of communication must be used to engage the stakeholders throughout the project (ADB, 2012).

Though there was participation plan in the CCCPP, the modes of communication were not clear. Communication was happening in an ad hoc basis, as there were no clearly stipulated times and intervals of holding meetings. One participant pointed out that 'the meetings were called randomly and as when the city deemed fit for them. In the calling of meetings, they would do a round of loud hailing or put up notices on street poles at road corners where the notices were hardly visible for the community to see'. Therefore, access to meetings was vastly compromised because modes of communication did not serve the purpose of inviting the community to the meetings. The participation strategy builds on the stakeholder analysis. Participation strategy needs to clearly identify stakeholders to consult. These may include formations of the civil society like churches, NGOs, business, woman /youth formations, business and residents (ADB, 2012). There does not seem to have been any such targeting in the CCCPP participation strategy.

Moodley (2007) argues that participation strategy is done through the holding of workshops or focus groups. He further asserts that it is in these fora that decisions should be taken about the media of communication between stakeholders. It is also through this process that parties should agree on time intervals of meetings, structures of participation and the resources that are necessary (*ibid.*). The other factor that hinders participation strategy revolves around the kind of language used during the meetings. As the table below shows, people who were part of the CCCPP were mostly African. The problem is that the dominant language that was used during meetings was English. This is not the appropriate language to use in the context of Cosmo City as ordinary people got confused by the complexity of environmental management issues discussed in a language they did not understand well (Reed, 2008). In the process, they became passive attendants who contributed less or nothing in the meetings. It becomes clear then, that the language used at such meetings should be customised to accommodate the local people, who are the actual recipients of the project.

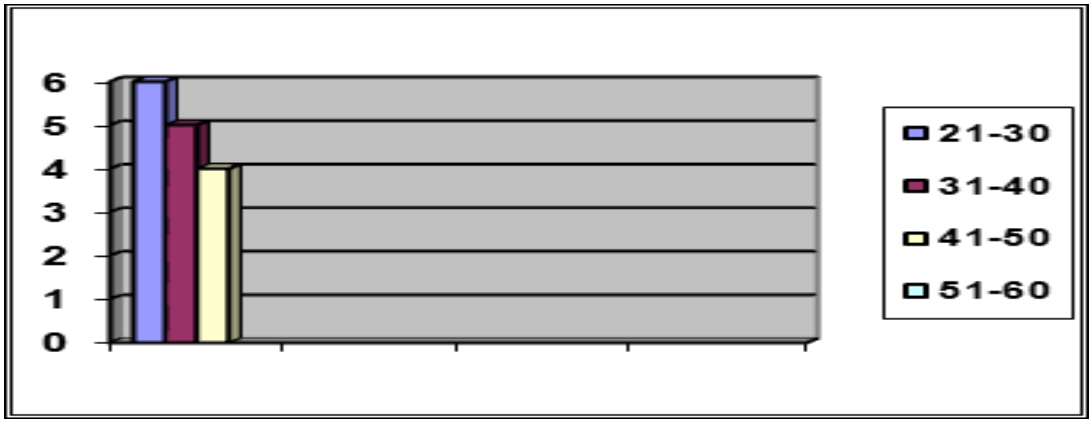


Figure 6: Demographic Profile of Cosmo City

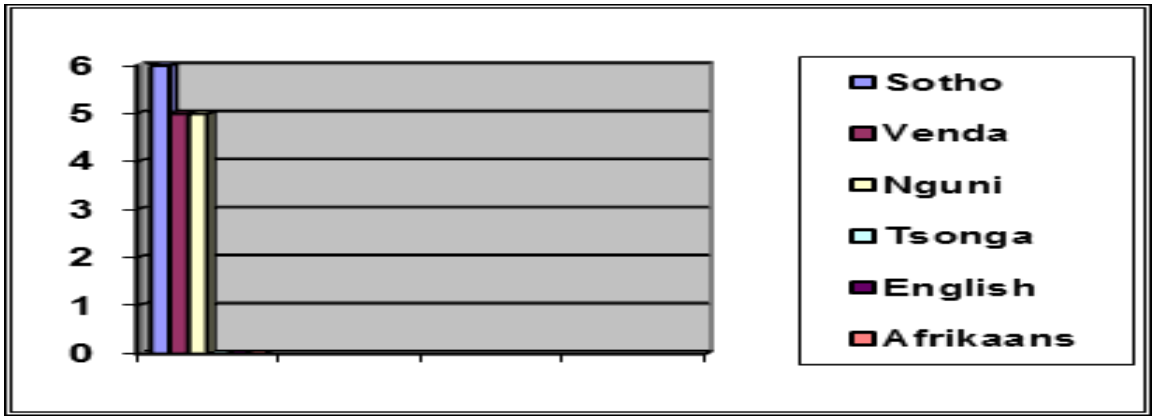


Figure 7: Distribution of community participants by language

The findings reveal that Cosmo City community members of Extension 2 and 6 are predominantly Black Africans as shown by their language groups. In a sample of sixteen (16) respondents, it was found that five (5) spoke Venda/Tsonga, five (5) spoke Nguni languages (Zulu, Ndebele, Xhosa and Swazi) and the remaining six (6) spoke Sotho languages (Southern Sothos, BaPedi and Batswana). In terms of age, the respondents were classified in four age ranges: 21 to 30 (comprising 6 people), 31 to 40 (comprising 5 people), 41 to 50 (4 people) and 51-60 (1 person). The above data depicts that study area has young people, the middle aged and to a lesser extent, the elderly. As stated above, language is important during participation as it tends to be an enabler or a barrier of participation.

5.5 Power relations in decision-making

Habermas (1981; 1984) advocates that communicative rationality and discursive engagement are important ways to reach consensus. His position is based on the fact that humans are rational enough to engage each other in a constructive manner to reach the negotiated settlement of their disputes. Be that as it may, this theory fails to recognise that planning is loaded with rhetoric of language and vested interests that emanate when the powerful try to subvert the views of those who are weak and cannot articulate their interests properly (Flyvbjerg, 2002; Friedman, 1997; Foucault in Rainbow, 1994). So the spatial patterns of cities, settlements and distribution of government budgets are the manifestation of how those who have power can manipulate decisions to suit their ends. That being the case, the recently mentioned Faludian theorists are very concerned with 'rules of the game' during participation because they shape how the planning process happens.

(a)The agenda setting

The community was asked about how the agenda was formulated and how their inputs were reflected in the decisions of the project. One participant responded, 'We were only invited to meetings when we were to be informed that the city was to roll out the CCCPP. Those invited were not even given time to deliberate on the agenda. Even the most burning issues that we raised were not followed up in the next meetings'. This was a popular view amongst the residents in this study. Some even went as far as saying that they saw their attendance of meetings as a futile exercise because their presence was just a rubber stamping exercise that they had been part of those meetings but as voiceless participants. Two councillors shared the same sentiment. The sitting councillor said when she was an activist, she remembered that the community was invited to CCCPP meetings but discussions at such meetings lacked depth and the quality of decisions was unsatisfactory. A former councillor emphasised this view and commented:

> Even in the council we have a very serious concern about donor funded projects. They come as a tailor made package that we as the community have to adopt as it is presented to us without little or no input from the community. When the community questions many issues that we are not comfortable with, especially their methodology of

implementation the donor threatens the community with taking the project somewhere else.

Under these circumstances, one can conclude that there was no genuine participation by the community.

(b) Access to meetings

In a participation process, all the 'rules of the game' need to be institutionalised, so that all the parties are well aware of their roles and the times of the meetings (Flyvbjerg, 2002; Friedman, 1997; Foucault in Rainbow, 1994). The levelling of the playing field affords the community enough time to interrogate decisions of the previous meetings and to have enough time to thrash out issues in order to meaningfully engage in the meetings. Regarding CCCPP meetings however, one city official indicated that meetings 'were taking place monthly and could also be convened as and when an emergency arose. The community complained also, that the frequency meetings later became too much, confusing to them. The meetings took place at the convenience of officials.' This is a good example of how authorities can use their access to resources to sway the decisions of the engagement in their favour. This is an area where the community needs to be empowered to have a thorough understanding of all methods of negotiation and persuasion. This will assist in making development programmes more representative of the view of the community and it also makes project management on the part of the officials easier, as they can learn from the communities' way of judgement (Sandercock,1998a).

(c) Means of communication

According to Reed (2008), public participation is a process that should be people-centred rather than government-centred. It is supposed to afford the community an opportunity to exercise their democratic right to influence decision making in government institutions. In this context, the channels of communication became paramount in giving people the space to engage with the government because communication needs to form part of the participation process. This assists in keeping people informed about the development of their project (ADBS, 2008). A clearly defined communication plan leads to the smooth running of a project and thereby increases the chances of its success. This involves identifying the channels of communication that

are relevant and contextual to the community and deciding how messages are transmitted in a language that is understood by the people.

Apart from the inappropriate use of language that was taking place in Cosmo City, the channels of communication did not suit the community. Most of the notices were placed by sticking flyers at locations barely visible to the community. Sandercock (1999) criticizes this practise and argues that planning is a collective action that aims to build a vibrant community. Therefore, planners — through stakeholders' identification needs, recognise that a community has differences (especially in terms of language, culture and other orientations. Accordingly, planners must attempt to use the most relevant methods and channels of communication. Additionally, clearly defined communication channels help to curtail authorities' power to disseminate communication that entrenches their power (*ibid.*).

CHAPTER 6
CONCLUSION AND RECOMMENDATIONS

6.1 Formalise the community representative structure

The logic of project management requires that stakeholder consultation be conducted before any project can begin (Murombo, 2008). However, in the case of Cosmo City, that was not effectively done because the main concern for the City of Johannesburg was to get hold of donor funding quickly before they lost it to other municipalities. As a result, there are many representative structures that were mentioned by the city officials that they were part of the participation process, whose existence was unknown to, or could not be mentioned by community members. In such circumstances, the project implementers should have firstly formalised these representative bodies, so that they can at best be the conduit for information sharing between the authorities and the communities.

6.2 Has the project succeeded in enhancing integration and a sense of community in Cosmo City?

The layout and design of Cosmo City Township has reinforced social exclusion, as there is a buffer fence that separates all three housing types. This NIMBYism[14] approach was seen also in how the high-income sections were against the high number of informal economic activities in the RDP section. The community in bonded houses used facilities like schools, hospitals and amenities in white suburban areas and not in Cosmo City. Despite the insufficiency of community facilities, mostly concentrated in the RDP section, people from the credit-linked housing sections reluctantly saw the need to share these facilities with whole community.

The project itself was initially targeted for Extension 2 and 6 of RDP section (as pilot study), with the aim of extending it to other RDP Extensions like 4, 7 and 1, and then later, also extend it to the high income areas at cost. But the NYMBISM design of putting buffer strips within the settlement prevents community members from freely accessing communal facilities. The fact

[14] Not-In-My-Back-Yard' (NIMBY) - a negative social cohesion reaction that is displayed by high income communities regrading sharing services and living with poor communities.

that the low-income groups had been provided with free houses created the impression that they needed to be provided with a hand-out in the form of CCCPP. They were deemed incapable of adding value in their development, by making a contribution towards maintain their facilities in a sustainable manner.

6.3 Participation: a means or an end to finding solutions to development planning challenges?

The concept of public participation is a prominent issue in development planning and some have linked it with various terms like 'people-driven' or 'people-centred' (Kihato *et al.*, 1998). Experience has shown that the involvement of people improves the positive outcomes of their project, because involvement results in willingness to bring their financial and labour input to the project and cultivate a sense of ownership of and shared responsibility for the project (*ibid.*). This further assists in ensuring that the instances of vandalism and facility neglect are diminished, because the community sees a great value in their communal assets and properties.

When they were interviewed, the communities in this study thought that CCCPP was part of RDP hand-out package. So they did not feel any sense of responsibility and the rights that the project accorded to them because they viewed it as a donation from government to them in the same way as they had freely accessed RDP houses. This is what Nimpuno (2013) critiques about the development approach in South Africa; that it always puts people on the receiving end of their development as they are not given an opportunity to take part and share in the responsibility to maintain their projects. Nimpuno (2014) further argues that this tendency breeds a culture of entitlement within the community, resulting in them not taking enough care of their projects because they have contributed nothing to them. The projects where people take part in are seen as ones that gives real and quantitative achievement to the people. Their participation contributes to the end product, which involves bringing about long term social infrastructure that sustains their livelihood. Public participation is a means to improve project results because people must contribute their ingenuity and skills in its construction and design to make the end product sustainable.

6.4 Cosmo City Climate Program as a process than an end product.

Kihato *et al.* (1998) see housing as a process than a product. CCCPP was mostly premised on officials' ideal of producing tangible results as they prepared reports for their performance evaluation. Theirs was to see the quantification of CCCPP installation than ensuring that there was real beneficiary empowerment in terms of transferring skills that will sustain livelihoods, in terms of project maintenance and for the community to replicate these skills and find employment in other similar and related projects. In real terms, there is no social impact the project has made on the community, as there is no attitudinal and psychological changes it inculcated in the beneficiaries. Nimpuno (2013) says it is worrying to justify a project as a success when there is no visible gain in how the beneficiaries associate themselves with the project in terms of its benefit to them and sustainability. Projects tend to be dominated by political sloganeering in place of delivering a quality product (ibid). This flaw that is evident in South African Housing Policy and has resulted in poor quality workmanship, for example, on many pre-1994 houses that had to be demolished and rebuilt under the National Housing Rectification Programme[15].

Development planning according to Nimpuno (2013) should not be driven by the misguided concept of '*delivery'* because that situation militates against genuine objective of participation in development which should nurture life sustaining skills. These are the skills that should change their attitude to attach great value to their social assets. Kihato *et al.* (1998) view this kind of participation as instrumental in according political power to the community. It equips people to be vigilant over their community assets and that in turn reinvigorates their sense of active citizenry. This is the kind of participation that encourages people to fight their marginalisation in their governance system and it gives them reasons for taking part in community structures.

[15] The rectification of houses was divided into three categories. The first category was non-structural defects where moderate rectification work was necessary. The estimated cost for this category was R19 523.74 per house. The second category was minor structural defects where extensive rectification work had to be done. This was estimated at R38 673.00 per house. The third category was major structural defects where there had to be demolitions and rebuilds. This category was estimated to cost R85 468.88 per house.

6.5 The alignment of the CCCPP with the ward IDP processes.

It also emerged during the interviews that the CCCPP was implemented as a solo project that was not linked to the IDP processes of the city. The officials of the city in their reports to the section 79 committees make no mention of the relationship of the CCCPP to IDP. This point was emphasized by the current ward councillor when she remarked, 'CCCPP just jumped the bandwagon of the development initiatives that are and were taking place in Cosmo City'. This created confusion to the community and consequently led to low level of public participation and attendance of CCCPP meetings, because to the community, there was a missing link between IDP service delivery budget and the CCCPP.

6.6 The stage at which public participation took place.

Pertaining to public processes of Environmental Impact Assessment (EIA), Murombo (2008) argues that the public tend to be informed of the implementation of a project after an application for authorization has been made. This shows that the decision to go ahead with a project would already have been made prior to the public's knowledge of such a project and any participation thereafter is undertaken as a mere formality that will not have any bearing on the decision. During the CCCPP, it emerged early on that there was no involvement of the public in the actual project design, hence the comment by the incumbent councillor that CCCPP 'just jumped the bandwagon' of the normal city planning procedures as pronounced in IDP and annual business plans of the municipality. This points to the fact that the project was conceived by the officials, who sneaked it through the business plans of the city. The councillor further added, 'We were extremely unfamiliar with the subject of climate change in its totality.'

Consequently, this project became an ivory tower for the community, who had not been adequately educated and empowered about it. Donor funding played a key role in this state of affairs. Danida had invited the city to conceptualise the environmental project, so that they could be afforded funding. The project consumers (Cosmo City residents) should have been consulted and informed about this. It was going to be more meaningful and impactful if there had been proper consultation on project through consulted the people and then packaging it into IDP process. Instead, lack of consultation means that the approach followed in the implementation of the CCCPP defeated the end of planning processes in South Africa, which seek to engender

collaborative planning between all stakeholders involved by placing communities at the centre of planning (Innes and Booher, 2003). This is also true considering the argument by IAPP (2002) which stipulates that the public participation process should not be only about informing the affected parties about a pre-conceived product but also needs the participants to be provided with the crucial information they require to participate meaningfully before and during all stages of a project.

6.7 The focus on the final product than genuine participation.

The reports consulted by the researcher show that the quarterly reports provided by top officials to the council committee are not a reflection of genuine public participation on the ground. When asked about the frequency of meetings and report back to the community, the City Officials (1 and 2) said these were held quarterly. However, the community said the meetings were fewer than that, were very sporadic and were called when the City of Johannesburg deemed it necessary to convene them. The indication is that the performance system of the city tempted the officials to forego a genuine public participation process so that they could tick boxes on their score cards and reporting system.

6.8 The role of language in determining the outcome of the participatory process.

Having outlined in the limitations of the research that the community in the project area is made out of people who speak African languages, the overreliance on the use of English during meetings and on communication materials created a barrier for the project consumers to fully and consciously influence the decisions of the project. That being the case, the power of the authorities (Fainstein, 2000) determined the steering directions in a fundamentally flawed engagement process that excluded the voice of the public (Sandercock, 1998).

6.9 The inappropriateness of time and short notice for the meetings

As highlighted in the responses of the community concerning the quality of public participation, most of them indicated that they could not attend meetings called by the CoJ as they would be at work or job hunting. The meeting times should have accommodated circumstances of the public, for example, the meetings could have been scheduled in the evenings, after work. If the

CoJ intended to get quality engagements in the meetings, it would have been proper if meetings were announced in advance so that so that community members would have enough time to prepare and influence the agenda. Additionally, the CCCPP meeting should not have been an isolated project. It needed to be aligned with the municipal IDP process, because IDP consultations are well attended and the senior political leadership of the local government attend them.

6.10 Summary of the chapter.

This chapter presents the conclusion and recommendations of the research. Findings indicate that the public participation process in the CCCPP was not accurately executed. This chapter also suggests alternative solutions that could have improved the situation. It has indicated that in most development projects there are impediments to public participation. The use of technocratic language discourages an intense engagement and thereby gives an upper hand to the technocrats in their pursuit to impose and chase targets that they have on their performance management systems or to report to the politicians on the council board.

6.11 Gaps for future research

(a) Community infrastructure resilience as a focus for low income communities

In this study, what comes out prominently is that the CoJ did not take into consideration that CCCPP was a Community Based Programme (CBP). The focus of the program should be about empowering low income communities about strategies of adapting their infrastructure to effects of climate change. As Dodman and Mitlin (2011) argue, the planning approach of the city should have been premised on the fact that communities have experiences of their local development challenges. They are well-positioned to communicate first-hand knowledge of their circumstances. They are also in a better position to exploiting their social networks in developing locally responsive measures to mitigate their vulnerability to climate change. As a community situated programme, CCCPP should have been aligned with municipal IDP. This community was going to embrace it and it may have been a useful tool of mobilising community to maximise their access to other municipal services. It could have gone a long way in enhancing community adaptative capacity and consolidating their livelihoods (Dodman and Mitlin, 2011).

(b) Climate change and Justice

As highlighted above, the major intention of the CoJ was to ensure that concerned communities were geared towards mitigating climate change in the way they interacted with their environment. The CCCPP intervention was miscalculated because mitigation and adaptation are mutually dependent (Lynn et al., 2011). CoJ should put more resources towards adaptation of community infrastructure in the high income areas where there is high consumption of resources like energy, water and emission of pollution is also higher (Nimpuno, 2013). So the concentration of mitigating climatic change by solely or overly focusing on low income areas perpetuates climate injustice because the poor contribute very little to changes of climate conditions. Therefore, it was illogical that CoJ could force the poor—who are on the receiving end of effects like heavy storms, droughts, clogged drainage systems and to say they have to mitigate climate change. The City could have made use of the funding to create incentives for high income areas to switch their energy use solar panels and also create awareness that they have to conserve resources like water as well. The focus of the project should have been towards infrastructure investment, which is of low standard in poor areas. It is for this reason that such programmes should have been packaged together with IDP budget so that it addresses the real needs of low income communities.

Nimpuno (2013) also reaffirms that communities are the ones who are conversant with real threats to their environment. The IDP, as a consultative process, would have been tightened together with CCCPP to solicit community innovation in finding locally relevant solutions to deal with the threat of climate change. Dodman and Mitlin (2011) support this view when they confirm that adaptation is a local issue, and people vulnerability to climate change enables them to create a locally relevant solution in their resilience process. Nimpuno (2013) and Scott (1998: 634) hold the view that people need to be given enough resources to deal with their circumstances. That being the case, the handing out of a pre-conceived programme militates against the developmental approach to planning. The scholars just cited above argue that people need to be empowered with requisite skills to equip them to make good use of state financial support to develop their localities.

(c) Planning as a collaborative effort between community and government

In some African countries like Tanzania, people take development as their collective responsibility (Nimpuno 2013). In South Africa, the instrumental planning approach has rendered low income people mere beggars who have embraced the culture of entitlement (*ibid*.). This attitude to their development has resulted in wild-cat service delivery protests that have been spreading in South Africa, because they have been conditioned to depend on government for everything. In Tanzania, the government encourages communities to apply the 'sweat equity' to develop their infrastructure, where government acts as facilitator than a driver of their development. They initiate projects and government comes in with developing skills so that they are empowered to sustain their services. This approach to development creates a sense of social responsibility and such people protect and sustain their infrastructure because they work for it. This process is cooperative in nature, where the government supports communities with requisite and enabling facilities so as to empower them to drive their own development as was the case with Tanzania's philosophy of Ujamaa National Development Approach (*ibid.*).

(d) Planning as a tool to skills transfer for economic empowerment

As a developmental state, South Africa is still faced with many socio-economic transformation challenges. Climate change is surely posing a great threat to the country's future. It is against this background that the country needs to be innovative in the way it addresses the development challenges at a local level. A project like CCCPP if used in a very creative way, can be very instrumental in addressing the skills shortage and technological transfer in the country. As a nationwide program, CCCPP provides a window of opportunities to municipalities in this regards. Since the project deals with infrastructure development, it gives municipalities some insight into coming up with innovative solutions to their development whilst they protect citizens against risks of environment. If the local government works with communities, it can provide opportunities for empowering people with technical skills to manage their development risks.

For CCCPP to be responsive, it should be informed by people's choice and their local experiences. It should have been designed with the purpose of ensuring that community infrastructure is resilient enough to climate change vulnerabilities like floods, storm and drain run-offs. The installation of solar water geysers is immaterial to the poor, because they do not consume more

energy in their households as this was confirmed by one respondent that they usually bath with cold water and rarely warm their water. This intervention was imposed on them as it was not their priority.

Mohan (2002) suggests that community participation in development planning should be transformative so that it affords equitable empowerment to the project consumers. The poor have the capacity to make their strategic choice. These people's strategic choice are the entry point that should inform bureaucrats about what matters most for the low-income households' development needs (Nimpuno, 2013). As outlined in the data analysis, the CCCPP was marred by what Arnstein (1969) calls manipulation in place of true citizen engagement for empowerment. The programme was externally determined and then imposed on the community. The identified development concerns of Cosmo City are storm water, sewerage, drain blockages and waste management. Nimpuno's (2013) training manual appears to hold answers as to how Cosmo City community should have been included in a cooperative system of developing their area, regarding issues of general infrastructure.

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APPENDIX 1:

INFORMED CONSENT FOR THE COMMUNITY MEMBERS

Dear Sir/Madam

My name is **Mbhekiseni Roy Makhoba**. I am a Master of Science in Development Planning student at the University of the Witwatersrand (Wits). I would like to invite you to participate in this interview, which is part of my studies towards this degree. The research is on **'The challenges of Public Participation in Climate Mitigation Projects with focus on Cosmo City Climate Proofing Programme'**. I will take notes of this conversation and record it if that is acceptable to you. The final work will be a public document that will be used solely for academic purposes. If you choose to remain anonymous you are guaranteed that your personal details, direct quotes and views will not be revealed to anyone, instead they will anonymously be situated within the body of the document. The findings of the research can also be made available to you if you want them.

You are encouraged to ask any questions before answering the questions in order to understand the purpose of the interview, and as form of consent to participate in the interview. If you have further questions you can contact my research supervisor Margot Rubin who can be contacted on *0827390243/(011)6460257 and at rubinmargot@gmail.com*

Please ensure that you fill in the following section to indicate that you have given me your consent to take part in the interview.

The researcher (student),…….has explained the intention of the study to me

Do you know about your choice to remain anonymous and that your confidentiality is secured?	Yes	No

Are you well aware that you can withdraw from participating from the interview if you feel uncomfortable to continue with it?	Yes	No

Do you know that your participation in this research is voluntary and you will not be given any reward or payment?	Yes	No

Name of interviewee ……

Signature of interviewee:……

Place of interviews: Cosmo City Ext. 6

Date & time……05-05-2012

Thank you for your time

Mbhekiseni, Roy Makhoba

Signature ……..

THEME 1: DEMOGRAPHIC INFORMATION

1. Which language do you prefer for conducting this interview?

Nguni	Sotho	Venda	Xitsonga	English	Afrikaans

2. Gender

Male	Female

3. Are you the head of a household?

Yes	No

4. What kind of ownership do you have of this house?

Rent	Own	Occupying /Staying Free

5. Age

21-30	31-40	41-50	51-60	61-70

6. How many years have you lived in Cosmo City?

0-1	1-2	3-4	4-5	5 or more

THEME 2: COSMO CLIMATE PROOFING PROGRAMME (CCCPP) KNOWLEDGE QUESTIONS

7. What do you understand about CCCPP and when did you come to know about it?

---

8. What do you understand about CCCPP?

……..

9. What are the impacts made by CCCPP in your family?

……

THEME 3: DEPTH AND APPROACH OF PUBLIC PARTICIPATION

10. How did the municipality introduce the CCCPP to the community of Cosmo City?

……

11. Do you think the municipality provided enough room for community to participate in implementing CCCPP?

……

12. Which are the systems/structures the municipality used to communicate with community about CCCPP?

13. Which language(es) was/were used in conducting meetings with the communities?

Nguni	Sotho	Venda	Xitsonga	English

13. How do you rate the level of Ward Councillor's involvement in the implementation of CCCPP? [Tick the appropriate answer):

Good	Fair	Poor

14. How often did the municipality hold meetings with community to discuss issues related to CCCPP?

---

15. Do you think the CCCPP has received enough political and financial support from the council?

THEME 4: THE FREQUENCY AND PROCEDURE OF MEETINGS

16. How often did the municipality hold meetings with the community to discuss issues related to CPP?

---

17. Were the meeting open for the general public to attend?

Yes	No

18. How many people from the community attend them?

---

19. How much time was the community provided with the agenda to review before the actual day of meetings?

Weekly	Monthly	Two months early

20. Do you think this was enough time for the community to consider the issues before the meeting?

---

21. Was the community allowed to add issues of discussion on the agenda?

Yes	No

22. What issues were the community's concern, and were they added to the agenda?

---

23. Do you think the city officials listened to you when you gave input about CCCPP?

---

24. How did the community ensure that the resolutions of their public participation meeting influenced the decisions of the municipality on the management of the CCCPP?

---

25. How often did the community receive feedback after the public participation meetings had taken place?

A week after	Two weeks after	Three weeks after	A month after	Every 3rd quarter of the year	Six months after

26. How did the municipality publish decisions emanating from public participation so that all other community members (even those absent during meetings) would know about those decisions?

APPENDIX 2: INFORMED CONSENT FOR THE FOR THE COUNCILLOR

Dear Honourable Councillor

My name is **Mbhekiseni Roy Makhoba**. I am a Master of Science in Development Planning student at University of the Witwatersrand (Wits). I would like to invite you to participate in this research interview, which is part of my studies for this degree. The research is on **'The challenges of Public Participation in Climate Mitigation Projects with focus on Cosmo City Climate Proofing Programme'**. I will take notes of this conversation and voice-record it if that is acceptable to you. The final work will be a public document that will be used solely for academic purpose. If you choose to remain anonymous you are guaranteed that your personal details, direct quotes and views will not be revealed to anyone. Instead, they will be anonymously incorporated within the body of the document. The findings of the research can also be made available to you if you want them.

You are encouraged to ask any questions before answering the questions in order to understand the purpose of the interview, and as form of consent to participate in the interview. If you have further questions, you can contact my research supervisor Margot Rubin who can be contacted on *0827390243/(011)6460257 and at rubinmargot@gmail.com*

Please ensure that you fill in the following section to indicate that you have given me your consent to take part in the interview.

The researcher (student)…….has explained the intention of the study to me.

Yes	No

Do you know about your choice to remain anonymous and that your confidentiality is secured?

Yes	No

Are you aware that you can withdraw from participating in the interview if you feel uncomfortable to continue with it?

Yes	No

Do you know that your participation in this research is voluntary and your will not be given any reward or payment?

Yes	No

Signature of interviewee:……

Name of interviewee……

Place of interviews……

Date & time……...

Thank you for your time

Mbhekiseni, Roy Makhoba

Signature ……Date……..

THEME 1: DEVELOPMENT INVOLVEMENT QUESTIONS

1. Before becoming a Councillor, what was your involvement with the community of Cosmo City on issues of development?

---

2. Councillor, can you please tell me when the CCCPP started in Cosmo City.

3. Why did CoJ choose to implement CCCPP in Cosmo City out of many other housing projects in the city?

---

4. What was the aim of introducing this project?

---

5. Did the project achieve the aims it set to achieve?

---

6. (a). Did the CCCPP have timeframes? If so, what were they?

THEME 2: THE PARTICIPATION STRATEGY

8(a). Did the city devise/develop a participation strategy for getting the community on-board the project?

8(b). What was that participation strategy?

8(c). If 'Yes', who formulated this participation strategy?

8(d). Do you kno how this strategy was formed?

9(a). Can you please tell me what you understand by public participation?

9(b). What does public participation mean to you in relation to the CCCPP?

---

(10). At what phase of the project was public participation started?

---

10. How did the city introduce the CCCPP to the community?

---

11. Do you think the community understood the potential benefits of CCCPP?

---

12. Do you think the CCCPP has received enough political and financial support from city council?

THEME 3: DEPTH AND APPROACH OF PUBLIC PARTICIPATION

13. Do you think the municipality provided enough room for community to participate in implementing CCCPP?

---

14. Which are the systems/structures the municipality used to communicate with community about CCCPP?

---

15. Which language group was used when communicating the project to the community?

[Tick the right answer]

Nguni	Sotho	Venda	Tsitsonga	English	Afrikaans

THEME 4: THE FREQUENCY AND PROCEDURE FOR MEETINGS

16. How often did the municipality hold meetings with community to discuss issues related to CCCPP?

Weekly	Monthly	Quarterly

17. Were the meetings open to the general public to attend? If they were, how many people from the community used to attend ?

---

18. How much time was the community provided with the agenda before the actual day of a meeting?

---

19. Was the community allowed to add issues of discussion to the agenda?

---

20. How did the community ensure that the resolutions of their public participation meetings influenced the decisions of the municipality regarding the management of the CCCPP?

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21. How often did the community receive feed from the public participation meetings?

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22. How did the municipality publish decisions emanating from public participation for all community members (including those who might have been absent during a meeting) to know those decisions?

APPENDIX 3: INFORMED CONSENT FOR THE CITY OFFICIALS AND CONSULTANTS (DANIDA & ONKE TRAINING)

Dear Sir/Madam

My name is **Mbhekiseni Roy Makhoba**. I am a Master of Science in Development Planning student at University of the Witwatersrand (Wits). I would like to invite you to participate in this research interview, which is part of my studies in this degree. The research is on **'The challenges of Public Participation in Climate Mitigation Projects with focus on Cosmo City Climate Proofing Programme'**. I will take notes of this conversation and record it if that is acceptable to you. The final work will be a public document that will be used solely for academic purpose. If you choose to remain anonymous you are guaranteed that your personal details, direct quotes and views will not be revealed to anyone. Instead, they will be situated anonymously within the body of the document. The findings of the research can also be made available to you if you want them.

You are encouraged to ask any questions before answering the questions in order to understand the purpose of the interview, and as form of consent to participate in the interview. If you have further questions, you can contact my research supervisor Margot Rubin who may be contacted on *0827390243/(011)6460257 and at rubinmargot@gmail.com*

Please ensure that you fill in the following section to indicate that you have given me your consent to take part in the interview.

The researcher (student),…….has explained the intention of the study to me

Yes	*No*

Do you know about your choice to remain anonymous and that your confidentiality is secured?

Yes	*No*

Are you aware that you can withdraw from participating in the interview if you feel uncomfortable to continue with it?

Yes	*No*

Do you know that your participation in this research is voluntary and you will not be given any reward or payment?

Yes	*No*

Signature of interviewee:……

Name of interviewee:

Place of interviews……

Date & time……

Thank you for your time

Mbhekiseni, Roy Makhoba

Signature ……Date……..

THEME 1: DEVELOPMENT INVOLVEMENT QUESTIONS

1. Before being involved with Cosmo City, what was your involvement with the other community pertaining to ssues of development?

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2. Can you tell me when the CCCPP started in Cosmo City?

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3. Why did CoJ choose to implement CCCPP in Cosmo City out of many other housing projects in the city?

4. What were the aims of introduction this project?

5. Did the project achieve the aims it set to achieve?

6. Did the CCCPP have implementation timeframes? If so, what were they?

THEME 2: THE PARTICIPATION STRATEGY

7(a). Did the city devise/develop a participation strategy for getting the community on-board the project?

8(a). What was that participation strategy?

8(b). If 'Yes', who formulated this participation strategy?

9(a). What is your understanding of public participation?

9(b). What does public participation mean to you in relation to the CCCPP?

(10). At what phase of the CCCPP project did public participation start?

11. Do you think the community understood the potential benefits of CCCPP?

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12. Do you think the CCCPP has received enough political and financial support from the city council?

THEME 3: DEPTH AND APPROACH OF PUBLIC PARTICIPATION

13. Which are the systems/structures the municipality used to communicate with community about CCCPP?

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14. Which language group was used when communicating the project to the community?

THEME 4: FREQUENCY AND PROCEDURE OF MEETINGS

15. How often did the municipality hold meetings with the community to discuss issues related to CPP?

16. How much time was the community provided with agenda before the actual day of a meeting?

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17. Was the community allowed to add issues of discussion on the agenda?

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18. How do the community ensure that the resolutions of their public participation meeting influenced the decisions of the municipality on the management of the CCCPP?

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19. How often did the community receive feed backs on public participation meetings?

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20. How did the municipality publish the decisions emanating from public participation for all community members (including those who might have been absent during meetings) to know those decisions?
