CLIMATE CHANGE KNOWLEDGE AMONG YOUTH IN DURBAN: A CASE STUDY OF COY7

By

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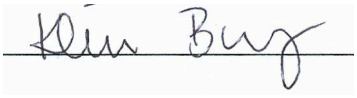
ABSTRACT

This case study explores climate change knowledge among a group of youth in Durban who participated in the seventh Conference of Youth (COY7). The conference was held 25th-27th of November 2011 in Durban in conjunction with the 17th Conference of Parties to the United Nations Framework Convention on Climate Change. The study examines how they understand the concept of climate change; what inspired them to take an interest in climate change issues; what sources of information on climate change that have been influential for them; and how their participation in the conference influenced their knowledge and commitment. The findings reveal that many different sources have been influential for providing climate change knowledge and engendering commitment among the youth. While peers are particularly important as a source of initial interest, the influential sources of knowledge are more varied. Two main sources were evident in this study: sources provided by more structured settings like university and written materials, and sources obtained through more social settings, such as interactions with people and conferences and seminars. According to the findings, COY7 was more important for the youth as a source of inspiration and motivation than as a source of new knowledge. The case study reveals the importance of diversity in sources of information about climate change among the youth.

PREFACE

The work described in this dissertation was carried out in the School of Built Environment and Development Studies, University of KwaZulu-Natal, Howard College Campus, Durban, from November 2011 to November 2012, under the supervision of Professor Dianne Scott.

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



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ABBREVIATIONS

AYCC	Australian Youth Climate Coalition
CO_2	Carbon dioxide
COP	Conference of the Parties
COY	Conference of Youth
EPCPD	Environmental Planning and Climate Protection Department
GHG	Greenhouse gas
IGO	Inter-Governmental Organisation
IPCC	Intergovernmental Panel on Climate Change
IYCM	International Youth Climate Movement
MCPP	Municipal Climate Protection Programme
NGO	Non-Governmental Organisation
UKYCC	United Kingdom Youth Climate Coalition
UN	United Nations
UNFCCC	United Nations Framework Convention on Climate Change

CHAPTER 1: INTRODUCTION

In the recent decades those arguing that human made climate change is not occurring have decreased in number. Climate change is now viewed as being the major environmental issue of our time and it is receiving increasing attention from governments, a range of institutions, organisations and people in general. Climate change has impacts on many areas of society such as the economy, health, security and food production (UNEP 2012; Commission of the European Communities 2009). The realisation of the impacts of climate change has lead to increased popular awareness and action around climate change. There are an increasing number of environmental organisations and more and more people opt to make changes to their lifestyles to lessen their impacts on climate change.

We live in what has been called a "network society"; the state is no longer the sole actor with hierarchal power over policy and people (Castells 2000). This is the result of the shift from government to governance. Civil society actors ranging from businesses and scientists to NGOs and community-based organisations are getting increasingly involved in policy and decision-making. There are networks of actors working together, united by common interests, and particularly around growing global concerns about impacts on the environment (Hajer 2003). These networks include the state, with the state taking the lead in setting up many governance networks. However, networks are also increasingly being facilitated by civil society organisations (Hajer 2005).

Arnstein stresses the importance of citizen participation: "(i)t is the redistribution of power that enables the have-not-citizens, presently excluded from the political and economic processes, to be deliberately included in the future" (1969, 246). This shows the importance of giving citizens the knowledge and tools to shape the society they live in and participate in decision-making processes about issues that affect them: this is central to this research project.

Global and local NGOs and organisations are playing an important role in shaping and fostering attention to environmental issues (Jelin 2000, 51). It is widely acknowledged that NGOs play and important role in world political affairs today (Wapner 2002, 37). NGOs also

have an important role in shaping how people view themselves and the world around them (Wapner 2002, 38). Many young people, as part of civil society, are taking action for climate change.

This research will focus on environmental knowledge related to climate change and activism among young people in Durban. There are two main reasons why youth have been chosen as the target population for this study. Firstly, because of the many examples of the commitment of youth to environmental issues (Wray-Lake, Flanagan, and Osgood 2010, 62). Secondly, the knowledge and beliefs held by young people are likely to be carried into adulthood and thus will contribute to social change in the future (Wray-Lake, Flanagan, and Osgood 2010, 83). There are many different definitions of youth; for the purpose of this thesis the official South African definition of youth (14-35 years) will be used.

This research will focus on climate change knowledge among youth in Durban and how it is linked to their participation in the seventh Conference of Youth (COY7). Since the eleventh Conference of the Parties (COP11) to the United Nations Framework Convention on Climate Change (UNFCCC) in Montreal in 2005, members of the International Youth Climate Movement (IYCM) have met in the days leading up to the annual COP to attend COY. The conference is organized and facilitated by the International Youth Climate Movement and gathers hundreds of young people from all over the planet each year for capacity-building, skills-sharing and campaign collaboration (COY 2011). In 2011, the seventeenth Conference of the Parties (COP17) was held in Durban, South Africa from the 28th of November to the 9th of December. Consequently Durban also hosted the seventh COY at University of KwaZulu-Natal from the 25th to the 27th of November 2011.

1.1 RESEARCH QUESTION

The main research goal of this study is:

> To explore climate change knowledge among youth in Durban, with a special focus on the impacts of the seventh Conference of Youth on the construction of environmental knowledge.

This will be examined in the light of four sub-questions:

1. How do youth in Durban understand climate change?
2. What factors have influenced the youth in committing more actively to climate change issues?
3. What sources and types of information have been influential in informing youth about climate change?
4. What effect did the Conference of Youth have on climate change knowledge and commitment among Durban youth?

1.2 THEORETICAL FRAMEWORK

This project will draw on literature related to the processes of knowledge production and knowledge exchange to frame the research. To understand how knowledge and tools are transferred to people it is important to understand the different types of knowledge that exist and how concepts related to knowledge have changed over time (Bruckmeier and Tovey 2008; Evers 2008; Ravetz 2004). There are differences between the explicit knowledge you can gain from a book, and the tacit knowledge you gain from lived experience (Evers 2008, 6). Cultural and local knowledge is tacit knowledge that is place and time specific (van Ewijk and Baud 2009, 220). There has been a growing acknowledgement of the importance of taking local knowledge into account for the success of policy-making and development (Yanow 2003). Local knowledge can be linked to experiences of social and environmental justice; if included in decision-making it affects the success of policy-making and influences the possibilities for citizen action (Roberts 2008; Scott and Oelofse 2005).

The production, application and exchange of knowledge are not simple apolitical processes. There are different ideas, stakeholders and methodologies involved that shape the processes and the outcome of knowledge production and exchange (Bruckmeier and Tovey 2008; Tovey 2008). Hajer proposes that by using the concepts of discourse, dramaturgy and deliberation, researchers can gain an understanding of how stakeholders can influence processes and affect people's perception of an issue (2005).

The performance of actors in decision-making processes is related to the setting in which the processes take place and how groups are composed. This influences how easily knowledge is shared and exchanged. Knowledge is easiest exchanged in groups where everyone knows each other from before or in groups where everyone is a stranger (Thomas-Hunt, Ogden, and Neale 2003). A strong sense of trust and an environment where knowledge sharing is encouraged will facilitate better knowledge exchange (Hall 2001).

1.3 RESEARCH METHODOLOGY

The case study of climate change knowledge examines the knowledge held by local participants in the seventh Conference of Youth (25-27 November 2011). A qualitative methodology was applied which involved the collection of primary qualitative data via semi-structured interviews. A combination of purposive sampling and snowballing sampling were used to locate a sample of 15 young people living in eThekwini municipality who had attended COY7. Semi-structured face-to-face interviews were conducted with the youth. The interviews lasted between 40 minutes and 1,5 hours, and focused on the understanding of climate change of the youth; where they had got their knowledge from; how this knowledge influenced their everyday lives and questions about the their involvement in COY7 and environmental organisations (Appendix III). All interviews were recorded and the oral data collected used as primary data. The primary data was analysed using a thematic analysis. A combination of an inductive and deductive approach has been applied, where the theoretical framework influences the coding of primary data to develop themes as well as using the primary data findings as a source of additional themes (Fereday & Muir-Cochrane 2006: 82). The data was divided in to themes, described and analysed within the theoretical framework.

1.4 STRUCTURE OF THESIS

The first chapter introduces the case study and the rationale behind it. It briefly explains the theories and methodology that will be used in the thesis. The second chapter presents the theoretical framework used; different types of knowledge, theories around knowledge construction, local knowledge, and knowledge exchange are explained. In the third chapter, background information is presented. This includes: background information on the basics

of climate change, climate change work in Durban, the UNFCCC and the COPs, and Conference of Youth. The fourth chapter outlines the methodology used for the case study; it presents the target population, data collection and analysis, the positionality of the researcher and limitations to the study. In the fifth chapter, the results of the case study are presented. The young peoples understandings of climate change is examined, as well as what made them take an interest in climate change issues, and what sources and types of information that have been important in informing them about climate change. The impact of COY7 on the young peoples' environmental knowledge and commitment are also explored. The last chapter discusses the findings in light of the theoretical framework and background and draws conclusions about the climate change knowledge and commitment in the local young people who attended COY7.

CHAPTER 2: THEORETICAL FRAMEWORK

In order to examine climate change knowledge among youth in Durban who attended COY7, where they have obtained this knowledge and how this knowledge has influenced them to commit more actively, this study will be framed within a theoretical framework of knowledge production and use. To understand the processes behind knowledge construction and exchange it is important to understand the different types of knowledge that exists and how they are used and understood by different actors. It is also important to understand how concepts related to knowledge are constantly challenged and transformed.

This chapter will examine knowledge types and knowledge processes that will be useful for the examination of the data collected from the youth. The chapter will start with section 2.1, which examines some typologies of knowledge that exist and which will be used in the study. This is followed by section 2.2, which reviews literature related to knowledge construction. This section will particularly discuss the increased attention given to local knowledge, and the different strategies used by stakeholders to promote their view. Lastly, section 2.3 examines different factors that facilitate and discourage knowledge exchange.

2.1 TYPES OF KNOWLEDGE

Starting with the basics of knowledge, Evers states that there are two different types of knowledge, tacit and explicit knowledge (2008). Tacit knowledge is acquired through lived experience; it has been argued that doing is more important than cognition when it comes to acquiring tacit knowledge. Observation, face-to-face contact and doing are the best ways of transferring tacit knowledge. About 80 per cent of knowledge is tacit. Explicit knowledge refers to knowledge that can be stored and gained through books or other media. Since tacit knowledge is linked to personal experience it is more elusive. This makes it important, in for example organisational settings, to make sure that tacit knowledge gets transferred to new recruitments or transformed to explicit knowledge for it to not get lost (Evers 2008, 6). A number of studies have been done on the transfer and emergence of tacit knowledge in different settings (Evers 2008). Many of these confirm that proximity and personal interaction are important in transmission of tacit knowledge. Social interaction is important

when it comes to all types of knowledge production, and transmission, whether it happens on the Internet or in real life (Evers 2008, 7).

Within these two broad categories there exist several types of knowledge, a few of these that are relevant for this study will now be examined. Van Ewijk and Baud distinguishes between three levels of knowledge; local, tacit knowledge; embedded knowledge learnt from cultural and technical experience; and a more codified universal knowledge in the science communities (2009, 220). Codified knowledge is explicit knowledge that can be accessed through documents and is taught in professional and academic settings. Embedded knowledge can be both tacit and explicit, it is largely learnt through practice and it is often linked to a sector or group. For example, engineers working in a municipality would have embedded technical knowledge. Embedded knowledge can be spread both through professional situations and through social networks (van Ewijk and Baud 2009, 220). Cultural knowledge is a form of embedded knowledge. It is based on what is considered socially and culturally correct in a certain setting; this can be in an organisation, in a region or in a country. Cultural knowledge can be both tacit and explicit (van Ewijk and Baud 2009, 220).

Local knowledge or lay knowledge is tacit knowledge that is constructed outside the scientific community. Scott and Barnett define lay knowledge as “local, ‘nonscientific’, ‘hard earned’, ‘less formally organized’ and related to ‘self identity’” (2009, 375). It uses various types of facts, such as beliefs and feelings in addition to more traditional forms of facts (Scott and Barnett 2009, 375). Local knowledge is based on the life world of people, on understandings and facts about a certain issue (Yanow 2003, 231). Local or lay knowledge is usually based in a community, either through a physical location or through common values, believes, practices, and professions. Yanow describes how members of a community, for example, environmentalists, “come to use the same or similar cognitive mechanisms, engage in the same or similar acts, and use the same or similar language to talk about thought and action” (Yanow 2003, 237).

This study will explore codified knowledge as well as local and cultural knowledge within a group of environmentally concerned youth in Durban. The study will try and identify common ideas, language and understandings that point to the existence of a common knowledge within this group of young people.

2.2 KNOWLEDGE CONSTRUCTION

There are two basic approaches that can be used to examine knowledge-building processes. The first is what have been termed Mode I or the elitist model; it is based on the idea of scientific knowledge as the only valid form of knowledge (Gibbons et al. 1994, 3; Bruckmeier and Tovey 2008, 323). In this model, knowledge building relies on scientific and expert knowledge systems, and is heavily influenced by scientific, bureaucratic and local elites. Mode I knowledge building give little or no value to local knowledge and experience (Bruckmeier and Tovey 2008, 323). The second broad type of knowledge-building process is Mode II; it recognizes that there are different knowledge forms and that knowledge-building is a social process including different actors with different paradigms. This is a transdisciplinary approach that is less hierarchical than Mode I, more socially accountable and includes a wider and more varied set of practitioners (Gibbons et al. 1994, 3). Transdisciplinarity draws together different disciplines to generate novel analyses (Rosenfield 1992, 1351).

Within Mode II, two different knowledge-building processes have been distinguished. The "Incorporation of knowledge" model includes practice-based knowledge and centres on the idea that the inclusion of different forms of knowledge with different qualities leads to a strengthening of the knowledge-building process through mutual reinforcement. Reformulation and strengthening of local knowledge gets much focus with this model (Bruckmeier and Tovey 2008, 323). The "Knowledge imbedding" model views knowledge systems as socially constructed and knowledge-building processes as conflict-prone. There is a power struggle between different actors to promote their view of an issue and this contributes to the knowledge building (Bruckmeier and Tovey 2008, 323). While the first one focuses on how the inclusion of different forms of knowledge can strengthen the

process the latter argues that the power struggle between the different types is what enhances the knowledge building.

The rise of local knowledge

What the emergence of Mode II processes indicates is a split from an approach to knowledge which considers science as the sole provider of "truth" and knowledge. It is now increasingly accepted that what counts as "expertise" is contextualised and localised to the situation where it is constructed and applied (Tovey 2008, 188). Ravetz argues that the scientific system faces a crisis of confidence, legitimacy and power and compare scientist to priesthoods in traditional societies due to their restricted recruitment and close involvement with the state (2004, 347, 356). What is seen is an increasing mistrust of science and a call for an understanding of knowledge that is more heterogeneous and acknowledges the importance of local knowledge (Ravetz 2004; Scott and Barnett 2009; Yanow 2003). Ravetz distinguishes between "mainstream" science and what he termed "post-normal" science, the latter having responded to the abovementioned crisis (2004). Post-normal science differs the most from mainstream science in its methodology; it has more citizen involvement through public debate and requires an extended peer community. The extended peer community leads to an inclusion of "extended facts", from local knowledge, investigative journalism etc. (Ravetz 2004, 353). Below two studies confirming the importance of taking local, lay knowledge into consideration are briefly discussed.

A study on wastewater management in New Delhi showed that there was a gap between expert and lay knowledge that created challenges for successful policymaking. The experience and knowledge of the poorer groups in the city who are exposed to poor wastewater treatment were not being considered by the state representatives, and the expert-led policy responses failed to respond to the practical, social and health problems these groups face (Karpouzoglou and Zimmer 2012, 61). By examining the way the local people and the scientists perceived problems related to wastewater, the study clearly shows the contradictions between these two views, the effects this has on the communities and ultimately the importance of taking local knowledge into consideration (Karpouzoglou

and Zimmer 2012). A study by Brooks et al on experience of risk in South Durban showed that failure to include lay knowledge led to certain notions of risk being left unnoticed (2010). Due to the polluted environment in the highly industrialised area in South Durban most risk assessments are based on "industrial risk" and the impact of air pollution on residents. The study showed that this risk, which is a mostly chronic risk, has become normalised by residents in the area and in many cases everyday risks, such as crime and drugs, worried people more (Brooks et al. 2010). Both these studies show how important it is to include different types of knowledge to get a better understanding of what the situation is like and what needs to be done in terms of finding solutions.

Tovey argues that, with the increased attention given to environmental issues and global warming on a global scale, local knowledge is both devalued and re-valued (2008, 190). On the one hand, concepts to deal with environmental problems, such as sustainable development, try to construct a universal description of the problem and what needs to be done. This is done without taking into consideration the different local socioeconomic, natural, cultural and knowledge dimensions that shape different areas. However, versions of sustainable development have emerged that take local conditions into consideration, and try to find a sustainable development path that is sensitive to these. While the global affects of climate change are still researched, new attention is also given to studying the effects of climate change on specific social groups and ecosystems and the adaptation possibilities of these (Tovey 2008, 190).

Local knowledge has become more recognized as something offering new perspectives on things and a greater understanding of certain situations. However, there is a critique of the way local knowledge is included. Briggs and Sharp argues that local knowledge is not treated as an equal to western scientific knowledge, but simply as something that can add a new perspective (Briggs and Sharp 2004). Scientific knowledge is the ultimate knowledge form and the one that decides which local knowledge it is worthy of examining closer, they argue (Briggs and Sharp 2004, 670).

Knowledge construction as performance

As seen above, there can be many different stakeholders involved in an issue, and these stakeholders have different perceptions of the world and use different forms of knowledge. This leads to power struggles between knowledge forms and knowledge holders or stakeholders, in defining and responding to an issue (Bruckmeier and Tovey 2008, 320). The final outcome is dependent on what knowledge form and which stakeholder has the most power and resources. Power is inherent in knowledge claims and in practices that contribute to specific scientific claims gaining authority (Scott and Barnett 2009, 374).

There are different strategies that can be used by stakeholders to gain support for their views and highlight issues they find important. Much of the literature on this concerns policy processes but for the analysis in this thesis the concepts will be used to highlight how different actors promote certain views on climate change. One of these strategies is the construction and use of discourse, which is termed ''argumentative discourse''. Hajer explains discourse as "an ensemble of ideas, concepts and categorizations through which meaning is allocated to social and physical phenomena, and which is produced and reproduces in an identifiable set of practices" (2005, 447). Hajer argues that discourse is more than just the use of language; it is also about practices that reinforce and give meaning to the discourse. Discourse analysis can be used to draw focus to certain "markers", "structures" and "patterns" in a particular discussion (Hajer 2005, 447).

Further, the use of discourse to exert power happens in a setting, and is therefore performed by the actors involved (Hajer 2005, 447). By using dramaturgy a decision-making process in the form of a meeting, for example, can be analysed as a set of staged performances (Hajer and Uitermark 2008, 7). In what setting something is said, and who says it can have a lot of impact on how the message is received; "the role of the setting can be used to amplify the impact of what is said" (Hajer and Uitermark 2008, 6). Some important elements of dramaturgy are performance, setting, scripting, counter-scripting and staging. Of particular interest to this study is: performance, which relates to the way a contextualised interaction produces certain understandings of an issue, knowledge and power-relations; the setting, which is about the physical situation of an interaction and

artefacts used; and staging, which examines the deliberate organisation of an interaction, symbols that are used and roles that are given (Hajer and Uitermark 2008, 7). To summarise this section, different actors have different agendas and try to frame an issue and use knowledge in a way that will benefit them.

2.3 KNOWLEDGE EXCHANGE

In this section the factors that motivate and facilitate knowledge exchange will be discussed. Hall argue that knowledge can be seen as a private good, and that it then is up to the owner do decide to share it or not (2001, 7). To encourage people to share their knowledge different types of rewards or incentives that make people feel it is worthwhile to share their knowledge can be used. These can be hard rewards, in form of money, or access to information and knowledge (Hall 2001, 7). There can also be soft rewards, like enhanced reputation or personal satisfaction (Hall 2001, 10). In addition to these incentives that encourage people to share knowledge, the setting where the exchange takes place is also important to motivate or discourage knowledge exchange. Environments that encourage knowledge exchange provide conditions where knowledge is more or less seen as a public good. Among other things, experimentation should be encouraged, all contributions valued, and knowledge sharing should be an explicit responsibility. Communities for knowledge sharing should also be promoted, for an environment to be encouraging for knowledge exchange. Exchanges get motivated by "moral obligation and community interest, rather than self-interest" (Hall 2001, 12). If all contributions are valued, despite the status of the actor, exchange of knowledge is more likely to happen. It creates a climate where participants feel that everybody can contribute, and everyone knows something useful (Hall 2001, 14).

In environments where experimentation is encouraged, people are more open to the potential benefits of exchange of knowledge and experience. Studies show that in settings with strong sense of trust, participants are more willing to expose themselves and ask questions (Hall 2001, 13). Collins and Smith discusses how "a social climate for trust, cooperation, and shared codes and language will facilitate knowledge exchange" (2006, 547). The social climate is based on a collective set of norms, values and beliefs in a group.

By interacting and working together it is more likely that trust will build between people and in groups; there are many different practices that can be employed to facilitate this, such as job rotation and team-based work (Collins and Smith 2006, 547). Putting emphasis on group outcomes rather than individual outcomes means that people work for a common goal or purpose; this will make participants more willing to share knowledge. Having shared codes and language will also facilitate knowledge exchange. This consists of a common set of terms, symbols, and understandings that make effective communication between participants possible (Collins and Smith 2006, 547). This will enable access to information and integration of new knowledge (Collins and Smith 2006, 548).

Studies on knowledge exchange have shown that groups composed of people who know each other were more successful in exchanging knowledge than groups where no one knew one another. However, groups consisting of both connected people and strangers show mixed results (Thomas-Hunt, Ogden, and Neale 2003, 465). A study of these heterogeneous groups shows that the “socially connected”, in the presence of “socially isolated” members become so focused on maintaining their social connections that they focus on contributing to the knowledge shared with their connections, rather that contributing with their unique knowledge (Thomas-Hunt, Ogden, and Neale 2003, 475). The socially isolated in these groups, on the other hand, are likely to feel more comfortable disagreeing and their contributions was emphasised more by the socially connected. Further, socially connected individuals were more accepting of divergent opinions by strangers, rather than by people they are socially connected with (Thomas-Hunt, Ogden, and Neale 2003, 474). What this indicates is how socially connected and socially isolated members use different ways of gaining acceptance from the group (Thomas-Hunt, Ogden, and Neale 2003, 468). Hall explains how individuals with few ties to others in the group are more likely to have a more varied network and might find it easier to identify new or diverging knowledge (Hall 2001, 15). A different but related theme emerges from a study by Patrucco; the study shows how cooperation between a plurality of actors with different knowledge and competence creates an environment that fosters innovation and knowledge exchange (2003).

In addition to getting status from connections with other group members, status is derived from perceived expertise (Thomas-Hunt, Ogden, and Neale 2003, 465). Knowledge of a member's expertise affects both the group performance and the individual performance. Members identified as possessing expertise are given power and status by other members, and this affects their performance in the group (Thomas-Hunt, Ogden, and Neale 2003, 466). Perceived experts participate more and emphasise both shared knowledge and the unique knowledge possessed by other members. They are also likely to take on responsibility for managing the information provided by the group (Thomas-Hunt, Ogden, and Neale 2003, 473).

2.4 CONCLUSION

The concepts and ideas about knowledge presented in this chapter will be used to frame and analyse the data that emerged from the interviews with young people in Durban. I will examine what types of knowledge about climate change that the youth have, and what type of knowledge or knowledge's that have been the most influential in their lives. This will also be an opportunity to examine if there are divergences between the sources and types of knowledge that has taught the youth about climate change and those that have influenced them to commit more actively. Theories about knowledge construction will be used to explore how the knowledge has been built. I will also search for indications of local knowledge among the youth, as well as cultural knowledge linked to things such as, organisations, professions or the youth climate movement. The processes by which knowledge is exchanged will be examined, with a special focus on COY7 and how the knowledge exchange there influenced the young people. By examining the data in light of these theories the research will contribute to a greater understanding of processes that lead to climate change knowledge and commitment among youth in Durban.

CHAPTER 3: BACKGROUND

The United Nations Secretary General has stated that climate change is the major, overriding environmental issue of our times, and it is an issue that receives attention from everyone from governments to civil society (UNEP 2012). Globally, governments are trying to respond to the threat of climate change in the UN through the United Nations Framework Convention on Climate Change (UNFCCC). This process is closely followed by different civil society organisations, many of which want to make sure that any commitments agreed on are for the best for the people and planet. A lot of action is also undertaken locally, by governments and people, to deal with climate change and its impacts. This chapter will present what climate change is and what action has been taken to deal with it on a global level in the UNFCCC and locally in Durban. Civil society activities will also be described in a section on Conference of Youth (COY), a yearly meeting of the International Youth Climate Movement (IYCM).

The chapter starts with Section 3.1 defining climate change and the measures used to mitigate or adapt to it. Section 3.2 describes the climate change work in the eThekwini municipality, and some of the strategies the municipality has adopted are presented. The following section, 3.3, focuses on the work and the structure of the UNFCCC, with a specific focus on the Conference of the Parties (COP). Finally section 3.4 on Conference of Youth (COY) explains the history and structure of COY, and gives more details about COY7 held in Durban in late 2011.

3.1 DEFINITION OF CLIMATE CHANGE

It is now scientifically proved that the average global temperature is increasing, and that this is largely caused by human made emissions of greenhouse gases (GHG) (IPCC 2007). The Intergovernmental Panel on Climate Change (IPCC) states that "(t)here is *very high confidence* that the global average net effect of human activities since 1750 has been one of warming" (IPCC 2007, 37). The IPCC is the leading international body assessing climate change. It is a scientific body that reviews and assesses information relevant to the understanding of climate change (IPCC 2012). The IPCC states that anthropogenic GHG emissions have increased since the industrial revolution, with a 70 per cent increase

between 1970 and 2004 (IPCC 2007, 36). There are four main greenhouse gases (GHG) emitted by human activities; carbon dioxide (CO_2), methane, (CH_4), nitrous oxide (N_2O) and halocarbons (IPCC 2007, 37). CO_2 is the most common of the anthropogenic GHG; the increase in the atmospheric concentration of CO_2 is mainly caused by the burning of fossil fuels.

GHGs occur naturally in the atmosphere and are essential for life on the planet. Greenhouse gases warm up Earth by preventing some of the sun's rays from reflecting out to space. But industrialisation, forest clearing, certain farming methods, population growth, economic growth, growth of standard of living etc. has contributed to substantially increase the levels of GHG in the atmosphere (UNFCCC 2012c). This means that more of the solar radiation gets reflected back to earth, thus increasing temperatures. The average global temperature has increased by 0.74 degrees Celsius since the late 1800s, and is expected to increase with 1.8 to 4 degrees Celsius in the next hundred years if nothing is done to lower GHG emissions (UNFCCC 2012c).

Climate change affects human and natural life in a multitude of ways. There is evidence for increased extreme weather events such as tropical cyclones, droughts and heat waves (IPCC 2007, 30). With a temperature increase between 1.5 and 2.5 degrees Celsius, biodiversity loss is expected to be 20-30 per cent (UNFCCC 2012c). Melting icecaps and glaciers and thermal expansion of the oceans are leading to rising sea levels; both the Arctic and the Antarctic ice is melting at a rate faster than ever recorded (DESA 2010, 3). Climate change will also impact on economy, food security, human health, fresh water resources and many other dimensions of life on earth.

Even if GHG emissions were to be stabilized it is very likely that the anthropogenic warming and sea level rise will continue for centuries. This is due to the long time scales associated with climate processes (IPCC 2007, 46). Climate change might at one point reach what scientists refer to as "the tipping point", where the gradual change will move into a self-fuelling spiral. Melting icecaps and glaciers leads to less white surfaces to reflect the sunrays and rising sea levels. More dark surfaces, both on land and water mean that more of the

heat from the sun is absorbed, fuelling climate change. No one knows how much methane is trapped in permafrost or in the seabed and what will happen when this gets released due to warming climate (UNFCCC 2012c). If global temperature increase were to be stabilised at 1.9 - 4.6 degrees Celsius (relative to pre-industrial temperatures) these changes will only occur over a time scale of thousands of years (IPCC 2007, 54).

Measures to prevent and prepare: mitigation and adaptation

Efforts to address climate change centre on mitigation and adaptation strategies. Mitigation refers to measures to lower GHG emissions, such as using renewable energy, developing cleaner technology and protecting and planting forests. Adaptation strategies are measurements to decrease the vulnerability of humans and ecosystems to climate change (DESA 2010, 7). Many adaptation strategies are not only driven by the need to reduce climate change vulnerability but also enhance economic development and poverty alleviation, and they can be embedded in other planning initiatives. Research shows that there are adaptation options that can be implemented with low cost and high benefit. Further, some options show higher cost-benefit ratios if implemented at an early state, indicating the importance of early focus on adaptation (IPCC 2007, 56).

For mitigation to be properly and thoroughly implemented governments can play an important role by putting in place climate change policies. This could be policies that put a price on carbon or create incentives for the use of low-carbon technology (IPCC 2007, 58, 59). There is potential for positive spinoff from mitigation strategies; evidence show that mitigation strategies leading to less air pollution can have health benefits that will offset parts of the mitigation costs (IPCC 2007, 59). The capacity to implement mitigation and adaptation strategies are closely linked to socioeconomic circumstances and availability of information and technology (IPCC 2007, 56). To effectively address climate change and its impacts it is necessary to implement both mitigation and adaptation strategies (IPCC 2007, 65).

3.2 CLIMATE CHANGE POLICIES AND STRATEGIES IN DURBAN

Environmental issues have been on the agenda in Durban for many decades, and even more so after the transition to a democratic society in 1994 (Freund 2001). In 2004, the eThekwini (Durban) municipality started working on a Municipal Climate Protection Programme (MCPP) to respond to the threat of climate change (Roberts 2010, 397). The MCPP differs from other municipal climate protection programmes in that it has a "strong and early focus on climate change adaptation" (Roberts 2010, 397). As a city in a developing country, Durban has to ensure that developmental goals and needs are met despite the effects of climate change on the city. Focusing on adaptation strategies, in contrast to many mitigation strategies, provides the possibility of benefiting development as well. This is one of the main reasons why adaptation has become a focus of the climate protection work in Durban (Roberts 2010, 398). In addition to this, substantial progress has been made in mainstreaming climate change into all aspects of the Municipality's work; something that will benefit the climate protection work (Roberts 2008). To further the work on climate change a Climate Protection Branch under the Environmental Planning and Climate Protection Department (EPCPD) was approved in 2007. The creation of this branch is a clear indication of the eThekwini municipality's strong commitment to climate change (eThekwini Municipality 2011). The main task of the Climate Protection Branch is; "to assess the local impacts of climate change; to develop tools that facilitate the incorporation of climate change issues into municipal planning and decision-making; to develop and implement appropriate mitigation and adaptation plans and projects; and to develop an understanding of climate change and its impacts amongst key city stakeholders" (Climate Protection Branch 2012). The work of the Branch has a focus on community, municipal and ecosystem-based adaptation and has contributed to Durban being considered a global forerunner in climate change adaptation (eThekwini Municipality 2011, 36).

3.3 THE UNFCCC

In the early 1990, it became clear that the threat of climate change was real and that a global treaty on how to deal with this was needed (UNFCCC 2007, 11). After 15 months of negotiations, the United Nations Framework Convention on Climate Change (UNFCCC) was adopted in May 1992. The Convention was opened for signature at the Rio de Janeiro Earth

Summit (United Nations Conference on Environment and Development) in June the same year and came into force in early 1994 (UNFCCC 2007, 12). In September 2011, the Convention had been signed by 194 states plus the European Union (UNFCCC 2012b); this almost universal membership makes it one of the most supported international environmental treaties (UNFCCC 2007, 12). The ultimate aim of the UNFCCC is to achieve "stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system" (United Nations 1992, 7).

Early on it was realised that the Convention was not enough to tackle climate change and that stronger commitments were needed. In 1997, after two and a half years of negotiations, the Kyoto Protocol was adopted (UNFCCC 2007, 12). The Kyoto Protocol sets legally binding carbon emissions cuts for the developed countries. It also led to the formation of mechanism to help countries reach their emissions targets (UNFCCC 2007, 27). The Kyoto Protocol came in to force in 2005 and there are currently 192 parties to the Protocol (UNFCCC 2012b). The Kyoto Protocol commitment period ends in 2012, and at the seventeenth Conference of the Parties (COP17) in Durban in late 2011, governments agreed to a second commitment period seamlessly following the first (UNFCCC 2012a). In 2010, Governments agreed to reduce carbon emissions to a level that keeps global temperature increases below 2 degrees Celsius (UNFCCC 2012a). But there is no easy answer as to how this will be achieved and the negotiations around climate change are intricate events.

Conference of Parties

Since the Convention came into force in 1994, the parties to the Convention (the countries that have ratified, accepted, approved, or acceded to the treaty) have met annually for Conference of the Parties (COP). The first COP (COP1) was held in Berlin, Germany in 1995 (UNFCCC 2007, 12). COP is the supreme body of the Convention; here the implementation of the Convention is reviewed, new decisions made and new commitments negotiated. In addition to this there are other bodies to the Convention that meets at least twice a year (UNFCCC 2007, 16). Concurrently with COP the meeting of the Parties to the Kyoto Protocol (CMP) takes place.

The importance of non-governmental (NGO) and intra-governmental organisations (IGO) for awareness raising, training and education (Article 6 of the Convention) has been recognized by the UNFCCC and their work encouraged (UNFCCC 2007, 24). Over 1500 NGOs and IGOs are recognised as observer organisations at the COP. A large number of the attendees at COP, on average 7000, are from these organisations (UNFCCC 2012b). This has led to the COP becoming a hub for civil society activity, with protests, pledges and the voicing of concerns. Since the Rio Earth Summit, young people have been present in the UNFCCC negotiations, and in 2009, the UN youth constituency YOUNGO (Youth NGO) was established consisting of youth organisations from around the world (YOUNGO 2011). The youth involvement related to COP will be discussed more below.

3.4 CONFERENCE OF YOUTH

Even though the youth attended the UNFCCC negotiations before, it was not until COP6 in The Hague, 2000, that a youth conference was organised in conjunction with the COP. Since then there has been a youth event at every COP and many of these have produced youth declarations; such as the "Youth: Protagonists, Not Spectators" issued by youth delegates at COP10 in Buenos Aires (DESA 2010, 51-52). The first COY (COY1) was held in conjunction with COP11 in Montreal, Canada in 2005 (YOUNGO 2011). COY in Montreal produced the document "Our climate, our challenge, our future" that among other things, called for binding emission reduction targets, renewable energy, more focus on adaptation options and the importance of communities being involved in developing solutions. The declaration stated; "We envision a world where all members of society have not only the right but the means to influence the world around them and where sustainability, equity, and justice are uncompromised values" (COY1 2005).

The Conference of Youth (COY) is a freestanding conference, not linked to the UN, though YOUNGO is involved in the organisation of the conference. COY is organised and facilitated by the International Youth Climate Movement (IYCM) through a non-hierarchical and inclusive process. COY is usually held in the days prior to COP and much of the focus of COY is to prepare the youth for COP. The conference focuses on "capacity-building, skills-sharing

and campaign collaboration" (YOUNGO 2011). The youth get prepared for their participation at COP and for their work with their organisations; ideas, knowledge and experience is exchanged; strategies for COP are formulated; and a lot of inspiration is gained to continue working for the cause. In addition to this, the conference is a great opportunity to network and meet young people from other organisations and countries who share the same passion and commitment.

Conference of Youth in Durban

COY7 was held from the 25th-27th of November 2011 in Durban, South Africa, and was attended by more than 500 young people from all over the world. An initial group of individuals and organisations to organise COY were chosen in April 2011. From this group two bottom liners were chosen to lead the work, one from the global North, Hillary Bowman, and one from the global South, Jean-Paul Brice Affana. The role of the bottom liners was not to co-ordinate so much as facilitate. They helped the working groups communicate with each other and tried to fill gaps that arose. The bottom-liners were also responsible for managing the COY7 budget. COY gets funding from many different sources, such as organisations, governments and YOUNGO.

To manage the work with the conference there were several working groups: Logistics, Partnerships and Outreach, Fundraising, Program, and Communications. Later on in the year Greening UKZN, an environmental student organisation at University of KwaZulu-Natal (UKZN), Durban, and member of the COY organising team, set up a Durban based team of volunteers. They organised themselves into working groups and focused on doing things that were needed on the ground, such as securing a venue, finding sponsors, and encouraging South African youth to register for COY7. The researcher was part of the executive committee of Greening UKZN and both international and local working groups.

There were many different workshops being held at COY7, all of them facilitated by the youth themselves. The workshops touched on many different issues; experiences of climate change, how to youth and social movement can make a difference, the basics of the UNFCCC process, and lessons and experiences of organisations. There were two high-profile

guest speakers in the plenary, Kumi Naidoo (Greenpeace) and Bill McKibben (350.org). In addition to this there were several working groups that met every day to strategize and plan actions for COP17. The focus of these working groups was mitigation, human rights, women and gender, communications, actions, capacity building, finance, adaptation, forests and water. There were also activities happening during the breaks, such as performances, shooting of videos, song and dance. All the time new friendships were made and networks built. A South African Youth Climate Coalition (SAYCC) was also formed during these days, with help and inspiration from other youth climate coalitions such as the United Kingdom Youth Climate Coalition (UKYCC) and the Australian Youth Climate Coalition (AYCC).

3.5 CONCLUSION

This chapter started with explaining what climate change is, how it has occurred and how mitigation and adaptation strategies can help lower the expected changes and impact of the changes that will occur. The international response to the threat of climate change was discussed in section 3.3 about the UNFCCC and COP. This showed us that while there are efforts and will to do something about climate change, the international negotiations are intricate events and there are many different and opposing views on what needs to be done and when. Section 3.4, on COY gave an insight in how the COY emerged and the structure of the Conference. More detailed information was given about COY7 and how it was organised. The different issues discussed at the Conference were also examined, as well as a brief account of the atmosphere at the conference. This will contribute to a greater understanding of what the respondents encountered during the Conference.

CHAPTER 4: RESEARCH METHODOLOGY

This chapter will describe the methodology applied in this research. The case study was designed to explore knowledge about climate change held by young people in Durban; where they had obtained this knowledge and their involvement with COY7. Data for the study was collected through 15 semi-structured in-depth interviews with youth living in Durban. The study uses a constructivist interpretative approach, which is based on the idea that reality is socially constructed and focuses on the ways people make sense of their everyday lives (Mottier 2005). A combination of an inductive and deductive approach was used, where the theoretical framework influenced the coding of the primary data and the primary data findings were used to influence the development of the theoretical framework (Fereday and Muir-Cochrane 2006, 82).

The chapter starts with section 4.1 describing the rationale behind choosing Durban as the location for the study, and how the respondents were chosen. Section 4.2 describing the data collection through the email survey and the in-depth interviews follows this. The third section, 4.3, describes the process of data analysis. This is followed by section 4.4 on positionality and how the researcher influenced the data. Finally in section 4.5, the limitations of the study are discussed.

4.1 TARGET POPULATION AND SAMPLING

Location selection

The study was conducted among youth from eThekwini (Durban) municipality in KwaZulu-Natal, South Africa. Durban was chosen as the site for the study because it hosted the 2011 Conference of Youth (COY7), and the UNFCCC Conference of Parties (COP17) and meeting of Parties to the Kyoto Protocol (CMP7). COP is one of the most important global climate change related events and it attracts not only official delegations from all member countries but also a great number of civil society organisations. COY happens every year in conjunction with COP and brings together youth from the International Youth Climate Movement. These events brought a lot of focus to climate change and related issues to Durban and the weeks when they took place were full of activities and energy, both inside

the conference venues and outside. The influx of engaged people from all over the world further contributed to the vibrant environment. The study will explore how these events, in particular COY7, influenced climate change knowledge and commitment among youth in Durban.

Defining youth

There is no clear cut definition of youth and many different criteria can be used to decide when a young person gets classified as an adult. The end of compulsory schooling, voting age and minimum age for standing for election are some criteria that are used to mark the transition into adulthood (Commission of the European Communities 2009, 6). The different criteria used mean that there are many different definitions of youth used internationally and nationally. The United Nations defines youth as people between 15 and 24 (UNESCO 2011). In the South African National Youth Commission Act youth are defined as persons between the ages 14 and 35 (National Youth Commission 1996). The South African definition of youth is very close to the definition stated in the African Youth Charter, where youth is defined as persons between 15 and 35 years (African Union 2006). Conference of Youth (COY) does not specify whom they define as a young person, so anyone who considers himself or herself a youth can attend. However, many of the delegates at COY came from different youth organisations that might have had age restrictions on their membership. The majority of the delegates at COY7 were in their twenties. Since COY does not define youth and since my study is of local youth I chose to use the South African definition (14-35 years) for my study.

There are many reasons why a focus on youth and climate change knowledge deserves attention. First of all young people have been recognized by the UN as key stakeholders in environmental issues (United Nations 1992). Many youth also find environmental issues being important to focus on, and take action to protect the environment (Corriero 2004; Wray-Lake, Flanagan, and Osgood 2010, 62). Further, due to young people being a new generation, changes in their attitudes will reflect long-term changes in the society (Wray-Lake, Flanagan, and Osgood 2010, 62). Wray-Lake et al. states that “We *must* care about young people’s environmental attitudes, beliefs, and behaviors, as they are likely to be

carried into adulthood, communicated to offspring, and expressed in leadership decisions as younger generations replace their elders as society's leaders" (Wray-Lake, Flanagan, and Osgood 2010, 83).

Selection process

The study used purposive sampling, and some snowball sampling to recruit respondents. Purposeful sampling is used to select information-rich cases that offer explanation and information regarding the study questions (Patton 1990, 169). Snowball sampling locates respondents by asking people if they know anyone who it could be useful to talk to (Patton 1990, 176). In my case this was done by asking my respondents if they knew anyone else who went to COY who they thought would be willing to participate in an interview. Respondents were chosen from an Excel sheet where the information from delegates who registered to attend COY7 is. In my role as an organiser of COY7, I had access to this spread sheet. Initially, all participants who stated South Africa as their country of residence were copied into another spread sheet for this study. This list was then examined to try to locate the participants living in Durban. The reason all South Africans was initially copied was because I was not sure how to locate those in Durban, and not exclude young people who were from Durban but had not stated so in the registration form. When it became clear that there was a large enough sample of young people who lived in Durban, it was decided to work with this group. Because COY is a conference that attracts people from all over the world, there was only a field in the registration form for the country of residence and not one for where in the country people lived. This meant that a different sampling approach had to be adopted to locate the participants from Durban.

There were three main ways that it was possible to tell if people were from Durban or not. One was the organisation they stated that they were part of (e.g. Durban Youth Council, Greening UKZN), some people who were not part of an organisation stated their school or university in this field, which also helped me. Secondly, there was a field in the registration form where you would state your address in Durban while at the conference (if known). From this field registrants who stated an address in Durban that was not a hostel, hotel or the like, were selected. Lastly, the email address the registrant put down were examined;

there were a number of people who put down their UKZN student emails; this indicated that they lived in Durban. There were a small number of people who were known to live in Durban though it did not show on the registration form; these were people the researcher knew personally. These people got copied to the new spread sheet. The people from Durban who were part of the COY organising team but had not registered were added to the spread sheet. The email addresses to all these young people were then added into a group on a Gmail account that was created to use for this research (coy7study@gmail.com).

An email containing some information about the research and a short, 18-question survey was then sent out to everyone in the group. The email survey asked the respondents to state if they were willing to participate in a face-to-face interview. The respondents who were positive were then approached for an interview. The response to the email survey was very poor, and even with two reminders being sent out to the email group, I only had 12 replies out of 156 recipients. Due to the lack of sufficient responses to the survey, and thus not enough youth to interview, a snowball sampling method was used to select further respondents. Respondents were at the time of the interview asked to identify and provide contact details to people they knew who attended COY7 and who might be interested in participating in an interview. Some people were approached directly by the researcher and asked if they would like to participate in an interview. This was mainly people who the researcher knew from the COY organising team. Finally, a sample of 15 respondents were selected and agreed to be interviewed. Nine out of 15 respondents were in a greater or lesser degree involved in organising COY7, and thus have a different experience of the conference than people who came there as delegates. This will be further discussed in the limitations section below.

4.2 DATA COLLECTION

Email survey

In order to collect empirical data for my research I sent out a short email survey to the 156 COY7 participants from Durban I had located (Appendix I). The email started with an introduction to the research and an explanation of the study. It also contained a short consent section to request consent for me to use the information they provide for my

thesis. The first section of the survey was a personal profile, following this was a few questions concerning involvement in any environmental group or organisation. Thereafter were two general questions about their COY participation and a section on climate change; this section starts with general questions about climate change and then moves on to questions about climate change knowledge. After this the respondents are given the chance to give comments to the organisers for the next COY. Finally the respondents are asked if they would be interested in participating in a face-to-face interview on the same topic.

Only 12 people responded to the email survey; indicating that email surveys are not a very effective way to collect data. One of the survey respondents that were interviewed commented that the email survey looked a bit unprofessional, and that I would have received a better response if an online survey tool had been used. Some of the people I spoke to that had received the survey but not responded stated that they had meant to reply to it, but that they had forgotten and the email had ended up out far down in their inbox. Many of the people who did reply to the survey were people who were part of the COY organising committee or in another way know me. This might be because people feel more inclined to help someone out when they know the person, and also because they know that they will meet the researcher again and possibly have to explain why they did not reply to the survey. Out of the 12 respondents, two stated that they were unable to participate in a face-to-face interview, one due to other commitments and the other one because she had moved out of town. Of the remaining 10 respondents, interviews were conducted with seven. The remaining three either did not reply to the emails regarding scheduling an interview, or we were not able to find suitable time for the interview.

The email survey did not produce much information that was not conveyed through the face-to-face interviews. The majority of the questions in the email survey were on themes that were also dealt with in the interviews and the respondents that replied to both had very similar answers in the survey and interview. Due to the low number of respondents to the email survey and since there was no information from the survey that was not present in the interview data it was decided not to use the survey data for this report.

Interviews

The main data for the research was collected through 15 open-ended, in-depth interviews with youth from Durban who participated in COY7 (see Appendix IV for a description of the study population). In-depth interviews schedules were used as the main research tool to allow for a greater understanding of factors that influence knowledge and how COY7 impacted on the knowledge of participants. In-depth interviews allow the respondents to share their experience and go into depth about how their knowledge and commitment have built.

The interviews examined the youth's understanding of climate change; factors influencing commitment to climate change issues; types of information received; sources of information and the impact of COY7 on knowledge and commitment. Much focus was put to understanding what made the youth take an interest in climate change and the different sources of information on climate change that have been influential, and what message these sources conveyed. By examining this, the study hopes to show how different sources of information reveal different types of knowledge held by participants about climate change. The study also aims to understand how this knowledge had influenced the youth's feelings towards climate change and what needs to be done to mitigate and adapt to it. The focus on the impact of COY7 will make it possible to comment on the influence events like this can have on the youth's understanding of climate change, and their willingness to take action.

The interviews took place in different settings based on what worked best for the respondent. A few took place at different venues at University of KwaZulu-Natal, some took place at public spaces like restaurants, others again at the respondents home, or at the researcher's home. The interviews conducted in the researcher's or respondent's homes were all with people who know the researcher from before and thus the choice of setting would not create a bias. Being interviewed in the home of someone you have never met before can create a situation where the respondent does not feel completely relaxed and this can influence the information they give. Present at the interviews were only the respondent and the researcher. The interviews took between 40 minutes and 1,5 hours. All

interviews were digitally recorded and partially transcribed. In addition to this, notes were taken during the interviews; this was both to make the data analysis easier and to record observations. The participants had the option of revealing their names in the report or not. Participants who stated that they wanted to remain anonymous were given a pseudonym to be used in the report. The first anonymous respondent was given a pseudonym starting with A, the second starting with B and so on. The pseudonyms were names from the same population group as the respondents, to make clear in the report the spread of respondents over the different groups. In the report only the first names of respondents are used for two reasons; with the focus being on youth I found it more purposeful to only use first names as this feels more informal; and to give respondents a level of anonymity.

4.3 DATA ANALYSIS

The data was collected through note taking and recording of interviews, and then analysed further using thematic analysis. This process included taking the data from the interviews and categorising frequently mentioned ideas and perceptions into themes. Ideas that were opposing to the mainstream view in the sample were also coded. It has been suggested "that the core of qualitative analysis consists of the **description** of data, the **classification** of data, and seeing how concepts **interconnect**" (Dey in Kitchin and Tate 2000, 230). This is not a linear process; while description need to happen before classification and classification before connections, the researcher can go back and modify the previous task when necessary, to get a different perspective (Kitchin and Tate 2000, 231). The themes that emerged from the data for this case study where then further analysed to get a better picture of the data collected from the respondents and convey the results from the case study. The data was examined to find major themes that were further examined to provide the findings of the research for the results chapter.

The data collected was analysed in light of the sub-questions; where each sub-question represented an overarching theme and was presented in a section in the results chapter. The information relevant for each sub-question was then further coded in to themes that represented different issues or arguments that arose from the interviews. Not all information provided in the interviews was relevant for the study; the results chapter only

describes and analyses the most significant findings. In the results chapter, the data is described to get an understanding of the data gained from the interviews and how these were related. Further the data are analysed by applying the theoretical framework on knowledge to get a picture of the climate change knowledge among the youth, how this has developed and how it influences the youth's lives.

4.4 POSITIONALITY

Positionality is described by Chiseri-Strater as including "given attributes such as race, nationality, and gender which are fixed or culturally ascribed" as well as being "shaped by subjective-contextual factors such as personal life history and experiences" (Chiseri-Strater 1996, 116). It is important to note that the researcher is part of the context that is being studied, and that who they are and what they bring in to the study will affect the results. The interview should not be seen as a setting giving direct insight into the respondents' lives, but as a setting in which the researcher and respondent co-construct data (Roulston, deMarrais, and Lewis 2003, 645).

My role in this study was not only as a young, white, foreign, woman doing post-graduate studies; but also as someone involved in COY7 and with extensive knowledge and interest in climate change issues. In my role as a young student it is possible that the respondents felt a connection that made them relax and share information freely. However, most of the youth knew about my involvement in COY7 and my interest in, and knowledge of, climate change, and this could influence the interviews. This might have lead to the youth replying vaguely or shortly, in fear of saying something "wrong". Further, knowing my involvement with civil society groups could have lead to the youth focusing more on things they think I wanted to hear, and views they believe I will expect. Reflecting on the interviews, it feels like the youth were relaxed and they shared information willingly. However it is not possible to find out if they were selective about what information to share with me, or if who I am affected the interviews in other ways.

4.5 LIMITATIONS

The study is limited by the sampling method; due to the low number of responses to the email survey new ways of finding respondents had to be devised. People who were part of the COY organising team were approached as they were easier for me to get in contact with, know me through the organising team, and were in general willing to participate in an interview. However, having a large number of respondents who were involved in organising COY, rather than having participated as delegates, did possibly create a bias. The people on the organising team had little time to participate in the formal sessions at COY and did in that way lose out on some of the knowledge sharing processes. On the other hand, they worked with COY for months before the actual conference, and formed close relationships with youth from all over the world involved in the organising team; this could lead to COY having a stronger impact on their lives, both in their understanding of climate change but possibly even more for their commitment to climate action.

The study sample is not very representative of the South African population. Firstly, all respondents are studying, or have studied at a tertiary level, something that is not common among South African youth. Higher education can also indicate more access to information and experiences that affected their knowledge and commitment to climate change. Secondly, the race groups in the sample are not representative of the South African population. The sample consists of nine Whites, three Africans, two Asians, and one other. The sample is not representative of the South African participants at COY either; there is no data on the race groups at COY7 but looking at the registration form it appears that the racial distribution among South Africans at COY7 did not diverge greatly from that of the country as a whole. The main reason for the skewedness of the sample is probably to be found in the sampling methods used. Because of the lack of responses to the email survey a snowballing method had to be used. Due to contacts with people in the COY organising committee, many of the respondents were from this group. The organising team in Durban had a skewed racial distribution, with a high number of White members. This can be linked to how environmental concerns often are perceived to be something for the white middle class.

4.6 CONCLUSION

This case study of climate change knowledge aims to explore climate change knowledge among youth in Durban. The study uses a qualitative methodology and collects its main data through semi-structured, face-to-face interviews with youth from Durban who participated in COY7. Respondents were located using a combination of purposive and snowball sampling methods based on the registration form from COY7. Data was collected through 15 in-depth interviews with youth from Durban who participated in COY7, and analysed using thematic analysis. Through the data collected it is possible to explore what youth in Durban know about climate change, where they have received this knowledge from and how it affects their everyday lives. This information can be used to gain a better understanding of what it is that inspires youth to take an interest in climate change and what sources of information are the most influential. The results of the study will be forwarded to the COY8 organising team, where it might help them in organising a conference that inspires youth to do even more.

CHAPTER 5: CLIMATE CHANGE KNOWLEDGE AMONG DURBAN YOUTH

In order to examine what youth in Durban know about climate change and how their participation in COY7 affected their knowledge and commitment, interviews were conducted with 15 youth. All of the youth had some previous concern in climate change issues and the aim of the interviews was to understand where they had received their knowledge and interest in climate change from, and how the participation in COY7 influenced them. The interviews focused on the youth's understanding of climate change, what influenced them to take an interest in climate change issues, sources and types of information they had received about climate change, and the impact of COY7.

This chapter will present the results from the interviews and is structured around the four themes presented above. Section 5.1, on understandings of climate change examines how the youth understand climate change, what or who they argue is responsible for it and what should be done to address it. Section 5.2, on factors influencing commitment follows this; here the sources of the youth's interest in climate change are examined. The different sources of information on climate change that has provided the youth with knowledge, and the types of knowledge received from these are examined in section 5.3, on sources and types of knowledge. Lastly, section 5.4 on COY7 examines the impact of the conference on the youth's knowledge and commitment.

5.1 UNDERSTANDINGS OF CLIMATE CHANGE

All the respondents had at least a basic understanding of what climate change is, though the way they described it and what parts they put weight on varied a great deal. A few of the respondents gave a vague initial description of climate change, which could indicate a lack of understanding of the concept. One respondent described climate change as: "…how the climates and weather are changing as the years go by" (Brandon); there were no reference to GHG and only when asked about the causes of climate change were human activities mentioned. There was also a divergence between people describing the science of climate change and those focusing more on the social and natural effects of it. Sophia described climate change in very scientific terms, as the change in temperature due to emissions of

GHG that creates a layer that reflects the sunrays and heats up the planet. Other respondents focused more on the effects of climate change:

> "Extreme weather, droughts, flooding, mass migrations of people that are being affected by extreme weather, increased poverty as a result of extreme weather. Caused by human activities." (Delwyn)

Four of the respondents mentioned how climates change naturally but that human behaviour is affecting the rate and pattern of the change, and that this has negative impacts:

> "I think climates do change, I think we might be coming out of an ice age and heating up, I think that's normal, but I think the consequences of this climate change, the severe consequences of climate change, are due to the very fast rate at which it is happening. And that rate, for me, is human induced." (Caili)

In explaining what climate change is, all respondents made use of, codified, explicit knowledge, even though it differed if they focused on scientific or socioeconomic descriptions of the concept.

Causes of climate change

Everyone referred to climate change as caused by human activities, and there was a general agreement that the modern way of life is the major cause of climate change. Abigail stated that:

> "[Climate change is] our deteriorating environment as a result of our consumption and behaviour. I should say our deteriorating *global* environment. 'Cause it's different to just polluting a riverbank, you know, in your back garden."

As the causes of climate change the respondents mentioned things like, industries, overpopulation, use of fossil fuels, consumption, greed and the meat industry. Many of the

respondents mentioned capitalism as the major cause of climate change. However, humans' disconnection to our environment was also mentioned. For example, two of the respondents explained the causes of climate changes as follows:

> "Capitalism. Humans just trying to do what ever they want, and how ever they want to increase their profit. Regardless of how it…who it affects or what it affects or… You know, they don't live for the future, they live for the now." (Brandon)

> "Disconnections with the environment, humans have othered themselves from the environment in which we live, and I think that we take actions without fully understanding the consequences of those actions." (Inger)

Many of these responses were what you would expect, knowing the youths' backgrounds and general knowledge of climate change, as well as how climate change is portrayed in the media and other public channels. More interesting is how one respondent argued that human disconnection from the environment is the major cause of climate change, as humans no longer understand the direct impact of our actions on the environment.

Addressing climate change

When asked what they feel needs to be done to address climate change the replies ranged from more utopian visions about a global constitution to making small changes in everyday lives. Three main themes could be seen; the role of individuals; the role of governments and policies; and the role of the UN and global agreements. Ten of the respondents referred directly to the role "everyone" can and should play in order to lower climate change. It was argued that individuals could make a change not only by behavioural change, including conscious consumption, recycling, and vegetarianism, but also by using their democratic rights and pressuring governments to make changes. Delwyn, for example, had this to say:

> "There needs to be a push from consumers for industries that produce material from renewable sources. People need to be more proactive! Instead of waiting for stuff to happen they should adopt precautionary principles, not reactionary principles."

At the government level a lot of focus was put on the importance of policies, legislation and other measures that governments should put in place to lower the impact on and effects of climate change; the green economy, introducing clean technology, investing in renewable resources, developing public transport and instituting more regulations for businesses were some of the suggestions that were brought up. The importance of the role of government was stressed:

> "I really do feel that government needs to play a bigger role, government isn't there to try and make money of its populations and of its citizens, it is there to govern firstly its people and make sure that they're safe and got some future. /…/ Government needs to play a stronger role in terms of city legislations and certain laws regards to how much CO_2 we emit into the atmosphere. I do feel that there is definitely a need for us [South Africa] to have that plan to go full tilt, not just 60 per cent, 80 per cent renewable energy, I'm talking full tilt 100 per cent renewable energy and address the issue head on." (Njabulo)

In terms of actions on the global level there were variations in the way people felt about it. Though a few of the respondents talked about the need for global cooperation, there were doubts about whether the UN system would be able to create the change needed. There were also calls for regional cooperation instead of global: "Ideally, they [UN] would be the forerunners of people that start to realise and implement these things although they don't have much political sway or actual sway." (Caitlin)

Knowing that these youth have participated in an event like COY that is closely linked to the UN COPs and where delegates are experiencing much hope and frustration regarding the UN system, it is understandable that they do not have much trust in the possibilities of the UN system. This could also help explain why so many of the respondents felt that it was important to work on many different levels to truly be able to create change. The importance the respondents put on the role of individuals is no surprise; this is youth that

decided to use their spare time to attend a climate change conference, and some of them spent hundreds of hours volunteering to make sure the conference could take place.

The youth's involvement in climate change issues could also be seen in their everyday actions. All respondents but one claimed that their knowledge of climate change had influenced them to make changes to their lives. Many of the things they mentioned were smaller changes like recycling, trying to use less electricity, driving less and being more conscious consumers. Steven, for example, had taken things further and had, together with his brother, developed an efficiency plan for their house. The plan referred to changes they were planning to do over the next few years in regards to things like water recycling systems, solar power and modern electricity technology. Bibi, who has experience of farming both from her family and from working in a food garden at UKZN, claimed that her knowledge of climate change had influenced her to farm organically. She used organic manure from compost heaps, and no chemical fertiliser. Four of the respondents particularly mentioned talking to people and informing them about climate change as things they do. Aluwani stated: "I try to tell people about climate change, so at least I'm having an impact on someone's life". Andrew, however, stated that he used to recycle but that he had stopped and that he now did not do anything special in his everyday life due to his knowledge of climate change; he felt that technology should do more to lower climate change. Knowledge of climate change and the experience at COY had a big impact on Njabulo, and it inspired him to change work and start working for a renewable energy company.

5.2 FACTORS INFLUENCING COMMITMENT

Source of initial interest

When asked about when they first became interested in climate change issues, the respondents gave many different responses. Three of the respondents claimed that they had been environmentally aware from an early age, and that the interest for climate change had grown out of this. Sophia, for example, stated that:

> "I think I've always found it interesting because it's something that affects everyone, whether they are aware of it or not. /…/ I became more aware of it and more aware of my own carbon footprint in about grade 10 at school in biology. /…/ And then I started walking home from school."

Most respondents were not sharing Sophia's experience of school, nine of the youth claimed that they had not learnt about climate change at school. A few of the others explained that they had learnt about other environmental issues, such as ecosystems and ozone, but not directly about climate change. However, ten respondents mentioned their experience at university as something that has influenced their interest in climate change. Five of these claimed that university was one of the experiences that initially made them interested in climate change issues. One student stated that:

> "It was a big topic at university, and then I got involved in that Green economy project, and I think that's when things really took off, and when I started doing more active things about it, like COY and my thesis." (Marita)

A few of the respondents claimed that it had been a gradual thing; that you would pick up information from different sources and that the interest grew with the knowledge. Being educated and having an interest in current issues can make it hard to not hear about climate change, and take a stance: "I consider myself socially aware, and kind of conscious, and I think I should…I don't know, naturally be interested in something like this because, you know, it affects us." (Steven)

Other influential sources

Peers

A substantial number of the youth claimed that peers had been influential either in initiating their interest in climate change or in influencing and deepening their interest. When asked what first got her interested in climate change Caitlin replied; "…a lot of my friends who felt quite passionate about it, and that passion sort of rubbed of when you interact with them."

For Abigail it was initially a lack of peers that influenced her interest in climate change; when she started university she did not know anyone and joined an organisation to meet people. The organisation was the Green Campus Initiative at University of Cape Town, and through her work with that organisation and the people she meet there her knowledge and interest grew. Of the 15 youth that were interviewed, 12 said that peers were important for their interest in climate change, and many felt that they were among the most important factors influencing their commitment and interest:

> "Peers would be probably the biggest factor, just connecting with other people who have knowledge, similar knowledge or more knowledge, of the subject and discussing the issues that we're faced with. Learning from each other I think is a big thing. And also seeing other people taking actions, you know, doing things that you could also do, but they are actually just doing it!" (Steven)

The emphasis on the influence of peers reveals that peer interaction is important for knowledge sharing and building on existing knowledge. Talking to someone who is an equal, and sharing your interest, can create an atmosphere where it is easy to talk, share your thoughts and ideas, and ask questions you perhaps would not ask in other settings. Caili talked about how she appreciated having close friends who shared her interest, because that meant that you did not only talk about superficial things, but you could also discuss more serious issues.

Influential people

Six of the respondents mentioned teachers or other people they have meet in an academic or intellectual space as being important for stimulating their interest in climate change. This is both people that the youth have interacted with in courses and seminars, and people that they have forged a more personal relationship with. Marita gained a lot of inspiration, and a job through one of the teachers in her postgraduate programme. This relationship also, indirectly, inspired Marita to write her thesis on the green economy. Having a lecturer that you build a relationship with over the course of your studies seems to be a source of inspiration and motivation for some of the youth. Brandon noted that:

> "[Professor] Harald Witt was always one of these figures that I looked up to, and I still do look up to him. /…/ This man is the biggest pain you will ever meet, because he's one of those people who just will never give you a break about anything in terms of what he believes in and you can't help the man or even argue with a man that has such beliefs!"

Civil society actors where brought up by three of the youth as people who had influenced their interest in climate change. What is interesting about this is that all three had first hand experience of these people, through seminars or talks. Sophia explained how the speech by Bill McKibben from 350.org at COY inspired her a lot. It is possible that people who are good public speakers, and in addition are passionate and knowledgeable about an issue, can manage to reach out and influence youth. Attending a seminar or talk can also be an easy way of acquiring new information. Andrew mentioned the following person:

> "Tony Frost, he's a Rotarian, he was a former CEO of the World Wildlife Fund in South Africa. He gave a presentation, which I thought was amazing. He talked about the impacts and how it is real, I mean, he showed photos of old corals that are bleaching that didn't bleach 20 years ago."

Organisations

Eleven of the youth reported being, or having been, involved in an organisation that had influenced their interest in climate change issues. The organisations were mainly student organisations at universities but also worldwide organisations like Rotary and Greenpeace. Involvement in the COY organising team was also brought up by some of the respondents as a source of inspiration:

> "I have to say that being a part of the COY organising group was huge also for me. For stimulating my interest and inspiring me to carry on down this path. I mean, that was huge, that was definitely one of the biggest drives for me." (Njabulo)

Organisations seem to be both a way of getting new information and inspiration and a way to meet peers. It can also be a way to feel that you do something for the cause, a way to contribute and make a difference.

The media

With regard to the influence of media on the youth's interest in climate change, the majority states that the press has had an influence on their interest in climate change. A few of the youth reported that they had received a lot of initial knowledge from the press that made them explore other sources of information more thoroughly. Marita stated: "At the end of the day that's probably where I get most of the information from. At least in the beginning, now I read a lot of books and long articles about it because I'm writing my thesis on it." Four of the respondents were, however, more sceptical about the media and argued that they did not trust the information in the press fully or that they would rather use other sources:

> "It [the media] irritates me, how they portray climate change, they don't know what they're talking about! /…/ I'm quite happy with debates and all that. /…/ But the media doesn't get the nuances of that, its more like, you know, you'll get this reporting of 'Climate change isn't happening!' as opposed to 'There was this one case which showed this interesting thing about this and that's why…'" (Caili)

Inger had an ambivalent feeling to the media, as much as she felt she got information from it, it also had a way of dampening her interest:

> "It has simultaneously stimulated and supressed. /…/ Sometimes it's just too overwhelming and you don't want to hear any more people saying things about it. But it's also sometimes really wonderful and interesting things." (Inger)

The overall impression from the youth is that the media is a valuable source of information and knowledge about climate change, but that this does not necessarily mean that it is a source of inspiration or influence. The media can be a great way to get a lot of basic information and understand the different debates, but if you want to get a deeper and more

nuanced picture you might have to search for other sources, or at least move away from the mainstream media.

5.3 SOURCES AND TYPES OF INFORMATION

The youth sampled in this study have received information about climate change from a wide array of sources. The sources that the youth claimed have been the most influential to them will be presented in this section. It will start by reviewing all the sources that the youth claimed to be influential to their climate change knowledge, and then move on to examine those they claim are *the* most influential.

Main sources of information

As stated before, the majority of the youth had not learnt about climate change at school, however five of the respondents claimed that school had been an important source of information for them. In many of these cases, the information received was not specifically about climate change, but related to other environmental issues that opened their eyes to the interconnectedness between humans and the environment and the consequences of human actions. This has made the youth more environmentally conscious. A few of the respondents mentioned how climate change was not a big issue when they were in school, indicating that people younger than them might have learnt more about climate change at school.

Whether or not the youth claimed university to be an influential source of information is closely linked to what the youth have studied and whether or not climate change and environmental issues have been part of the course work. All eight who has claimed university to be an important source of information, have been, or currently are, studying a degree where environmental issues naturally would be brought up. There is one exception to this rule; Marita, studying development studies, did not directly put university as an influential source of information. However, she mentioned university as being important for stimulating her interest in climate change issues, and she claims academic articles have been an important source of information, a source that is closely linked to academic work. Four more respondents also mentioned academic articles and books as being influential for

their climate change knowledge. These were people who also claimed university to be influential for their knowledge. Studying something that touches upon climate change issues will expose you to these whether you want it or not, and this can initiate or deepen an interest in these issues, and lead to a more active search for knowledge.

Twelve of the respondents claim that media have been an important source of information. They referred mostly to newspapers, both printed and online, but blogs, magazines, television and internet in general are also mentioned as sources. It seems like many of the youth find media an easy accessible source of knowledge, where a wide variety of issues are explained in layman's terms and updates on current issues are accessible. Four of the respondents mentioned social media like Facebook and YouTube as sources of information, though they did not include it in their list of main sources. Documentaries where mentioned by six respondents as an important source of information. In addition to this six more youth claimed that they had learnt about climate change from documentaries, but this was not cited as one of their main sources. The documentary that was mentioned the most times was the Al Gore documentary 'An Inconvenient Truth' from 2006. Media and documentaries are a source of knowledge that can be there whenever you have time or want to learn more, and things are often explained in a way that is interesting and easy to understand. This factor might contribute to the fact that so many of the youth mention these as important sources of knowledge about climate change.

People in the youth's surroundings were influential in making them interested in climate change issues, and they are also important sources of information. Nine of the youth claimed that interaction with people was an important source of climate change knowledge. Out of these, five mentioned peers in particular, something that further strengthens the role of peers as seen from above. Discussions and talks with family members were claimed by three respondents to be an important source of climate change knowledge for them. Talking to people, be it peers, family members, teachers or others, can be a great way to learn new things, dare to ask questions and have discussions that broaden your views.

Interactions in more structured settings can also be influential; seven of the youth claimed that seminars and conferences had been influential sources of knowledge. This was in most cases events that the youth had taken an active decision to participate in, though some were linked to their studies. Four of the youth mentioned COY7 as influential, and two mentioned COP17. The impression here is however, that for many of the youth who mentioned these conferences as important, it was not only the structured parts of the events but also the more informal and social sides, as well as the general excitement that made conferences influential. Another more structured form of interaction that the youth had acquired knowledge from were organisations. Three of the respondents claimed organisations to be among their main sources of information. One of them mentioned Rotaract, and the other two stated that Greening UKZN had been influential for their knowledge. For Brandon it was not just Greening UKZN, but also the interaction with other organisations through Greening UKZN that had been important for the growth of his knowledge of climate change.

Most influential source of information

When asking the youth which source or sources of information about climate change that have been the most influential to them a greater insight emerges about what it is that has inspired the youth to take an interest in climate change as well as what sources of information the youth feel have provided them with the most useful and important information. Some of the findings here are similar to those in the previous section but there are also a few points that differ.

Only one of the respondents claimed school as the most important source of information. This was one of the two youngest of the respondents; this can indicate that climate change issues have been dealt more with in schools in the more recent years. Sophia feels that school has been the most important source of knowledge for her because it was her first "real" source. In school she learnt about the basics of climate change, the effects it has, and how and why climate change should be addressed. As indicated in the section above, university has been an important source of knowledge; three of the respondents claimed that university was their main source of knowledge. For Abigail this was mainly through her academic work; she studied Energy and Development studies, where she learnt a lot about

how climate change affects the world and what can be done about it. Bibi and Brandon's experience of university as a source of knowledge went beyond just course work. Both of them were involved in Greening UKZN, an experience that provided them with much knowledge, both on practical aspects like what the individual can do and what needs to be done in the world.

Aluwani's main source of knowledge was also linked to university; for him journal articles are what had provided him with the most information. This started when he was working on his PhD proposal. Studying biotechnology, he received much information on technology and sustainable products, but he has also learnt about the basic science and what can be done to address climate change. For three other respondents, reading has also been one of their main sources of information, though for them its not only academic texts. Newspapers and the Internet provided Bibi with a lot of general information on climate change. It is interesting to note how only one of the respondents mentions media as their main source of information, while 12 respondents mentioned media as an important source of information in the previous section. This can probably be linked to the lack of trust in media, and the lack of nuances in the information provided. For Marita it has mainly been her own interest that has made her search for information online; this has largely been facts about climate change and how it affects the world. Caili recalls a book by Mike Hulme as an important source of knowledge, as well as many texts leading up to and around COY7 and COP17. Around COY7 and COP17 she read a lot of highly technical material. However, an interactive tutorial on the UNFCCC sent out by the UKYCC, provided much valuable information about the managing of climate change and how to combat climate change.

Two of the respondents claimed that documentaries had been the main source of knowledge for them. For Andrew this was 'An Inconvenient Truth', while Delwyn had seen many different documentaries that had informed him. Andrew felt that he learnt the scientific facts about climate change as well as the getting a feeling that there is an urgency to act. Information on human activities that causes climate change was one of the things Delwyn claimed to have learnt from documentaries. He also felt that seeing likeminded, passionate people in the documentaries gave him hope. Being able to play documentaries

over again, and the visual aspect of it seem to be two factors that make documentaries an influential source of knowledge.

People in the youth's surroundings are influential on many levels. Five of the youth claimed that this was the most, or one of the most, influential sources of knowledge. For most of the youth the people were peers, but teachers were also cited by one of the respondents as being influential. Though the youth learnt about the politics of climate change and current issues from peers, they emphasise that the most important knowledge they received was about what you can do to reduce your impact, and why you should do this:

> "We all can make small changes and those small changes can then have a huge and big difference, or make a big difference in terms of what lies ahead for all of us. /…/ And also that its not…this whole entire concept of renewable energy or climate change isn't this idea that's only privileged to people who are intellectuals or whatever, we *all* can get involved, we *all* can start learning a little bit and pick up little ideas and get involved!" (Njabulo)

Another source of information that is influential is conferences and seminars; five of the youth claim that these have been one of their most important sources of information. For three of these youth, the conference was COY7. It seems like the interaction with other passionate people fighting for the same thing as them was one of the main factors responsible for COY7 being so influential. The fact that conferences are interactive spaces where you are exposed to new ideas and new people is one of the factors that make conferences an important source of information for the youth. Reevin explained that he found it boring to read, and that he learnt a lot more from listening to people. What the youth learnt from conferences was different depending on what the theme of the conference was. Reevin had been to many conferences and felt he had gained a holistic understanding of the way forward from these:

> "How can we make it economically viable to bring about alternative forms of energy – using energy as an example? There's this big factor of the environment and the

> economics and how do you start building up an industry to make it more viable /…/ economically as well as socially viable. What social impacts is it gonna bring about to do it, positive or negative. Realising how all these factors needs to be in place before something real starts happening." (Reevin)

With regards to COY, it also varied depending on what the youth did at COY and which sessions or workshop they attended. Steven attended a COY workshop on zero emissions society that influenced him much. Brandon was involved in the organising of COY which meant he had little time to attend sessions but much time spent building relationships and sharing thoughts with other passionate youth.

Perceived experts on climate change

Who the youth perceive to be experts on climate change can give insight to what sources the youth feel give a trustworthy and nuanced picture of the issue. It can also provide an indication to what types of information the youth find the most important.

Possibly not very surprising, scientists were cited as experts the most times, followed by academics. Ten of the respondents perceived scientists to be a reliable source; Marita specifically mentioned the IPCC as a source she would go to if she needed information. Academics with knowledge of the field were perceived as experts by six of the youth. Sophia, who stated both scientists and academics as experts, also raised some cautions:

> "You never know what people's political agenda are, so you can have a whole lot of studies produced – and that's also why its important to read who's written things – because you could have a whole lot of articles which have been sponsored by certain governments who it is in their best interest to show that climate change really isn't necessarily a problem. It [reliable experts] would have to be people who are independent of any sort of funding that has a agenda."

Inger shared Sophia's concerns and claimed that involvement of humans mean that you never get completely objective and reliable information. She was not sure if there was

anything like reliable experts on climate change, and stated that the best thing would be to use multiple sources.

Three of the respondents mention activists as reliable experts in the field. This could be linked to an understanding of civil society as being independent and not linked to funding that comes with an agenda. Civil society also has a way of raising awareness about issues in a way that is accessible, appealing and often highlights the shortcomings of governments and the international community. With regard to the international community and the UN, three of the respondents saw the UN as an expert on climate change. While one respondent raised concerns about the trustworthiness of the UN; Caitlin stated that even though it probably has a lot of insight it also is a big organisation. As their motives are not clear she would not trust them blindly.

People with personal experience of climate change where cited by three of the respondents as experts on climate change. People who have lived in an area for a long time, and farmers in particular, were people whom Bibi perceived as knowledgeable on climate change. Caili pointed out that lay knowledge might not be scientifically correct, but their experience is real and needs to be taken into consideration:

> "Too often knowledge is seen as…it has to come with a certain type of authority, and I think that is incorrect. Everyone has knowledge and all that knowledge is valid to a point. It doesn't mean it's the *right* knowledge though, but it does mean that it's valid. " (Caili)

Other examples of perceived experts on climate change that were mentioned were, engineers and architects. Njabulo, who cited engineers and architects as experts, has recently taken an interest in renewable energy, and has no previous professional or academic experience with climate change issues. This explains why he views these professions as perceived experts.

Experiences of changing weather patterns

Knowledge of climate change can come from a person's own experiences of changing weather patterns. Nine of the youth claim that they personally have experienced changes in weather patterns. The other six either feel they have not experienced changes, or claim that they are too young and that they cannot be sure whether it is real changes or just their perceptions:

> "I find it difficult to say as a youth, I feel like when I was younger every single afternoon there used to be a thunderstorm in Durban. But I was also young, so I'm not sure how much I trust my memory." (Inger)

The youth who felt they had experienced changes talked about changes in the season patterns and rainfall patterns, unusual temperatures, floods and droughts. Some of the respondents explained that it is hard to know if this is because of climate change or if it is because of variations in natural cycles. However, it was pointed out, even if extreme weather events are not due to climate change it can still create an awareness of it:

> "Having people experience extreme weather events makes them a lot more aware of it [climate change] /…/ people associate all those natural disasters with climate change, which is helpful for the climate change cause…" (Caili)

The majority of the respondents felt that their family and people around them do not talk very much about changing weather patterns. In relation to unusual weather events many of the youth experience that people give brief comments like "Oh, climate change!" without going in to more detail about it. This can indicate a lack of knowledge about climate change, but it is also an understanding that climate change is real and that changes will occur at some point. Njabulo mentions how in rural communities knowing of climate change but not knowing what it really is, can give life to superstitions that misinform people:

> "We're hyping up the situation way too much and people /…/ who have no connection with climate change, will make it an urban myth type thing. So people

who grow up in rural areas will go “Oh, it’s the snake in the sky” or whatever, old stories like that.”

Around half of the youth feel that experiences of extreme weather events and changes in weather patterns are influential for their interest in climate change. It makes climate change feel more real and tangible; something that can inspire you to do more. However, for Sophia it made her feel worried and contributed to a feeling of helplessness.

5.4 THE IMPACT OF COY7

This section outlines the range of impacts that respondents experienced through their attendance of COY7. These include, climate change knowledge, inspiration and motivation, skills, changes to their everyday lives and mobilisation around climate change issues.

Climate change knowledge

About half, or eight, of the respondents claimed that COY7 affected their knowledge of climate change. The new knowledge ranged from a basic understanding of the UNFCCC and COP to more debated topics such as population control. Reevin explained how COY gave him a broader understanding of climate change and related issues, and introduced him to concepts that were new to him. At COY7 he learnt about the huge impact population control can have on the worlds CO_2 emissions, and how debated the topic is:

> “It’s one thing that could change everything. But people don’t like hearing that, and people like the right to chose how many kids they can have, so there’s a whole bunch of social issues with that. That was a good point for me from COY, and that was the first time I really gave though to that.” (Reevin)

Four of the youth mentioned how hearing stories about what other people are doing and how they experience climate change was inspiring and taught them a lot. Case studies such as the tar sands case in Canada and experiences from people living in the Pacific were mentioned. Steven felt that hearing from specific organisations gave him enhanced knowledge: “I got some good first hand information from active organisations.” Njabulo

realised that South Africa were not that far behind the developing world when it comes to climate change work. This both inspired and alarmed him:

> "Whilst South Africa is behind in some respects, we're not that far behind. Which also made me quite sad; I kind of feel first world countries should be way, like astronomically, furtherer than what we are." (Njabulo)

A few of the youth felt that COY7 influenced their attitude towards climate change more than their actual knowledge:

> "It didn't really affect my knowledge of climate change, but it affected my attitude towards it. /…/ All these people [at COY7] are so passionate about finding ways to prevent climate change and reduce carbon emissions; it brought it closer to home. If they can be so passionate and interested about it then there's no reason for me not to attempt to do my bit either." (Caitlin)

Caitlin's experience was shared by five other youth, who felt that seeing other passionate people inspired them to do more. Claire felt that meeting other people was a way to build networks that can facilitate knowledge sharing, both at COY and in the future: "meeting people and actually creating links, if you have a large pool you can always find ideas in it. And you can replicate what other people have found that has worked."

Three of the respondents claimed that they did not really learn anything new about climate change at COY, though this did not mean that they did not enjoy the conference. They found it an inspiring event and a useful place for networking. Sophia expressed some disappointment; she had expected to learn a lot more at COY7 than she did: "I found too many people were coming up with the same message 'We can make a change', and then when asked 'How?' the conversation often ended."

Most important things learnt

Facts

When asked what the most important things that they learnt at COY7 were, many of the youth mentioned facts or information that built on their knowledge of climate change. Some of the youth had learnt things about the structures necessary for the management of climate change, like insight in the UN system and the IYCM. Others mentioned more specific points such as information about case studies like the carbon tax in Australia, the tar sands in Canada and what different NGOs around the globe are doing. Facts and information around renewable energy technology, South Africa's fossil fuel consumption and climate change and health were other things the youth learnt:

> "One thing I really enjoyed was looking at issues of health and climate change. The team that came and spoke were doctors in training. And they were like, what is gonna happen with climate change /…/ and then they linked it with diseases. I thought that was very interesting, because there are already so many diseases that are problems /…/ We're trying to prepare for something that we can't really prepare for." (Inger)

Motivation and inspiration

COY7 seems to have been an eye-opener for many of the youth, in many different ways. Some of the youth mentioned how COY7 made them realise what a big issue climate change is and that this led to a change in their attitude towards it. Two of the respondents felt that COY7 opened their eyes to the big impact small actions can have, and that this encouraged them to do more. For half of the respondents, seeing passionate people who are determined to make a change, was a learning experience they highlighted. Inger reported that COY7 made her realise the "huge machine" that exists around climate change and all the work done by it. Many of the respondents felt inspired by seeing the passion and knowledge of the youth at COY7. They saw the potential in this passion and knowledge, and felt that it needed to be made use of:

> "The youths energy needs to be harnessed. There's a lot of potential among the youth to grab attention and gear up to mobilise communities and countries and people in general, because the youth have a lot of energy. See the youth as an opportunity." (Abigail)

> "The youth can and, I'm hoping and praying, will make a difference. They are extremely passionate and also extremely knowledgeable, I find. Way more knowledgeable than a lot of people in generations directly above us; in terms of the amount of people who are actually in the know and actually know about the subject. That was huge for me, that was a really, really, good experience. " (Njabulo)

Being surrounded by people who share you passion and commitment made some of the youth realise that they were actually part of a big movement and it motivated them to keep on fighting:

> "The passion that it gave me from being involved in that just…for myself I learnt never to give up. Never to stop fighting for what you believe in, although, getting back to the whole thing of… it gets painful for your peers and your friends when they hear you harp on about things. At the end of the day COY7 gave me the passion to, you know, fight for what I believe in." (Brandon)

Although there were many youth who were knowledgeable and provided inspiration and motivation, Njabulo felt that there was a huge gap between those who know a lot about climate change and those who do not know. He saw that people tried to close this gap, but argued that it could be done in a better way:

> "I saw a lot of positive things but I also saw that there's definitely some interactions that we definitely could do a lot better, and I think you know what I'm talking about, a lot of people where coming up with a lot of aggression. Which is good because you're passionate about what you believe in. But you also could be a lot more understanding and try to engage people a lot more in the discussion of what climate

change actually is, instead of just trying to be aggressive and pointing fingers…" (Njabulo)

Skills

Some of the youth reported learning things at COY that were not directly linked to climate change. Networking skills, project management and collaboration were skills the youth reported learning at COY7. Although these skills are not related to climate change, they are useful for the expansion and work of the climate change movement and for the youth's development.

Influence on everyday lives

All the young respondents, except one, reported that COY7 had an influence on their everyday lives. For some of the youth this was smaller changes in the way they went about with their everyday life; Bibi reported having become a vegetarian; Reevin had cut out red meat; and Sophia had not brought bottled water since making a pledge about it at COY. For Steven, COY helped stimulate changes in his life and inspired him to create an energy plan for his house.

Five of the youth reported that COY had given them inspiration and motivation. It rejuvenated interest, provided motivation to stay focused and learn more, and provided a push to get more involved in climate change activities:

> "Personally it gave me such upliftment. You know, being involved with so many people of a similar nature to me. Personally it was just a great fulfilment of my life. It gave me that push…this is what I want to be involved in!" (Brandon)

While Brandon was still looking for a new organisation to get involved in, Claire reported how COY had made her get more involved in Greening UKZN, an organisation she had helped out in before.

A bigger network means that you have more people with knowledge and passion around you, to share ideas and work together with. Four of the respondents mentioned how COY provided them with a growing network of likeminded people that impacted on their lives:

> "Knowing more people who are super involved…it's like what I was saying before about influences, people, getting closer and closer to you. And the more influences around you the harder it is to ignore those influences." (Inger)

Mobilisation

It is clear that COY7 inspired many of the youth to mobilise more around climate change issues. Nine of the respondents reported that their experience at COY had inspired them to mobilise. This took place on many different levels; four of the youth claimed that while they would not get actively involved in an organisation they were now more inclined to support organisations, sign petitions and participate in events. Some, who already were involved in an organisation, felt that COY inspired them to do more. Abigail explained how her experience at COY made her feel that it was more useful to contribute in existing structures, rather than trying to do something new. Realising that you are part of a big movement can be a motivation to do more and influence others to join you:

> "COY7 actually explained to me the beauty of collaboration and partnership and joining a movement which actually is making a lasting contribution, not only in words but in actions as well. /…/ From now on when I think about tackling climate change or climate change impacts, I don't think I can do it alone – I think who I can get along with me in the bandwagon. So that we together can have the most…huge impact around climate change." (Aluwani)

For Delwyn, COY7 provided him with the push to start his own organisation. He explained how he had had the idea before, but all the energy around COY7 had given him more inspiration and he wanted to carry on the momentum from the conference.

Reevin had been thinking of being more actively involved, but had come to realise that his role was different. He wanted to play a role in steering South Africa towards sustainable

development and greener technologies thorough his academic and professional work. Njabulo explained that he supported different organisations, but he felt his most important contribution would be through his work in the renewable energy sector:

> "The forging of a renewable energy sector or job sector, is really, really, vital. For people to understand that its just not about tree huggers and all that, you can be someone who's into corporates and corporate investment and you can make really good money from getting behind something that is green, from getting behind that industry. And that is my way, that I think I wanna get involved."(Njabulo)

Five of the youth felt that COY7 did not inspire them to mobilise around climate change issues. Some of the explanations given to this were that they would rather do things in their personal lives or that they preferred "behind the scene" involvement.

Would the youth revisit COY?

The majority of the youth claimed that they would love to go to COY again if they got the chance. A few of those who had been involved in the organising team pointed out that the wanted to go as participants, so they could participate more in the workshops. From their responses COY is perceived as an inspiring, motivational and empowering event. The youth valued meeting likeminded people from all over the world, and gained a lot of knowledge and information.

Only two of the youth were not sure about going to COY again. Andrew wanted to look at the program first to see what subjects would be dealt with and who would speak. Abigail felt a bit despondent about big conferences and was of the view that there is only so much you can do there:

> "I don't like big conferences, I feel there's this massive waste of time and energy that goes into them. It's an awesome opportunity to meet people, but my interest is more localised effort. /…/ Right now I want to do things in my own neighbourhood, I want to practically walk the talk here, and do more here."

5.5 CONCLUSION

This chapter presents climate change knowledge among youth from Durban based on information from 15 interviews conducted in April and May 2012. The interviews showed that most of the youth had a good understanding of the concept of climate change, what causes climate change and what can be done to address it. All youth but one claimed that their knowledge of climate change influenced them to make changes to their every day lives, indicating that the knowledge leads to commitment. Peers are influential for the youth's interest in climate change, particularly in initiating the youth's interest in climate change, but also as a source of knowledge. However, other people, organisations, university, readings and seminars and conferences have also been influential for the youth's interest and knowledge. It seems like more social settings, which include peers, organisations and other people are the most influential for the youth's interest in climate change; while as sources of information about climate change it is more divided between the more social settings and other more structured influences such as university and reading material.

The youth's participation in COY7 was more influential as something inspiring them to do more rather than as a source of knowledge. However, many of the youth reported having learnt new things at COY7 ranging from knowledge about the UNFCCC and experiences of people affected by climate change to more tacit knowledge around project management and networking. Most of the youth reported being inspired by their experience at COY7, and claimed that the experience had led to them making changes in their lives. COY7 had also inspired many of the youth to mobilise around climate change issues in different ways. These findings will be discussed further in the discussion and conclusion chapter below.

CHAPTER 6: DISCUSSION AND CONCLUSION

6.1 DISCUSSION

This case study sets out to explore climate change knowledge among youth in Durban, with a special focus on the impacts of the seventh Conference of youth on the construction of environmental knowledge. This has been examined in the light of four sub-questions:

1. How do youth in Durban understand climate change?
2. What factors have influenced the youth in committing more actively to climate change issues?
3. What sources and types of information have been influential in informing youth about climate change?
4. What effect did the Conference of Youth have on climate change knowledge and commitment among Durban youth?

This chapter will answer each of these sub-questions in turn, by applying the theories about knowledge to the data collected and presented in the previous chapter.

In regards to sub-question one; explanations by the youth of what climate change is, what causes it and how it can be addressed points to a large influence of explicit knowledge. This is something that is not very surprising given the nature of the issue and how it only to a small degree, can be experienced first hand. However, even if it is codified knowledge, it is possible that the youth might have acquired some of the knowledge though a more tacit setting, at for example COY or another more social and interactive setting. It is possible that some of the knowledge the youth have of climate change is tacit to them, even though it is possible to codify. To some extent the way people talked about climate change and climate change issues, in response to this question and in general in the interviews, were linked to their formal training. However, it also became clear that the youth had a spread of knowledge about climate change that went beyond their training. Everyone seemed to have an understanding of the socioeconomic and natural impacts of climate change and some

respondents with a social science degree revealed a good understanding of the science of climate change.

Sub-question two examines the factors that have influenced the youth's interest in climate change issues. It becomes clear that different types of knowledge sources have influenced the interest of the young people. Both more structured settings like school or university and more social settings like mixing with peers and engaging in organisations are highlighted as important. The variety of channels that has influenced the youth indicates a knowledge-building process in line with Mode II, where not only scientific knowledge is important. This will be examined in more detail in the next paragraph. The importance that peers and other social interactions have had for the youths interest in climate change indicate that these settings provide an environment that facilitates knowledge building and exchange. It is possible that these settings provide a strong sense of trust, a condition that has been proved to make participants speak more freely and ask questions.

Sub-question three studies the sources of information the youth have claimed to be influential to their knowledge of climate change, and which of these that have been the most influential. Both more formalised sources like university and academic articles and social settings such as engaging with people and attending conferences are reported by the youth. The sources of knowledge mentioned the most could be found in both these groups. The groups of sources mentioned the most time were university, different readings, people and seminars and conferences. The way knowledge is acquired from these sources can be different; in the former two it might be mainly through reading, writing and attending lectures; in the latter two it is through debates and discussions where the information flow can go both ways. The majority of the information that the youth claim to have obtained from these sources is explicit knowledge. This is not very surprising given that the youth were asked about sources of *information* about climate change. The young peoples sources of information are derived from Mode II form of knowledge building where different types of knowledge's inform and contribute to a total understanding. It highlights knowledge building as a social process where different knowledge forms and sources are shaping the process.

It is interesting to see that while three youth mentioned organisations as a source of information, no one mentioned it as their *main* source of information. This could be due to many organisations not having education of their members as a focus, but rather focusing on actions, events etc. It might be implied that you know have some basic knowledge or search for information on your own. Participation in an organisation seems to be more important for inspiration than for actual information.

Scientists and academics were what most of the youth perceived as reliable experts on climate change. These provide us with scientific, codified knowledge. This indicates that this type of knowledge is what the youth find the most important when it comes to understanding climate change. Climate change is an issue that is largely understood and examined through scientific discourse so it should not come as a surprise that the youth put weight on this type of information. However, it is interesting that three of the youth mention activists as reliable experts. Activists can have knowledge that is local, from their own experience; embedded, from organisational and civil society work; and codified knowledge. This spread of different types of knowledge can provide an interesting view of climate change issues that inspires the youth. Activists are in general seen as being independent, and not bound by funding with an agenda. This provided the respondents with a sense of trustworthiness. Though activists might be people with a lot of knowledge and possibly also own experience of the effects of climate change, there can be a lot of strong feelings involved, something that could affect the trustworthiness of the information they provide.

Nine of the youth felt that they had experienced changes in weather patterns, and some of the others felt that they were too young to be sure whether the changes were real or just something they felt had changed. However, this points to a reliance on local knowledge among the majority of the youth. They feel there have been changes in the climate, even though there is uncertainty as to whether this is due to natural cycles or an anthropogenic impact. Youth with experience from rural areas mentioned seeing changes here, indicating local knowledge derived from this context. It seems like the local knowledge that the youth

have of climate change is more important as something influencing their commitment to climate change issues than as something providing them with information.

Even though most of the youth felt that the people in their surroundings did not contemplate much on why changes in the weather were occurring, the youth felt that people around them had a general awareness of climate change and climate change was often mentioned in relation to extreme weather events. Njabulo pointed out how too little knowledge of climate change can lead to misconceptions that are not helping people address the issue in the right way. Though there exists local knowledge that makes people realise changes are occurring, they lack the explicit formal knowledge that explains why changes occur and what can be done.

In addition to local knowledge of the situation in Durban, the youth can also be said to have cultural knowledge of COY, the IYCM, and different organisations that they have involved in. The youth can be seen as experts in a field; they have in-depth knowledge of youth activism and youth perceptions of climate change. By examining this knowledge and expertise it is possible to gain a greater understanding of what it is that make youth in Durban take an interest in climate change issues, and also what can be done to make more youth get involved.

In regards to sub-question four, the impact of COY7, many of the respondents talked about the inspiration and motivation they gained from attending COY7 and working together with other people who shared their interest. COY7 created an environment where knowledge sharing where encouraged and where different types of knowledge were valued. There was a non-hierarchical environment at COY7, something that helped facilitate knowledge sharing, as people felt that everyone's contributions were seen as important. However, it is possible that people could feel inferior to other youth who might have more experience from previous COY and COP attendance and engagement in the IYCM, though this have not been examined in detail by this study.

As explained in the theory chapter, heterogeneous groups consisting of both socially connected people and strangers can both facilitate and work against knowledge exchange (Thomas-Hunt, Ogden, and Neale 2003). At COY7 many interactions would be in groups such as these, where there were some people who knew each other and some who did not know anyone. The theory proposes that if a person is the "stranger" in one of these interactions they are more likely to contribute to the knowledge exchange by presenting their personal views. In an interaction where a persons know one or more of the others they are less likely to contribute with new knowledge and more likely to agree and contribute to the knowledge presented by the people they know. The youth are likely to have been in both these types of settings at COY7, and chances are that they learnt the most from settings where they did not know anyone. This, combined with the feeling of trust and the environment facilitating knowledge exchange, would contribute to the youth both sharing their knowledge and acquiring new knowledge at COY7.

The experiences of the young people indicates that COY7 have been important both for their knowledge of climate change and as something inspiring and empowering that has challenged them to do more in their everyday lives. The youth have learnt both explicit facts about climate change and gained more tacit knowledge about the IYCM, networking and project management. It is likely that the youth picked up more embedded or cultural knowledge about the IYCM, COY and COP through their experience; however this was not studied thoroughly enough by this study to say anything substantial about. All youth, but one, stated that their participation in COY7 had influenced them to make changes in their everyday lives, and nine youth claimed that COY7 had inspired them to mobilize around climate change issues. This clearly points to COY7 having an important influence on the youth's commitment to climate change issues. However, it appears that COY7 was not as influential when it comes to provide the youth with knew knowledge of climate change issues, even though many of the youth did acquire new climate change knowledge at COY7.

6.2 CONCLUSION

This case study has examined climate change knowledge among youth in Durban who attended COY7. Primary data was collected through 15 semi-structured face-to-face

interviews conducted in April and May 2012. The youth were all people who had some knowledge and interest in climate change issues from before, and it was therefore not surprising to see that most of the youth presented a good understanding of climate change. Even though there were some weak initial descriptions of the concept, when asked more detailed questions about the causes of climate change and how it needed to be addressed, all of the youth indicated a deeper understanding of the concept. All the youth agreed that the climate change experienced today is caused by human activities, and that efforts to address it are important. Many of the youth felt that everyone should contribute to combat climate change, but the role governments and the global community should play were also highlighted.

The case study revealed the importance of peers as a factor influencing the youth to take an interest in climate change. Almost all the youth explained how their peers had been important for their interest in climate change. However there were other sources that had been important for the youth's interest. The study found that school, university, media, organisations and people were all sources of information that the youth highlighted as influential.

The sources of knowledge about climate change were in many ways similar to the factors influencing commitment. The youth claimed to have learnt about climate change from sources such as school, university, media – including social media, online media and documentaries, interactions with people, and seminars and conferences. The sources that the youths had found to be the most influential were divided between more structured settings like university and things they had read and more social settings like people, seminars and conferences. This shows that while a social setting can be important for initiating interest, more structured settings can be important sources of knowledge. This can be seen in those people the youth perceive to be experts on climate change; a majority of the respondents feel that scientists and academics, who supply explicit, fact based, codified, knowledge, are people they feel are reliable experts that can provide information about climate change issues. There was some proof of local knowledge among the youth; over half of the youth claimed that they personally had experienced changes in weather patterns,

indicating tacit knowledge among the youth. This local experience was something that half of the youth claimed was a factor that influenced their commitment to climate change issues.

Examining the influence of COY7 on the youth, all of the young people claimed that their participation in the conference lead to changes in their everyday lives. This ranged from small changes, such as becoming a vegetarian, to bigger changes like starting an environmental organisation. COY7 inspired nine of the youth to mobilise more actively around climate change issues. In terms of climate change knowledge around half of the youth felt that they had obtained new knowledge at COY7. This indicates that COY7 was more important as a source of inspiration and motivation to do more to address climate change, than as a source of explicit knowledge.

It appears that a combination of social and more structured knowledge settings are beneficial for climate change knowledge and commitment in the study population. While the more structured setting provides hard facts and nuances to the climate change debate, the more social settings can be a way to discuss what you know, get other peoples views and make the knowledge more applicable in their lives. Having people to discuss the issues with is a way to keep the interest alive and keep up to date with the issues. Getting information from a multitude of sources of different types can be a way to get a more diverse and possibly deeper understanding of the issue.

The study has showed that it is important to understand the diversity of sources that can be important in influencing the knowledge and commitment of young people to climate change issues. Even though much can be learnt from university and academic readings, interacting with other people who care about the same thing can be important in turning the knowledge into commitment and actions. The youth are the leaders of tomorrow, and it is important to explore what it is that makes them take an interest in climate change issues. By understanding what influences the youth's interest in climate change it is possible to target actions and interventions that will make more young people care about climate change, something that could lead to changes in society in the long term. This case study

has examined a small group of people and has only been able to examine a few areas of the issue. Further research could be beneficial to get a deeper understanding of the sources of information that influence the youth and what it is that turns having knowledge about an issue into a commitment to address that issue.

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APPENDICES

APPENDIX I: EMAIL: COY PARTICIPANTS FROM DURBAN

Subject: Conference of Youth research project (if you are not from Durban or did not attend COY7, please ignore this email)

Dear COY participant,

My name is Karolina Borg and I am a student studying for my Masters at UKZN. I was part of the organising team behind COY7 and also attended the conference. Seeing all the inspired and passionate youth at COY7 inspired me and I choose to study the conference deeper by doing research on it for my thesis. The topic of my thesis is to explore the environmental knowledge about climate change held by participants from Durban in the seventh Conference of Youth and how this conference impacted on their knowledge. The result of my research will be feed to the organising committee of COY8 and will hopefully help improve future conferences.

My research will consist of two parts; the first part is this email survey, the second part is face-to-face interviews with a smaller number of respondents (if you are willing to participate in an face-to-face interview, just answer "yes" to the final question below). For the survey part I would appreciate if you could give some time to reply to a few questions regarding *your experience* at COY7. This is entirely voluntary and you are free to refuse to answer to any question. You can reply to the questions in the attached word document or in your email. If you have any questions feel free to contact me on this email, coy7study@gmail.com.

Your replies to this survey will be kept strictly confidential and will be available only to myself as the researcher. I would like to use excerpts from your replies as part of the final research report. If you are willing to participate in this survey which of the following do you give consent for?

a. The information you provide to be used in the report
b. Your name, position and organisation to be stated
c. Your position and organisation to be stated but not your name

Survey questions

1. What is your name (only if you stated "b" above)
2. What is your age?
3. What is your race?
4. What is your gender?
5. In what area in Durban do you live?
6. What is your occupation?
    a. Employed
    b. Learner
    c. Tertiary student

    d. Unemployed
    e. Other (please state what)
7. Are you currently involved in any environmental organisation/group etc.? What is the name of this organisation? (if you replied “yes” please proceed to question 8, if “no” please proceed to question 9)
8. If Yes: Tell me more about this.
    a. What is the aim of the organisation?
    b. What made you get involved?
    c. What do you do for this organisation?
    d. How long have you been involved with the organisation?
9. If No:
    a. What are the reasons you are not involved with an organisation?
    b. Would you be interested in getting a list of different organisations in Durban that you could join?
10. COY7 participation:
    a. How did you find out about COY7?
    b. Why did you decide to attend the conference?
11. What first got you interested in the topic of climate change?
12. In your understanding, how would you explain climate change?
13. What would you say has been your major source/s of information about climate change? Give details
14. Other than COY7, have you participated in any knowledge exchange processes regarding climate change (eg workshops, conferences, meetings)? Give details
15. In what way did your participation in the Conference of Youth affect your knowledge of climate change?
16. What were the three most important things you learnt at COY7?
17. Do you have any comments to the organising committee of COY that could help improve the conference?
18. Would you be willing to participate in a longer (approximately an hour) face-to-face interview with me?

Thank you for your cooperation.

Karolina Borg

Master student
School of Built Environment and Development Studies
University of KwaZulu-Natal
Durban

APPENDIX II: INFORMED CONSENT FORM

(To be read out by researcher before the beginning of the interview. One copy of the form to be left with the respondent; one copy to be signed by the respondent and kept by the researcher.)

My name is Karolina Borg (student number 208522071). I am doing research on a project entitled "Changing climates: the effects of the seventh Conference of Youth on climate change knowledge among youth in Durban". The project aims to understand the environmental knowledge about climate change held by participants in the seventh Conference of Youth and how this conference impacted on their knowledge. This project is supervised by Professor Diane Scott and Ms Catherine Sutherland at the School of Built Environment and Development Studies, University of KwaZulu-Natal. I am managing the project and should you have any questions my contact details are:

Contact details:
Cell: 0719598264
Email: karolina_borg@yahoo.se, coy7study@gmail.com or 208522071@stu.ukzn.ac.za

Thank you for agreeing to take part in the project. Before we start I would like to emphasize that:

- your participation is entirely voluntary;
- you are free to refuse to answer any question;
- you are free to withdraw at any time.
- your name will not be revealed unless you give permission

The interview will be kept strictly confidential and will be available only to myself as the researcher. I would like to use excerpts from the interview as part of the final research report. If you are willing to participate in this interview, which of the following do you give consent for?

The information you provide to be used in the report	
Your name, position and organisation to be stated	
Your position and organisation to be stated but not your name	

Please sign this form to show that I have read the contents to you.

---------- (signed) ---------- (date)

---------- (print name)

APPENDIX III: INTERVIEW SCHEDULE: COY7 PARTICIPANTS

My name is Karolina Borg and I am a student studying for my Masters at UKZN. The topic of my thesis is to explore the environmental knowledge about climate change held by participants in the seventh Conference of Youth and how this conference impacted on their knowledge. I would like to ask you some questions about your understanding of climate change, where you have got your knowledge of climate change from, and your involvement in environmental movements and COY7.

Thank you for agreeing to take part in the project. Before we start I would like to emphasize that:

- your participation is entirely voluntary;
- you are free to refuse to answer any question;
- you are free to withdraw at any time.
- your name will not be revealed unless you give permission

Section A: personal profile

1. What is your age?
2. What is your race?
3. What is your gender?
4. In what area in Durban do you live?
5. What do you do? (work, school)
6. Are you currently involved in any environmental organisation/group etc.?
    - If Yes: Tell me more about this. (What made you get involved? What organisation? What do you do for this organisation? How long have you been involved with the organisation ...)
    - If No: Would you be interested in getting involved? Why?

Section B: Understanding of climate change (objective 1)

7. How would you explain climate change?
8. Do you find it a difficult concept to explain? Why?
9. What do you believe is the major cause of climate change?
10. What do you feel needs to be done to combat climate change? Who is responsible for bringing about change?
11. What do you understand by the terms ‘mitigation’ and ‘adaptation’ in relation to climate change?
12. How does your knowledge of climate change influence your everyday life?
13. How do you think climate change will affect the world in the future?
14. Have you any knowledge of what is being done to in your city of Durban to mitigate or adapt to climate change?

Section C: Factors influencing commitment (objective 2)

15. What first got you interested in the topic of climate change?
16. Did any school subjects/university courses influence your interest in climate change?
17. Have specific teachers/persons stimulated your interest in climate change?
18. Do you belong to an organisation that has stimulated your interest?

19. To what extent has the media stimulated your interest in climate change? Give examples?
20. To what extent have your peers been influential in stimulating your interest in climate change? Who in particular?
21. Do you feel young people should take an interest in climate change? Why?

Section D: Types of information (objective 3)

22. Have you personally experienced change in weather patterns – explain your experiences
    a. Why do you think these changes occur?
    b. How does your local community/friends explain the changes?
    c. How important is this knowledge derived from your experience in stimulating your interest?
23. What information did/have you received at school about climate change?
24. What information did/have you received at university about climate change?
25. How did you link this with your personal experiences?
26. Have you read any materials on climate change, what were they and how did they explain climate change?
27. Have you received information about climate change from other sources? What type of information was this?
28. What type of information have you and your family received from the municipality about climate change?
29. What are the *main messages* coming across in all this information you have received?
30. In addition to people's knowledge that they have of climate change that is based on their own experiences of this, from your perspective, who are the reliable experts who can inform us about climate change?

Section E: Sources of information (objective 4) (order and classify the information)

31. List and explain the main sources of information that you have received chronologically. *(How did your knowledge build?)*
32. Which source/s do you feel have been the most influential?
33. What main concepts and ideas about climate change did you learn from this source/these sources?

Section F: Impact of COY7 (objective 5)

34. How did your participation in the Conference of Youth affect your knowledge of climate change?
35. What do you feel was the three most important things you learnt at COY7?
36. Do you think your participation in COY7 has lead to any changes in your everyday life?
37. To what extent has your experience of COY7 prompted you to join with others to mobilise around climate change issues? i.e. join an organisation/start an organisation? Participate in climate change events etc.
38. Would you go to COY again if you got the chance? (why/why not?)
39. What recommendations would you make to the organisers that could help them in the transfer of knowledge about climate change?

APPENDIX IV: DESCRIPTION OF SAMPLE

Date of interview	Respondent name	Age	Gender	Race?	Area in Durban where living	Occupation	Involved in environmental organisation
26/04/12	Caitlin	25	Female	White	Berea	Tertiary student (English literature)	No
02/05/12	Steven	26	Male	White	Glenwood	Project coordinator	No
03/05/12	Andrew*	25	Male	White	Glenwood	Development economist	No
04/05/12	Delwyn	27	Male	Asian	Pinetown	Community scholar at Centre for Civil Society	Yes
09/05/12	Inger	25	Female	White	Glenwood	Working for NGO	No
14/05/12	Marita	24	Female	White	Morningside	Research associate/Tertiary student (Development Studies)	No
15/05/12	Sophia	21	Female	White	Berea	Tertiary student (Cognitive Science)	No
15/05/12	Aluwani	30	Male	African	Musgrave	Lecturer (Biology)/Tertiary student (Biotechnology)	Yes
16/05/12	Brandon	24	Male	White	South Durban/Bluff	Bar man	No
21/05/12	Abigail	26	Female	White	Glenwood	Manage KZN Sustainable Energy Forum/Consultant	Yes
23/05/12	Caili	25	Female	White	Glenwood	Researcher at eThekwini Economic Development Unit	No
24/05/12	Bibi*	36**	Female	African	Newlands East	Tertiary student (Development Studies)	No
25/05/12	Claire*	21	Female	Other	Berea	Tertiary student (Cognitive Science)/ Facilitator for head injury cases	Yes
28/05/12	Njabulo	30	Male	African	Durban North	Regional Coordinator for marketing agency	No (Volunteers for Greenpeace)
30/05/12	Reevin	25	Male	Asian	Durban North	Tertiary student (Environmental Engineering)	No (Volunteers for WWF)

* Pseudonyms

** 35 at the time of COY