

URBAN TRANSFORMATION AT A LOCAL LEVEL?

THE CASE OF DURBAN'S 100 RESILIENT CITIES CAMPAIGN

Submitted in fulfilment of the requirements of the
degree of Doctor of Philosophy in Management Sciences
in the Faculty of Management Sciences at the Durban University of Technology

Tilmann Felix Feltes

November 2020

Supervisor: Professor Monique Michal Marks (PhD)

Co-Supervisor: Professor Nirmala Dorasamy (PhD)



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Supervisor: Professor Monique Michal Marks

Signature:

Date: 30/04/2021

Co-Supervisor: Professor Nirmala Dorasamy

Signature:

Date: 30/04/2021

Abstract

This thesis aims to explore the interdependencies between the concepts of urban transformation and urban resilience, enriched by an interrogation of the practical use of these concepts at a local level. It discusses the problems in finding conceptual clarity and in implementing these concepts in the city of Durban. Transformative and resilient urban management is viewed as the key driver for sustainable solutions to urbanisation challenges such as socio-economic pressures and environmental degradation. The important role cities play in this process has recently been highlighted by the United Nations' Sustainable Development Goal (SDG) No. 11, which is devoted to making cities "inclusive, safe, resilient and sustainable". The concepts of urban transformation and urban resilience are increasingly used in academic literature as well by practitioners, but there is little academic literature available about the interrelation and interdependency of these two new concepts. This research explores what exactly is meant by the "new paradigm" of urban transformation and what role the concept of urban resilience plays within it. To achieve this aim, a theoretical research into the current application of the two concepts is being conducted and enriched by a practical interrogation of the use of the two concepts at a local level. Here, the city of Durban and its 100 Resilient Cities project was selected as an African city to explore and interrogate the municipality's aim to activate a process of urban transformation with this project. The research includes primarily an intensive literature-review, a document analysis of current approaches and of given path-dependencies, and new concepts in the urban development debate. These findings are interrogated against the outline and the implementation of the 100 Resilient Cities campaign in Durban. After a detailed documentation of the implementation of the project, additional interviews conducted with experts in the field contribute to the findings and analysis of the data. The research recommends new governance models for cities, given their emerging political power. It shows that "resilient" approaches are needed for any urban transformation process and identifies the benefits of city networks and international exchange in this context. With its findings, the research aims to create new knowledge, for academia and practitioners concurrently, by providing conceptual clarity about the interdependencies between the concept of urban transformation and the concept of urban resilience, and its practical meaning within a concrete project context in a very large city in South Africa. This knowledge feeds into the emerging and currently developing academic literature and policy debates.

Declaration

I hereby declare that the thesis submitted for the degree of Doctor of Philosophy in Management Sciences in the Faculty of Management Sciences, Department for Public Management and Economics at the Durban University of Technology is my original work and has not been submitted to any other institution. I further declare that all sources cited or quoted are indicated and acknowledged in the bibliography.

Tilman Felix Feltes

Student No: 21451826

Dedication

This PhD is dedicated to the people of Durban. Their diverse society, culture and history fascinated me right from the start. Without them I would not have started this interesting journey.

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With gratitude and appreciation, I would like to acknowledge everybody who encouraged and supported me throughout the completion of this thesis. Firstly, my sincere gratitude goes to my supervisor, Professor Monique Marks. I would like to thank her for her dedication, guidance, feedback, encouragement and provocative thoughts. Her expertise and trust helped me to proceed in spite of many challenges and her constructive advice improved the quality of my work and academic growth immensely. Her endless patience and unrelenting focus were commendable. I would also like to thank my co-supervisor, Professor Nirmala Dorasamy, for her academic input and assistance. Despite the fact that I found myself working in between two faculties, her door was always open.

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On the home front I would like to express my heartfelt thanks and appreciation to my parents and my wife. I would like to thank my wife for putting up with my frustrations and irritations. She introduced me to South African society and culture, and its special way of life and thinking. My parents always supported me unconditionally, against all odds, and made it possible for me to go my own way. A very special thank you also goes to my grandmother. Thank you all for your support and your constant encouragement!

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List of abbreviations

AAPS	Association of African Planning Schools
ACC	African Centre for Cities
AfDB	African Development Bank
ANC	African National Congress
ARP	Alexandra Renewal Project
AU	African Union
BNG	Breaking New Ground Policy
BRT	Bus Rapid Transit System
CBO	Community-Based Organisations
CDE	Centre for Development and Enterprise
CIA	Central Intelligence Agency
COP	Conference of the Parties
CPC	City Planning Committee
CRF	City Resilience Framework
CRO	Chief Resilience Officer
C40	Cities Climate Leadership Group
DDP	Democracy Development Program
DFID	Department for International Development of the United Kingdom
DUT	Durban University of Technology
ECOWAS	Economic Community of West African States
EMA	eThekweni Municipal Area
EPCDP	eThekweni Environmental Planning and Climate Protection Department
GDP	Gross Domestic Product
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit / German Corporation for International Cooperation
G20	Group of Twenty
HABITAT III	United Nations Conference on Housing and Sustainable Urban Development
HDI	Human Development Index
HSRC	Human Sciences Research Council

IASS	Institute for Advanced Sustainability Studies
ICLEI	Local Governments for Sustainability
IDP	Integrated Development Plan
IEA	International Energy Agency
IIED	International Institute for Environment and Development
IIHS	Indian Institute for Human Settlements
IMF	International Monetary Fund
IOM	International Organization for Migration
IPCC	Intergovernmental Panel on Climate Change
IRP	Integrated Resource Planning
ISS	Institute for Security Studies
ITB	Ingonyama Trust Board
ITRUMP	Inner City Thekwini Regeneration and Urban Management Programme
KAS	Konrad-Adenauer-Stiftung e.V.
KfW	Kreditanstalt für Wiederaufbau
KZN	KwaZulu-Natal
LDC	Least Developed Countries
MDG	Millennium Development Goals
MILE	eThekwini Municipal Institute for Learning
MMP	Medellín Master Plan
NDC	Nationally Determined Contributions
NGO	Non-governmental Organisations
NUA	New Urban Agenda (Quito Declaration on Sustainable Cities and Human Settlements for All)
OECD	Organisation for Economic Co-Operation and Development
PRA	Preliminary Resilience Assessment
PUI	Proyectos Urbanos Integral
RBO	Resilience Building Option
RDP	Reconstruction and Development Programme
SACN	South African Cities Network
SADC	South African Development Community

SAIIA	South African Institute for International Affairs
SAIIR	South African Institute for Race Relations
SAPS	South African Police Service
SDCEA	South Durban Community Environmental Alliance
SDG	Sustainable Development Goals
SDSN	Sustainable Development Solutions Network
SER	Socio-Ecological Relations approach
SES	Socio-Ecological Systems approach
SONA	State of the Nation address
UCLG	United Cities and Local Governments
UDL	Urban Development Line
UKZN	University of KwaZulu-Natal
UN	United Nations
UNCED	United Nations Conference on Environment and Development
UNCEPAL	United Nations Economic Commission for Latin America and the Caribbean
UNCSD	United Nations Conference on Sustainable Development
UNDESA	United Nations Department of Economic and Social Affairs
UNECA	United Nations Economic Commission for Africa
UNEP	United Nations Environmental Programme
UNFPA	United Nations Population Fund
UNHCR	United Nations High Commissioner for Refugees
UNICEF	United Nations Children's Fund
UNISDR	United Nations Office for Disaster Risk Reduction
UN-Habitat	United Nations Human Settlements Programme
USAID	United States Agency for International Development
VPUU	Violence Prevention through Urban Upgrading
WBGU	Wissenschaftlicher Beirat der Bundesregierung Globale Umweltveränderungen / German Advisory Council on Global Change
WSSD	World Summit on Sustainable Development
WTO	World Trade Organisation
100RC	100 Resilient Cities

Chapter 1: Introduction and context

1.1 Research aim

The 21st century will become known as the century of cities. By 2050, the urban population of Africa will have tripled¹, the number of African megacities will have quintupled² and the majority of urban residents will be young people (UN DESA 2018). For some, these are the most important challenges surrounding development in Africa. For this reason, amongst others, sustainable urbanisation policies have become a priority for politicians, international organisations and think-tanks. Resilient and transformative urban management is globally viewed as the key driver for sustainable solutions to the challenges of rapid urbanisation (Patterson et al. 2016; WBGU 2016; African Policy Circle 2019). The important role that cities could play in development has been emphasised by the United Nation's Sustainable Development Goals (SDG), here no. 11, which calls cities to be “inclusive, safe, resilient and sustainable”. Parallel to this, the new but broad concept of “urban transformation” is developing and exceeds the scope of existing concepts such as integrated urban development. Urban transformation is being proclaimed as a “new paradigm” (Stockmeyer 2011) which stands for “a new understanding of processes of urban change which require systemic changes of infrastructure, regulatory and lifestyle regimes, and a new cooperative system amongst politics, society, economics and academia” (WBGU 2011: 1). The concept “urban resilience” has been inherited under urban transformation and is nowadays defined as much more than an ecological concept, but rather as a precondition for urban transformation (Sassen 2010: 13; Edwards and Wiseman 2011: 185).

This thesis aims to explore what is meant by “urban transformation” globally, on the African continent and specifically in Durban, and what role “urban resilience” can play. To achieve this aim, research into the two concepts is being conducted, enriched by an interrogation of the practical use of the concepts at a local level using the 100 Resilient Cities project³ in Durban as an explorative lens.

¹ Estimated urban population mid-year (in thousands): 2015=491.531; 2030=824.014; 2050=1.488,920 (UN DESA 2018).

² Megacities have a population of 10 million inhabitants or more. At the moment these are Lagos, Cairo and Kinshasa. In 2030 Johannesburg, Luanda and Dar Es Salaam as well will grow to more than 10 million inhabitants, in 2040 Abidjan and Nairobi, in 2050 Addis Ababa, Bamako, Ouagadougou, Dakar, Ibadan and Kano will follow (Institute for Security Studies 2016: 10). In 2100, the three largest cities of the world will be the African cities of Lagos, Kinshasa and Dar Es Salaam (Hoornweg and Pope 2014: 9).

³ Officially branded as the 100 Resilient Cities campaign by the Rockefeller Foundation. In this study, the term “campaign” is used for the overall concept and the term “project” for the implementation of the campaign in Durban.

The thesis aims to make a contribution to the academic literature on “urban transformation” and its interdependencies with the concept of “urban resilience”. As an add-on to extensive qualitative desk-top research, the 100 Resilient Cities project in Durban is identified as case study to explore this connection at a local level, since one of the aims of the project is to activate a process with the end goal being urban transformation. The 100 Resilient Cities project therefore serves as a case to explore what urban resilience really means in a local context and how it can be connected with a defined urban transformation agenda.

The study offers an intensive literature review plus a documentary analysis of current approaches and new concepts in the urban development debate. The findings were interrogated against the outline and implementation of the 100 Resilient Cities project in Durban. After a detailed documentation of the project, interviewed experts add to the findings and analysis. Experts were defined as people who are either professionals working in the city administration of Durban or scholars from the academic fields of urban management or urban development.

Furthermore, in recent years a geo-political call has taken place in academia demanding new approaches which do not originate from the global north (Healey 2013; Parnell 2016). There has been a serious attempt to interrogate the dominant framing of resilience which has largely been conceptualised by academics from the north and is specifically based on practices and experiences of cities in the north. Ziervogel et al. (2017) thus call for a much deeper and more critical engagement with resilience in the global south, with a focus on African cities. This thesis supports this approach since it identifies constructions of resilience in Durban, which are relevant and meaningful, to different socio-political and economic contexts. It interrogates resilience as a step towards urban transformation that considers “locally oriented and endogenous processes, knowledge and norms” (Ziervogel et al. 2017). There is an urgent need for knowledge creation on how policymakers in developing and emerging countries can best engage with these processes. As this thesis includes findings by academics from Durban (as part of the global south), it will therefore contribute to this paradigm shift and will feed into an emerging academic and policy debate, currently underway, contributing to theory building through assessing existing theoretical debates.

There is always potential in social research for a confusion between “real world” problems (e.g. in policy and politicians on one side, in practice and citizens on the other side) and knowledge problems. Being aware of this, the study confronts the theoretical aspects and the knowledge problems related to the 100 Resilient Cities campaign in general and especially in Durban, with view of experts, working within the administration of the city of Durban on one the side and academic experts mainly from Durban universities on the other side.

This design has been chosen to get an idea of the problems of citizens (or better: problems acknowledged by citizens) and the problems of the municipality in Durban (or again: problems acknowledged by members of the municipality). This confrontation can help to understand whether the aims of the 100 Resilient Cities project fit for Durban as a city (institutional aspect) and for the people living in Durban (individual aspect) and whether there is a difference between these aims. The research also aims to create new knowledge, for academia and practitioners concurrently, by providing conceptual clarity about the interdependencies between the concept of urban transformation and the concept of urban resilience and its practical meaning within a concrete project context in a very large city in South Africa.

1.2 Background to the study

The author worked for different international and local development agencies and developed an interest in how internationally developed projects are locally implemented and especially how their underlying theoretical concepts are interpreted on the ground. Being a political scientist (M.A.) and human geographer (B.A.) who worked, amongst others, with GIZ headquarters in Germany and later with GIZ South Africa, the author had the chance to see how urban planning and urban development can be guided and steered by conceptualised urban governance policies. After working with a local Durban NGO, the Democracy Development Programme (DDP), and experiencing their participatory local project planning whilst lecturing at DUT, the author had the chance to observe the first steps of the 100 Resilient Cities project in Durban during several stakeholder meetings. After engaging with the underlying theoretical concept of the project, the author became fascinated with executing more academic research about the two new exciting concepts of urban transformation and urban resilience that were introduced at the beginning of the project.

The first contact of the author with the topic goes back to 2013, when the Sustainable Development Solutions Network (SDSN), a global advisory council for the United Nations, published a paper called “The urban opportunity: enabling transformative and sustainable development” (SDSN 2013) as important background to the global post-2015 development agenda. In this paper, researchers and practitioners from various countries, including Edgar Pieterse and Debra Roberts from South Africa, highlight the importance of urban transformation in reaching global development goals, bearing in mind the current global trends of urbanisation.

This thesis makes use of this publication as an entry point for the exploration of the emerging concept of urban transformation. Several literature sources (Rockström et al. 2009; Raworth 2012; Bai et al. 2015), as well as position papers from international organisations such as the global cities network

Metropolis (2011), UN-Habitat (2009) and IIED (2006) make it clear that a multi-sectoral and resilient agenda in urban management, accompanied by a common political vision, is needed to trigger urban transformation processes in a city. The important role cities can play in development has also recently been emphasised by United Nations Sustainable Development Goal (SDG) No. 11 that is aimed at making cities “inclusive, safe, resilient and sustainable”. The need for urban transformation as “the only sustainable development path for cities” is described in the UN-Habitat report “World Cities 2016” (UN-Habitat 2016) as well in the report of the *German Advisory Council on Global Change (Wissenschaftlicher Beirat der Bundesregierung Globale Umweltveränderungen, WBGU)* in its 2016 report for the German G20 presidency, titled “Humanity on the move: unlocking the transformative power of cities” (WBGU 2016).

Despite receiving more scholarly attention in the last decade, the theoretical governance and political aspects of urban transformations remain underdeveloped (Patterson et al. 2016; Pelling 2011). Even though much more research on sustainable cities has been published in the last few years, the academic understanding of the processes and factors that make cities resilient is still not clear (The Resilience Alliance 2007: 7).

General academic research in the broader field of sustainability transformation is growing across interdisciplinary perspectives. For example, sustainability transformations are explored in diverse fields of study such as energy systems (Loorbach and Rotmans 2010; WBGU 2011), water and ecosystems (Pahl-Wostl et al. 2010; Ferguson et al. 2013), food systems (Vermeulen et al. 2013; Gliessman 2015), urban infrastructure and logistics systems (McCormick et al. 2013; Revi et al. 2014) and green jobs (Fischer-Kowalski et al. 2012).

A number of academic approaches to conceptualising transformation towards sustainability have been developed, including socio-technical transitions (e.g. Geels 2002; Geels and Schot 2007), transitions management (Kemp et al. 2007; Loorbach 2009), social-ecological transformations (e.g. Olsson et al. 2006, 2014; Westley et al. 2011), transformative pathways to sustainability (e.g. Leach et al. 2012, 2013; Stirling 2014) and transformative adaptation (e.g. Pelling 2011; O’Brien and Selboe 2015). Yet even though the necessity of transformative processes has been generally approved, research focussing on the political and societal shaping of these processes were only starting recently (Patterson et al. 2016; Pelling 2011).

The concept of urban transformation is still emerging. Several conferences were held on the subject, and the concept is strongly embedded in current debates on the post-2015 Millennium Development Goals. Cities are now widely recognised as the most important role players in addressing national and

global challenges like migration, poverty, climate change, energy insufficiency or new mobility concepts, participation and wellbeing. According to the UN DESA (2012), Southern African cities are currently also dealing with huge urbanisation processes which will escalate in the next few years. Despite the need for cities to be more responsive and strategic, Parnell and Pieterse (2014: 15) argue that within the Southern African region there is insufficient urgency in responding to these challenges. Nor, they argue, is much attention being given by national government officials to the opportunities associated with the growth of African cities.

Saskia Sassen, well-known for her work around the so called “global city”, submits that cities are facing the consequences of global changes, whether these are migration, climate change or economic structural changes. Cities, she argues, are change-agents and thus the key to transformation (Sassen 2010: 13). This new vision draws on the work of scholars like David Satterthwaite and David Dodman (2013), Edgar Pieterse (2014), Saskia Sassen (2010) as well as the work of forward-looking practitioners like the former mayor of Bogotá, Antonio Moccus. In May 2013, the UN Sustainable Development Solutions Network, in a paper titled called “The Urban Opportunity: Enabling Transformative and Sustainable Development” (SDSN 2013) adopted some of their positions as important background to the High-Level Panel on the Post-2015 Development Agenda. In the paper, researchers from various countries highlighted the importance of urban transformation for reaching global development goals.

McKinsey and Partner (2013), the global city network Metropolis (2010) and UN-Habitat (2010) have already indicated in their research papers that (good) urban governance plays an important role in regulating and triggering urban transformation processes. Tim Campbell (2010) submits that it is collective learning through networks (of individuals, organisations and think-tanks) which leads to transformational change. In his book “Beyond Smart Cities. How Cities Network, Learn and Innovate” (Ibid.) he discusses examples of several cities around the globe which have achieved important transformations, and where networks are already operating and working together to foster innovative solutions for urban planning. As the Institute for Advanced Sustainability Studies (IASS 2011) states in their report, “The Quest for Governance of Sustainable Development”, urban management is key in macro change processes. Cities in the Southern African region are likely to become significant spaces where key social and economic problems will have to be addressed for sustainable solutions. Here, it is city managers and their teams who will be mainly responsible for developing and implementing urban transformation strategies. An example of such an urban transformation strategy is the three-year 100 Resilient Cities project in Durban, and the thesis will review whether and which city officials were involved in this strategy, and what the results were.

The COP21-meeting in Paris (December 2015) put forward in the strongest terms possible, that “cities are catalysts for change”. This view is also reflected in the conference output documentation of HABITAT III, entitled “The New Urban Agenda” from October 2016. Following the 2016 outcome document, African cities will become the global focus of urban development in the next few decades, because they have the highest urbanisation growth rates worldwide.

Durban is one of the biggest cities in Southern Africa and has a huge demand for progressive and sustainable urban development strategies because of its apartheid spatial legacy (Christopher 2001) as well as its increasing urbanisation rates. At the end of 2017, the city of Durban⁴, with financial and technical support from the New York-based philanthropic Rockefeller Foundation, completed a three-year project, the 100 Resilient Cities project, to address some of the abovementioned urban challenges. The city’s self-proclaimed goal was to use the campaign to activate a process of urban transformation in Durban. The campaign is a global flagship project that can contribute to tackle urban challenges. It is also relevant in the sense that it could provide answers to what resilience means on the local level. The author monitored and documented all the steps of the campaign from 2014 to 2017 as part of this thesis (see chapter 6).

1.3 Rationale

Huge challenges, as well as new chances and opportunities, accompany urbanisation processes in cities (SAIIA 2017). The former UN-General Secretary Ban Ki-Moon highlighted the urgency and importance of cities with the following statement in 2012: “Our struggle for global sustainability will be won or lost in cities” (UN Press 2012). African cities have huge potential to provide sustainable solutions to reach global development goals like minimising inequality, improving service delivery and boosting economies due to possible positive effects of urbanisation (ISS 2016). To reach these goals, current urban development strategies must be brought in line with new urbanisation challenges and new urban development policies must be invented.

If new cities are to be built according to the resource- and emissions-intensive concepts used in the last two centuries, we would find ourselves in conflict with planetary boundaries (WBGU 2016: 8). Therefore, according to the WBGU (2016: 8), a renowned consortium of high-ranked scholars and academics who advise the German government in international politics, conventional worldwide urbanisation processes must be terminated.

⁴ In this thesis, Durban stands as a synonym for eThekweni Municipality.

As we heard from Parnell and Pieterse (2014: 15), there is currently insufficient urgency amongst city officials to respond to challenges and opportunities associated with African cities, but at the same time African cities present a different and exclusive opportunity to advance the urban development debate at the global level (Verweij et al. 2006: 22). As the author furthermore points out, urban problems are complex and require unconventional solutions reflected in creative policies that speak to different perspectives and strategies.

The city of Durban represents a particularly valuable site to explore the development of the concept of urban resilience due to its combination of socio-economic and environmental pressures. It is the combination of rising climate change impacts, minimal economic growth, a large informal sector, inequality and poverty, weak citizen participation in decision making, high levels of social capital, already existing resilience and adaptation plans and a dual governance system which make the problem of transformation so complex and difficult.

What takes place in Durban, and in Africa more generally, must be viewed in the context of global trends, because the concepts of urban transformation and urban resilience guide urban agendas worldwide. Yet, what exactly these new buzzwords mean is unclear (Sanchez et. al. 2016: 881; UN-Habitat 2017), as is how they can be adapted and implemented on local levels. It is for this reason that one of the key objectives of the thesis is to provide conceptual clarity of the interdependence of the two terms of urban transformation and urban resilience.

In making sense of the theoretical and programmatic terms, the thesis refers to the 100 Resilient Cities campaign by the Rockefeller Foundation in Durban. The rationale for this focus is that the 100 Resilient Cities project itself aims to use urban resilience to trigger urban transformation processes. The Rockefeller Foundation, working in partnership with academics and local governments, is one of the leading organisations to have started to think seriously about how resilience applies to future urban challenges. Durban was one of the first 100 selected cities in which the foundation's 100 Resilient Cities campaign was piloted.

In studying the theoretical conceptualisation and the project in Durban, the thesis explores local government initiatives as an anchor point and “driver of change” in the broader governance context. The argument for this is twofold: First, although academic research on urban transformation and resilience has increased, there is still little focus on the interdependencies and the practical implementation of these holistic and systemic approaches (National Research Council 2006; Coppola 2006). Second, as some authors have identified, a research gap exists in the integration of local culture and knowledge in resilience and transformation approaches (Bankoff et al. 2015: 2; Cannon 2015: 289).

1.4 Problem statement and research objectives

Currently, there is a large debate on the topic of urbanisation in Africa amongst European and African scholars, and as well amongst development practitioners and politicians. Academic concepts such as urban transformation and urban resilience are in the spotlight, often discussed and used by development practitioners without knowledge of the original meaning and how the concepts relate to each other. As already mentioned above, the concepts guide urban agendas worldwide yet what these buzzwords exactly mean is unclear (Sanchez et. al. 2016: 881; UN-Habitat 2017), as is how they can be adapted and implemented on local levels.

The specific research questions are:

1. How is the concept of urban transformation understood globally and what are the interdependencies with the concept of urban resilience?
2. What does urban resilience mean in the local context of the 100 Resilient Cities project in Durban?
3. How does a conceptualisation of resilience in the global south could look like?

The thesis will contribute to this knowledge gap by developing conceptual clarity about the two concepts and analyse how these two concepts can be used for concrete project implementation on the ground in a city of the global south. In doing so, this thesis will not promote a one-sided pessimistic or optimistic view, as is often the case in the current debate on urbanisation in Africa, rather it will try to make a meaningful contribution to the objectification of the matter and add more clarity for further scientific research in this field. In the end, the outcome of the research should also benefit not only the academia with this new conceptualisation of the two concepts but as well development practitioners, international foundations, politicians and development agencies, which could draw on the research's findings for their conceptualisation of new urban transformation projects. The thesis also addresses another knowledge problem. On the one hand, significant general urban research is conducted (mostly by northern international scholars), which deals with the theoretical aspects of mostly very similar international development projects on urban transformation. On the other hand, much research is done (mostly by local, national scholars) about the practical implementations of urban transformation in cities in the south. What is new in this thesis is the combination of both perspectives. Additionally, there is value in creating new knowledge about the link between internationally developed blueprints and their local implementation in very different settings. To date, the Resilient Cities framework developed by the Rockefeller Foundation has not been tested in the South African urban context. The study interrogates how the project in Durban make use of the Resilient Cities campaign

framework, and which projects are implemented with the aim to trigger sustainable urban transformation processes. The Rockefeller Foundations Resilient Cities framework and general concept of urban transformation will be analysed in detail and questioned against the local conditions and framework of the city of Durban.

The following three hypotheses will guide the argument in the thesis:

1. The 100 Resilient Cities campaign is not designed for cities of the global south.
2. Urban transformation can only be achieved with urban resilience as a starting point.
3. The concepts of urban transformation and urban resilience are only successful if adapted to the local context and with participation of local stakeholders and citizens.

The thesis comes in this sense timely that now global urban development agendas are setting new paths. Urban issues are becoming more important than ever before as we can see from the importance of the topic being included in forums such as the United Nations Framework Convention on Climate Change and through the push to achieve SDG 11 despite former scepticism of politicians and academics that an urban SDG will become reality. This research is therefore well-timed to interrogate the linkages between current global development agendas and implementation processes on the ground.

1.5 Methodology

This research is primarily a theoretical desktop study, using the case of the 100 Resilient Cities project as a lens to focus on the research questions. The main aim is to develop – with the example of Durban - clarity about what urban transformation means in the global and in the African context, and about the role that local government can play in achieving “good” urban transformation on the local level. In doing so, the thesis aims to make a contribution to the literature on “urban transformation” and the inherent concept of “urban resilience”. To achieve this, the current internationally adapted theoretical scope of urban transformation was explored and distinguished from more historical and localised understandings of urban transformation. An in-depth literature analysis of different concepts of urban resilience and urban transformation was done, literature was examined with focus on papers and documents from established international research collaborations and networks. International conferences and conference papers were also of major interest as these conferences are forums for up-to-date exchanges about this emerging concept.

Even though the term “governance” includes several other stakeholders (e.g. private sector and civil society), this research focused on local government as the core area from which concepts and visions

for urban planning and urban management have to originate and be developed. Government is viewed as the primary actor. Governance systems are always plural and include many different stakeholders but it is crucial that the role of local government is generally understood as an “anchor” which is key to urban transformation processes (Howlett and Ramesh 2017). Furthermore, other stakeholders like “private sector” or “civil society” are always difficult to be determined, and even more difficult to be researched. Local government is the focus point of all activities in a city, providing financial and personal resources for these activities and (usually) backed by democratic elections and decisions.

The empirical component of the thesis focuses specifically on the Rockefeller Foundation’s 100 Resilient Cities campaign and its aim to use the concept of urban resilience as a step towards urban transformation in Durban. It interrogates the impact and the effectiveness of existing interpretations and implementation of urban transformation and urban resilience concepts in the city of Durban. The contribution to the overall thesis with this project is to gain knowledge about the do’s and don’ts regarding the implementation of transformative and resilient urban development projects. Where are the stumbling stones? How is the project evaluated and monitored?

In qualitative research design, Leedy and Ormrod (2005:133) suggest a combination of theoretical desktop research combined with empirical research to get a complete understanding of the phenomenon a scholar is studying. According to Duminy et al. (2014: 193), a good case pays close attention to reality and focuses on the details of events as they actually happen. Given this close attention to empirical detail and process, case study research is eminently suited to the analysis of complex causality, material and power relations (Duminy et al. 2014: 193). Interviews with experts and key informants from the municipality, academia and civil-society were conducted (see chapter 2 for the methodology of the interviews) to gain deeper insights into contested concepts and practices, and to cross-check the observation and analysis of the author. Therefore, the study is not meant as empirical study in a narrow sense. The interviews are included to show how members of the cities administration on one side, and academics on the other side assess the process of implementing the 100 Resilient Cities project in Durban.

Because of the blurry debate of the concepts of urban transformation and urban resilience, a detailed discussion about past and current definitions of the concepts is conducted in chapter 5. It will be examined that governance systems are always plural and include many different stakeholders but the role of local government is key to all urban transformation processes (Howlett and Ramesh 2017).

1.6 Structure of the chapters

After the methodology of the research is presented in detail in chapter 2, chapter 3 is dedicated to the conceptual framework of the thesis. Titled “global rethinkings on urbanisation”, it sets the scene for the rest of the dissertation. It is a framing chapter that examines global debates around the shifting of urbanisation from a “collective evil to a collective good” (World Bank 2016: 4), and connects the challenges of urbanisation with a global agenda. It shows from the debate around the post-2015-Millennium Development Goals (MDGs) to the Sustainable Development Goals (SDGs) and the New Urban Agenda (NUA) from HABITAT III that urban issues matter. The analytical sub-chapters illustrate transformative processes of urban development in the global development agenda and that it is cities which can actively decide on their own path dependencies. The second part of the chapter approaches the concept of urban transformation. Here, the chapter reviews current global urbanisation reports and introduces leading academic networks and organisations in this field, such as the Sustainable Development Solutions Network (SDSN). It shows how the concept of urban transformation derived from policy and academic debates on urbanisation.

Chapter 4 consists of a collection of data, examples and ideas which show different facets and consequences of rapid urbanisation with the aim to identify various development areas with respect to their potential leverage effects on transformative urban development processes. These development areas are selected according to their potential for urban transformation, their systemic relevance and their potential to avoid path dependencies as well its possible negative potentials. They are important when it comes to interpreting the Durban case and selected intervention areas in the following chapters. The quite descriptive chapter also serves as a collection of ideas and facts that, without claiming to present final solutions, represents a kind of “toolbox” which makes a case for transformative and resilient urban development. The chapter examines why cities are crucial in solving upcoming human challenges and problems, and classifies global urban challenges according to social, environmental and economic agendas. Special attention is given to infrastructure and transport since, according to Swilling (2016) “without infrastructure it is nothing”. Besides the global perspective, special focus is given to African and South African perspectives.

Chapter 5 focuses on the specifics of the concepts of urban transformation and urban resilience as complex and diverse urban concepts. The chapter, titled “The city of the future: transformative and resilient”, describes the genesis and the relation of the two concepts. The chapter introduces in its first part the concept of urban transformation with all its facets and its specific meaning in this thesis. Emphasis is placed on the role of local government in urban transformation processes since governance processes are central to understanding, analysing and shaping transformation processes. In the

second part, different frameworks and origins of one of today's "buzzwords", namely resilience, are described. The chapter describes the history of the term and its roots from the ecology sector in the early 1970s up until today where it is used more as a holistic term. The Resilience Alliance framework is referred to in this chapter as it provides the most comprehensive and widely accepted understanding of what constitutes resilience and how can it be achieved. After the introduction of this second new concept, the difference between "bouncing back" (resilience) and "bouncing forward" (transformation) is introduced, and the connection and interrelation of the concepts of urban transformation and urban resilience is interrogated. Before the chapter concludes, a differentiation to other terms used in the international and South African context is provided and, as an excursus, the successful urban transformation story of the Colombian city of Medellín is presented.

Chapter 6 focuses on Durban's 100 Resilient Cities project as a practical project on the ground, which recognises the transformative potential of urbanisation processes. Transformation processes cannot be planned in detail from start to finish, but they can be influenced through focused policy interventions. Here, the Rockefeller Foundations' 100 Resilient Cities framework is introduced as a tool which bridges academic discourse and action on the ground. It provides an accessible, evidence-based articulation of urban resilience with a clear focus on practical implementation at the local government level. After a brief introduction to the campaign, the chapter gives an overview and analysis of the process by looking at the scoping experience of the first year (2014), the systems analysis and introduction of "levers of change" of the second year (2015), the stakeholder's consultation process of the third year (2016) and a detailed analysis of Durban's final Resilience Strategy. Finally, the chapter analyses the official objective of the project, namely to use the resilience campaign as a catalyst for an urban transformation process in Durban, and situates the 100 Resilient Cities project in Durban in the global context.

Chapter 7 offers the findings from expert interviews conducted during the research. Opinions and views of experts and key informants are presented about how the concept of urban transformation is understood globally and what are the interdependencies with the concept of urban resilience, what resilience means in the local context of the 100 Resilient Cities project in Durban and how this project can be connected with an urban transformation agenda in Durban. The expert interviews add reliability to the analysis from the previous chapters and their findings with the aim to answer the research questions and to help understand local particularities. The experts provide reflections on the local understanding of urban transformation and urban resilience from the perspectives of people who are broadly working in the field of urban development as theorists or practitioners in the city of Durban.

Chapter 8 expands on the previous chapters, summarises the findings and provides conclusions and recommendations. This concluding chapter is analytical in nature and returns to the theory in order to make considered policy recommendations. A more normative narrative is followed to make recommendations that result from both the conceptual interrogation of urban transformation and urban resilience and from the 100 Resilient Cities project. It filters the critical aspects from the research and provides recommendations and outlook. It analysis and criticises the use of the concepts of urban transformation and urban resilience and ends with concrete conclusions and recommendations in the most prominently featured topics such as multi-sectoral and interdisciplinary approaches, the local adaptation of global projects, city-to-city learning and citizen participation.

Chapter 2: Methodology

2.1 Introduction

This methodology chapter discusses the research basis of the thesis which is primarily a theoretical desktop study, combined with and focused on a concrete exemplary case in the city of Durban. According to Leech and Onwuegbuzie (2009: 269), research is the process of achieving solutions to problems using a planned and systematic method. This chapter outlines the research design and methodology, how data was gathered to make a theoretical contribution and how the key informants were recruited for expert interviews. Furthermore, the chapter discusses how the data was captured and analysed and provides insights into ethical considerations in the study, how the results were limited/delimited and how reliable they are.

2.2 Research design

The research was primarily a theoretical desktop study. The main aim of the research was to develop clarity about the meaning of urban transformation in the global and specifically the African context, and the role that politics in form of local government can play in achieving “good” urban transformations at the local level. In doing so, this research is designed to make a new theoretical contribution to the academic literature on “urban transformation” and the inherent concept of “urban resilience”. Academic concepts such as urban transformation and urban resilience are often discussed and used by development practitioners without knowledge of the original meaning and how the concepts relate to each other (Sanchez et al. 2016: 881; UN-Habitat 2017). This thesis will contribute to this knowledge gap with a theorisation of literature on urban change to develop clarity about the two concepts.

The theoretical desktop study included a very detailed examination of the literature on urban transformation and urban resilience. Here, the development of a growing interdependence of the two concepts is being analysed. This interdependence is researched in a very detailed and thorough way which will contribute to new academic knowledge in this until now very limited academic field. The clear need for more theoretical groundwork in this field is asked for by practitioners around the world given the fact that more and more development funds are being channelled into urban development projects such as the 100 Resilient Cities campaign by the Rockefeller Foundation. Here, the theoretical research of the thesis could have a very practical value for other projects on the ground. Therefore, in a second step, the thesis makes use of the case of the 100 Resilient Cities project in Durban to support the theoretical findings and to analyse how the 100 Resilient Cities project framework, as an urban

development model from the global north, resonates and is conceptualised in a city of the global south.

The 100 Resilient Cities project is embedded in the same context as the research of the thesis, namely to clarify the meaning of the two concepts by analysing the conceptualisation of an urban development project on the ground. With the help of the Rockefeller Foundation's 100 Resilient Cities project (which is described in detail in chapter 6), this research takes a step forward towards interrogating the impact and effectiveness of existing interpretations and implementations of urban transformation and urban resilience concepts in the city of Durban. As the whole project was only in the beginning stages at the time of this research, it was crucial to analyse what resilience and transformation really means in the Durban context. This was not very clear in the campaign at the outset, hardly surprising given the much contested nature of the term.

Unpacking the current concepts and theories was mainly done through a documentary qualitative analysis of relevant municipal policy papers, plans and documents about the project. In qualitative research design, Leedy and Ormrod (2005:133) suggest a combination of theoretical desktop combined with empirical research on the ground to get a complete understanding of the phenomenon a scholar is studying. Therefore, with the aim of gaining more clarity about the meaning of resilience and transformation at the local level, the 100 Resilient Cities project in Durban was chosen as an opportunity to engage and test out the developed theorisation of the concepts in this thesis. To gain deeper insights into contested concepts and practices in a city of the global south, interviews with experts or key informants from the municipality, academia and civil-society were conducted. A major advocate of the case-study approach is Bent Flyvbjerg. He and other scholars emphasise the importance of a good case study to appreciate, learn and infer from what is important and useful for research in the social sciences (Flyvbjerg 2001; Forester 1989; de Fries 2015). The relevance of context plays a significant role in a researcher's environment. In the last decade, Lauria and Wagner (2006) confirmed an increase in empirical development planning research using case studies as tools for analysis and interviews as research methods.

The following three hypotheses will guide the argument in the thesis:

1. The 100 Resilient Cities campaign is not designed for cities of the global south.
2. Urban transformation can only be achieved with urban resilience as a starting point.
3. The concepts of urban transformation and urban resilience are only successful if adapted to the local context and with participation of local stakeholders and citizens.

Reflecting on what has been shown, the research questions of the thesis are:

1. How is the concept of urban transformation understood globally and what are the interdependencies with the concept of urban resilience?
2. What does urban resilience mean in the local context of the 100 Resilient Cities project in Durban?
3. How does a conceptualisation of resilience in the global south could look like?

To answer the three research questions, the following narrative or process-related questions concerning the 100 Resilient Cities project outline in Durban will support the research:

- What happened in the course of applying for inclusion in the campaign?
- How did entry into the campaign affect the administration of the city, in terms of personnel and internal organisation?
- What are the key elements of the 100 Resilient Cities campaign and which elements were integrated into the project in Durban?
- Which elements of the overall 100 Resilient Cities campaign were not included and why?
- How did problems arise in that process and how were they solved?
- How were citizens involved in the process, the decisions and the enrolment of programme components?

2.3 Target population and sampling method/size

The following relates to the additional empirical study part only. Here, interviews with experts from the municipality, academia and civil society were conducted. As no generalisation to a larger population was intended, the sample is purposive (a non-probability sample). In a first step, the interviewee selection process was initiated by allocating local academics from relevant literature in the field. In a second step, additional recommendations were given by the two academic supervisors of the thesis as well as by the experts themselves (following the snowballing-process by Przyborski and Wohlrab-Sahr 2009: 173; Rubin and Rubin 2012). Access to the interviewees was given by gatekeepers from the municipality and academia. The interviews were semi-structured with a mix of open and closed questions. Following the recommendations by Meuser and Nagel (1991: 442), each expert was selected according to her or his specific knowledge around the research objective. The dedicated status of expert is in any way only a social and methodological construct (Deeke 1995: 9).

Table 1: Experts from eThekweni Municipality (category 1)

Name	Municipal branch	Area of expertise	Interview date and form
Dr Debra Roberts	Environmental Planning and Climate Protection Department (EPCPD)	100RC project, resilience and transformation	27.12.2017; 10:00-11:00
A	Inner City Thekwini Regeneration and Urban Management Programme (iTrump)	Urban planning, Safer Cities	29.01.2015; 12:15-13:20
B	Municipal Institute for Learning (MILE)	Urban development strategy, learning and knowledge exchange	29.01.2015; 7:45-8:30
C	Economic Development and Investment Promotion	Local economic development, environment	29.01.2015; 14:00-16:00
D	Development Planning, Environment and Management Unit	Urban transformation, inner city regeneration, urban Planning	21.12.2017; 14:00-15:15
E	Metro Police	Safer Cities	28.01.2015; 7:30-9:30

Table 2: Experts from academia, think-tanks and civil society (category 2)

Name	Organisation	Area of Expertise	Interview date and form
F	Durban University of Technology (DUT), Department of Town and Regional Planning	Urban planning	08.12.2017; 10:00-11:30
G	Disruptive Thought Shapers, Hatch Consultancy	Urban development, planning, architecture	07.12.2017; 22:30-23:30
H	Human Sciences Research Council (HSRC)	Urban development, economy	27.11.2017
I	University of Kwa-Zulu Natal (UKZN), School of Built Environment and Development Studies	Community development; traditional governance	20.07.2018; 15:00-15:30

J	Environment and Sustainability NGO	Urban development, environment and sustainability	13.12.2017; 9:00-9:50
K	CityInsight Consultants	Strategic planning and management	07.12.2017; 16:00-16:45

The key actor in the 100 Resilient Cities project was Dr Debra Roberts, the Chief Resilience Officer from eThekweni Municipality and her team. Roberts also functioned as gatekeeper to interviews with selected city officials.⁵ Other stakeholders (academia, consulting firms and urban specialists) were interviewed since they add important expert insights from “outside” the city (for a list of all interviewees see below). Unfortunately, it was not possible to conduct an interview with the Rockefeller Foundation’s project team from their headquarters in New York due to their continuous change of project staff and their unresponsiveness. The interviews were clustered in two categories, namely representatives from eThekweni Municipality (category 1) and other urban experts such as academics and representatives from think-tanks and civil-society (category 2) according to *table 1 and 2* below. The composition of the interviewees (in total six per category) was very diverse, including gender and race, and consisted of a good mix between senior and junior staff members. Senior professionals such as members of the City Planning Council (CPC) or former city managers were amongst the interviewees as well as young creative consultants from think-tanks and civil-society. As confidentiality was offered and granted to all interviewees, instead of their full names, aliases have been used (A-K). The data have been obtained and recorded in a manner that the information is not immediately identified with the research participant who supplied it, but such a link is possible by the researcher if required or necessary.⁶

2.4 Measuring instrument

A semi-structured interview guideline was used for the expert interviews. According to Lamnek (1993: 47), this has the benefit of organising the interview in a way that it is open for including new findings and new directions which otherwise might not have been targeted with a closed, spontaneous interview structure. For each category of the interviewees (eThekweni Municipality officials / academics), a slightly different interview guideline was drafted. The interviews were based on a questionnaire which was handed out to the interviewees before the interviews took place.

⁵ A gatekeeper letter / letter of approval from eThekweni Municipality is attached to this research (Annex A).

⁶ This does not apply for Dr Debra Roberts. Given her key role as Chief Resilience Officer content for non-confidentiality was obtained.

The questions were relating to the case of Durban and the 100 Resilient Cities project. Therefore, the interviews contribute only to the exemplary case study where the implementation of the 100 Resilient Cities project on the ground took place. All interrogations of the respondent's views on large topics such as transformation and resilience were asked with the aim to gain knowledge about the problems, conflicts and loopholes during the implementation of more theoretical concepts into the local project in Durban. Here, the answers of the interviewees contribute to cross-checking of critical aspects of the project as interrogated in chapter 5 and 6, e.g. the expanded participatory aspects of the project or its focus on governance questions rather than environmental issues, as well as its underlying theoretical concepts of urban transformation and urban resilience. The following questions were asked during the interviews (please also see the interview outline/questionnaire attached in Annex D):

○ **A. General Questions**

- What is your understanding of the term “urban resilience”?
- How do the terms “resilience” and “change” relate to each other in Durban in your view?
- What are the main current and future challenges for the city of Durban in your view?
- Is Durban in your opinion, a resilient city? What does this mean to you?
- Do you see institutional innovation in the municipality, and if so, please describe this?
- How interdisciplinary and holistic is the eThekweni Municipality, in your view?
- Does the municipality respond well to well-defined challenges and stresses in your view?

○ **B. Questions about the 100 Resilient Cities project in Durban**

- Do you know the 100RC project in Durban and are you involved in it?
- Do you think the 100RC project can be connected with an urban transformation agenda in Durban?
- Does the 100RC campaign as a “western model” fit the Durban context?
- Is the 100RC too project-based/too donor-driven?
- Do you see gaps in the 100RC project or in resilient planning in Durban?
- In what ways could the Durban 100RC project have transformative outcomes?

All of the above listed questions originated from an analysis of the literature around the 100 Resilient Cities project in Durban and its underlying theoretical conceptualisation. Here, the author tried to narrow down the broad questions around the global concept of urban transformation and urban resilience to the concrete 100 Resilient Cities project in Durban.

2.5 Recruiting process and data collection method

The main desktop research was limited to public policies, plans and articles. Thus, recently published literature about urbanisation, urban transformation and urban resilience, with the focus on papers and documents from established international research collaborations and networks from the global north and the global south, was examined. International conferences and conference papers were of major interest since they are forums for up-to-date exchanges about these emerging theories and their accompanying concepts. A range of search engines were used such as academic libraries in Germany and South Africa, google scholar, www.polity.org, The South African Parliamentary Library and South African Government Online.

Regarding the interviews: access to the interviewees was gained through gatekeepers from the municipality and by the supervisor. The interviews were done face-to-face with a semi-structured interview schedule, where this was not feasible phone or skype interviews were conducted. Two interviewees replied via email to the questionnaire. For the transcription, either an audio-receiver was used or the researcher took detailed notes. This was done after permission was granted by the interviewees. The interviewees were initially contacted via telephone or through email. According to Creswell (2009) and Rubin and Rubin (2012), an adaptation process is expected whilst undertaking qualitative research in social sciences given the fluidity of human interactions and human impact, therefore some interviewees were added and others were dropped during the period of writing thesis. As it became clear that additional knowledge was required, new interviewees were included. All interviewees were introduced to the concept of urban resilience and transformation as it is presented in chapter 5 of this thesis. This was done through a summarised one-pager (abstract)⁷ provided to all interviewees.

The interviews complemented the information obtained from the desktop research undertaken in step one. The semi-structured interviews were organised in the form of an organic discussion guided by key questions and themes proposed for each selected “category” of stakeholders. The questions posed were informed by the research questions and by reviewed literature. Despite different categories of interviewees, there was substantial overlap between the questions posed for each. As the interviews progressed, the researcher was able to probe a particular theme in different ways. This allowed for clarification to some extent about what was heard from one interview to the next, especially in cases where new themes emerged from one or other interview (see Rubin and Rubin 2012). The questionnaire and the interview guideline were tested during the first two interviews. The context was adapted afterwards and as well during the other interviews.

⁷ One-pager attached to this thesis with Annex D.

2.6 Data analysis

This dissertation, as already stated, is predominantly theoretical in nature, although a case study was used to test existing theories and refine them, to achieve the goal of clarifying key concepts in urban studies, and to provide a lens for making sense of the relationship between urban transformation and urban resilience. Whilst the author is aware that there is a tendency toward a more empirical research approach in South African urban studies, he believes that a purely empirical research study on urban transformation or resilience at the local level, as it was originally envisaged, would not have done justice to the emerging concepts of urban transformation and resilience.

Various ongoing academic debates around the two concepts are taking place but are often not fully understood or taken into consideration by scholars and practitioners, and especially by scholars working directly in the empirical field. A theoretical framework is important because it allows a conceptualisation of a program in its broader context. Furthermore, the author observed many academic debates in the course of the last few years around the concept and experienced the implementation of many “resilient” and “transformative” projects in cities worldwide with very different understandings of what transformation and resilience mean. The author therefore decided to dedicate a major part of the thesis to a theoretical interrogation of the concepts before analysing the local case.

The analysis of existing scholarly work was the main challenge and constitutes the largest part of the thesis. This analysis was guided by academics and practitioners in the field who advised the author about relevant discourses, past developments and literature in the field. Regarding the newest developments around the challenge of African urbanisation and related policy challenges described in chapter 4, current data from institutions such as UN-Habitat, the World Bank, the African Development Bank, several foundations and other institutions was extracted and, together with other scholarly literature, analysed in detail. Academic debates around the interpretation of the new concepts of transformation and resilience are discussed.

Analysing public documents for the study of the 100 Resilient Cities project in Durban was limited because the project ran parallel to the writing process of the thesis. Wherever possible, minutes and protocols of stakeholder meetings as well as circulated materials and documents were examined. The bulk of the information was gathered during the authors’ own participation in public stakeholder meetings as well as from publically available materials such as minutes, documentation material or background papers which were distributed during the workshops and/or published online on the website of the municipality. Where highlighted, other documentation materials were used. Various documents about the global 100 Resilient Cities campaign published by the Rockefeller Foundation were included as well.

When it comes to material collected from own observations as a passive observant of the stakeholder meetings, this relates to the time of the beginning of the project (phase one, early 2014) until the beginning of the last project phase three (mid 2016). During this time, the author was able to attend all four public stakeholder meetings in person but restrained itself from active participation to be in a neutral position not to influence the result of the discussion. The author also restrained himself from any intervention or debates. The announcement and invitation to all public stakeholder meetings was advertised on the municipalities website beforehand and therefore publically available. During the first meeting, a participants list was circulated with the option to receive future invitations by email. The author put his name to the list and therefore received email invitations as well. The stakeholder meetings took place at the event venue at Durban botanical gardens, which is a central venue with good accessibility. For the first meeting around 40 participants (mainly academic and civil society representatives) joined the event, the following workshops were attended by slightly fewer participants. The concept of every workshop was the same, started by a presentation (usually powerpoint) about the current state of the project either by the 100 Resilient Cities project team or by consultants hired by the 100 Resilient Cities project team. This was followed by discussions and involvement of the participants. Official minutes were taken by the project team and sent to the participants of the meetings via email afterwards.

The participation in these workshops was neither meant as participant observation nor as non-participant observation, because important aspects of these social research methods were not intended. The aim of participant observation is to gain a close and intimate familiarity with a given group of individuals (such as a religious, occupational, or cultural groups, or a particular community) and their practices through an intensive involvement with people in their natural environment, usually over an extended period of time (Spradley 2016). The social setting of events or behaviour has not been included in the observations by the author, simply because it would have been too time consuming to fulfil all necessary aspects relevant for a participant observation study. The participation in the workshops was also not part of a process of “learning through exposure to or involvement in the day-to-day or routine activities of participants in the researcher setting”, which would have been important for a “real” participant observation (Schensul et al. 1999: 91). As participant observation is the primary method used by anthropologists doing fieldwork, an important part of this method is informal interviewing, which also was not intended (and not done) by the author, neither before, nor after or during the workshops. The people interviewed were not workshop participants, but selected professionals and experts in the field (see chapter 2.3). The author did not blend into the community (also an important aspect of participant observation), instead he introduced himself as a research student

from DUT. Finally, nearly all of the other aspects relevant for participant observation in the narrow, methodological sense didn't apply for the author (see Kawulich 2005 for more details).

What has been done by the author is neither a non-participant observation. Non-participant observation involves observing participants (and not only observing discussions) without actively participating. This option is usually used to understand a phenomenon by entering the community or social system involved, while staying separate from the activities being observed (see Liu and Maitlis 2010 for further details). Neither was this the case.

So to sum up, what the author did was a kind of "passive participation" in workshops, to document the process which would otherwise not have been possible and to gain a better understanding of the 100 Resilient Cities project in Durban and its implementation.

The interviews were recorded and transcribed. Relevant information was cross-checked with all other information and coded according to the following schedule suggested by Warren (2002: 83-101): 1. Transcription, 2. Paraphrasing, 3. Headlining, 4. Thematic comparison (clustering of themes and sub themes), 5. Scientific conceptualisation, and 6. Theoretical generalisation. According to Lamnek (2005: 191), this process should be stopped as soon as a "theoretical saturation" is reached which means that no disparities are any longer recognisable. This saturation effect became a reality after having conducted a bit more than ten very detailed expert interviews. In the end, thirteen expert interviews, all with high-ranking municipal officials or academics were conducted.⁸ On average an interview took around 75 minutes. No interview was shorter than 45 minutes or longer than two hours. In some cases, a voice recorder was not used in case the intimacy of the interview would be disturbed. In such instances the answers were manually recorded during and/or directly after the interview with the aim of following the general rules of transcription by Kruse (2009: 132). After transcription and paraphrasing all the content was clustered and headlined according to themes and sub-themes and is offered in chapter 7 of the thesis.

2.7 Delimitations

Different theoretical concepts and frameworks were used (urban transition, urban regeneration, urban renewal) in the thesis to delimit the concept and to clarify what is meant in the context of this research by urban transformation and urban resilience. The term "urban transformation" is historically used

⁸ For a more detailed and state-of-the-art engagement regarding the conduction of expert interviews, see Kruse (2009) and Meuser and Nagel (2005) for further information.

differently in the South African context than in the international debate, partly related to the debate on the spatial legacy of apartheid.

This thesis contributes to the national and international debate and literature. The scope of the study addresses the understanding of urban transformation, both on the international and local level. The difference, delimitations and interdependencies between the concept of urban transformation and urban resilience are described in chapter 5. Incorporating many current trajectories and concepts, this thesis shows that future academic delimitation in the wide field of research on urban transformation and resilience is necessary. This will be of specific importance for further discussions on local concepts of urban transformation and resilience and projects based on these concepts.

2.8 Limitations

A limitation of this thesis lies in the fact that the 100 Resilient Cities project was running parallel to the writing of the thesis. On the one hand, this was an excellent opportunity to conduct research on a project where in the end stakeholders in the project could also benefit from the outcome of the research. On the other hand, it was very challenging given the fact that new developments were continuously taking place and up-to-date literature was only rarely available. The research is therefore clearly limited to the time it was written.

Similar to other case studies the findings in this study are limited to the city of Durban. Some findings and critical areas identified by the study might serve as a good starting point for identifying areas or solutions for similar challenges in other cities, but the findings of this specific case cannot be taken as a blueprint for other cities. Furthermore, having highly elaborated policies and simultaneously having great challenges on the implementation level is a well-known problem in South Africa. Due to this conflict, the study focused on the policy level first and then proceeded with an examination of the implementation level.

2.9 Validity and reliability

The research questions and hypotheses were primarily answered through an in-depth literature and theoretical review and through research into the conceptualisation of the 100 Resilient Cities project. The widest possible range of existing and relevant policy documents was used in the literature analysis. This assisted with reliability. Having said this, policies and perspectives of social actors who are responsible for enacting and developing policy sometimes change. The results of the research are therefore reliable only for as long as existing policy frameworks are in place. Policy changes are

generally slow but are critical to the direction of social change of any sort. Given the durability of policy, it is the researcher's belief that this research is reliable and has produced stable and consistent results. The Rockefeller 100 Resilient Cities project is significant in the sense that it will impact on the "shape" of the City of Durban in the future. Furthermore, and with reference to the above expert selection processes, the research is also reliable because the author was able to identify experts with the greatest insights into the research questions and all of them were available for detailed interviews.

2.10 Ethical considerations

The interviewees were fully informed about the purpose and character of the research project, and the interviews were conducted on a voluntary basis. Confidentiality and anonymity were offered and granted if necessary. The requirements for written informed consent were met and gatekeeper permission was obtained (both attached in the annex of this thesis). The research did not involve the collection of or access to any private, sensitive or personal health-related data and there was no foreseeable risk of harm or discomfort to the participants. Furthermore, all the interviews were recorded and/or notes were taken with the consent of the interviewees. The interviewees were informed in advance with a relevant DUT form of consent which also contained DUT's and the supervisors' contact details in case the interviewees had questions or complaints about the research process.

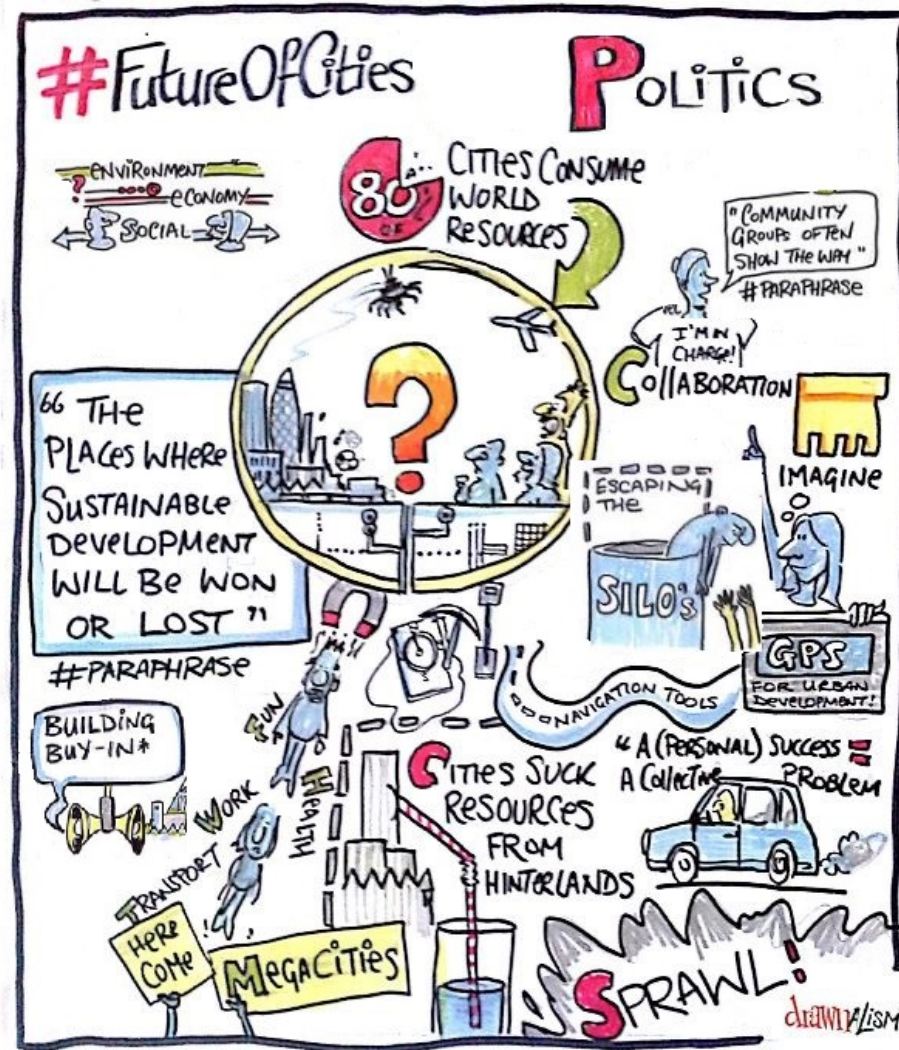
2.11 Conclusion

This thesis is primarily based on a theoretical desktop study and was developed through the use of a case study. The main aim of the research was to develop clarity about what urban transformation means in the global context that has specific resonance in a local African city context. The selected research approach was chosen in order to achieve the main objective of the dissertation, namely to explore the internationally adapted theoretical scope of urban transformation. The Durban case of the 100 Resilient Cities campaign provides a lens through which to interrogate this theorisation at a local level with its own specific historical and local conditions, which profoundly impact on urban transformation. The thesis therefore contributes to the lack of theorisation in this field, making considerable use of literature from the global south. The next chapter builds on this basis and introduces the conceptual framework of the thesis.

Chapter 3: Conceptual framework: Global rethinkings on urbanisation – from unnecessary evil to necessary good

3.1 Introduction

Fig. 1: Collection “The Future of Cities”



Source: Urban Gateway (2015). The content of the comic illustrates the main topics and debates from the 4th Future Cities Forum held 2015 in Munich where local government representatives and researchers from cities from 18 countries gathered to exchange best-practices, to network and to debate what politics and the future of cities could look like.

The cartoon above succinctly describes how critical cities are for environmental, economic and social global developmental agendas. Cities (here the “urban sprawl”) consume around 80 percent of the available resources of the world and at the same time take resources from less developed areas nearby

(the “hinterlands”). People are also included as part of these resources, coming in the form of rural-to-urban migration due to the understanding that cities are supposed to provide better employment, healthcare and education options, more entertainment opportunities and a better system of service delivery, to name a few benefits. Cities on the other hand are also hotspots of unemployment and environmental problems such as high carbon dioxide emissions. Yet cities are places of imagination where new agendas and paradigms can consciously and collectively be shaped (“escaping the silos”). The future of the planet will be largely dependent on how cities deal with the increasing challenges they face in the next decades. It is therefore crucial that individual communities in cities get involved in decision-making by coming up with creative ideas that can make a difference. They need to be guided and supported by accountable and participatory leadership structures on government level. All of these diverse aspects and challenges were discussed at the 4th Future Cities Forum in Munich in 2015 (the origin of the cartoon) and will be interrogated in this and the following chapters of the thesis.

As a starting point for the thesis, this chapter lays the foundation for understanding the need for programmes such as the Rockefeller’s 100 Resilient Cities campaign. It is from the content of this chapter that the concept for this thesis evolved—therefore this chapter forms a kind of base for all the chapters which follow. Assuming a global viewpoint, this broad-framing chapter examines the shift of urbanisation from a “collective evil to a collective good” (World Bank 2016: 4) and connects the challenges of urbanisation with a global agenda. It explores existing academic and political debates on urbanisation and which constructive role local government may play, it expands on the shifts that are evident in the Habitat III New Urban Agenda and in the Sustainable Development Goals (SDGs), and leads to a first conceptual rapprochement of the concept of urban transformation. The analytical sub-chapters illustrate the transformative processes of urban development in the global development agenda, demonstrating through data and discussion that it is cities which can actively decide on their own path dependencies. The second part of the chapter approaches the concept of urban transformation. Here the chapter reviews current global urbanisation reports and introduces leading academic networks and organisations in this field, such as the Sustainable Development Solutions Network (SDSN)⁹, and shows how the concept of urban transformation deviated from policy and academic debates on urbanisation.

⁹ The SDSN network is highlighted in this thesis because it is a good example of collaborative solution-finding in a network of academics from the global north and the global south with the background of the stated imbalance in this field shown in chapter 2.

3.2 The global urban challenge

“As the world moves into an urban future, societies across the globe have to grapple with deep challenges of redirection and reorganization to ensure that they manage global public good and resources effectively, that they harness the productive potential of urban societies in ways that enable the expansion of prosperity within the capacities of the planet, and that they build a better life for themselves—the central promise and challenge of transformative development for the 21st century”.

(SDSN 2013a: 8)

In 1992 when the first Earth Summit in Rio 1992¹⁰ took place there were 5.4 billion people living on the earth. At the beginning of 2016 there were 7.4 billion, and daily more than 140.000 people were moving to cities worldwide (Stiftung Weltbevölkerung 2015). This equals one million people per week, or seven times the population of New York City per year (Otto 2012: 17). This growth means that in the year 2050, of the estimated nine billion people on earth, 66 percent will reside in cities.¹¹ Furthermore, 90 percent of urban growth will occur in Africa and Asia while Africa’s urban residents alone are likely to triple by 2050 (UN DESA 2018; Turok 2013). As we can see from these numbers, urbanisation will occur in drastic numbers in the next few decades and will change the world substantially. Massive urbanisation processes tend to happen in significant waves. Given this background, the way in which urbanisation movements are managed is critical if the phenomenon is to be optimised and properly managed. Urbanisation can foster development and promote sustainability, or alternatively deepen poverty and accelerate environmental degradation (UNFPA 2007). As the SDSN stated above, urbanisation is key to future transformative development. According to Harvard University’s Edward Glaeser, one of the world’s best-known experts on urban development: “Cities are the best path we know out of poverty. They are the best transformers of civilisations. But, they are also demons that come with density.” (Glaeser 2016).

The world is moving forward. Modern technologies are restructuring our societies, new economic giants have arisen and new shapes of urbanisation are intensifying the pressures for better planning. According to the UN-Habitat Report “The State of African Cities: Reimagining Sustainable Urban Transitions” (UN-Habitat 2014: 276), African countries are currently in the middle of simultaneously

¹⁰ Informally known as Rio Earth Summit, the UN Conference on Environment and Development (UNCED) took place from 3-14 June 1992 in Rio de Janeiro.

¹¹ In 1900 it was only 13 percent

unfolding urbanisation processes while undergoing highly significant technological, economic, urban, environmental and socio-political transitions. All of this makes urbanisation challenges vital for reaching global development goals such as the Millennium Development Goals (MDGs) and the Sustainable Development Goals (SDGs), especially in Africa.

According to a survey of 131 governments, conducted on behalf of the UN Department of Economic and Social Affairs (UN DESA 2010), recent policy debates have evolved from first containing urbanisation, to preparing for it, and finally to reaping the benefits of economic growth associated with it. In this new view, urbanisation is a game changer which is currently reshaping development dialogue at a global scale. Cities are now widely recognised as the most important role players in addressing national and global challenges such as migration, poverty, climate change, energy scarcity and new mobility concepts, participation, and wellbeing. Some of the key markers for the importance of cities are described in a nutshell in *fig. 2*. This shows that urbanisation is responsible for 80 percent of global GDP and for 95 percent of population growth in the developing world, but also is responsible for an increasing share of world poverty, 70 percent of greenhouse gas production, and lastly that in cities worldwide 650 million people are living with high exposure to natural disasters. All of these aspects will be discussed in detail in chapter 4.

Fig. 2: Urbanisation is responsible for...



Source: Own compilation using data from (top to bottom): UN DESA (2014), UNEP (2011), UNFPA (2007), WWI (2007) and Dilley et al. (2005).

African cities in particular are currently dealing with huge urbanisation processes which are likely to increase in the decades to come (UN DESA 2012). As the Institute for Advanced Sustainability

(2011) states in its report “The Quest for Governance of Sustainable Development”, city governance is key in macro change processes. Cities in Africa are therefore likely to become significant “spaces” where key social and economic problems will have to be addressed in order to find sustainable solutions to a range of social, economic and political problems. Here, it is city managers and their teams that will be largely responsible for developing and implementing urban transformation strategies. McKinsey & Partner (2013), Metropolis (2010) and UN-Habitat (2010) have already indicated that (good) urban governance plays an important role in regulating and triggering urban transformation processes.

3.3 Habitat III – “The New Urban Agenda”

The United Nations Conference on Housing and Sustainable Urban Development (HABITAT III), held from 17 to 20 October 2016 in Quito, Ecuador, was the third conference after HABITAT I in Vancouver 1976 and HABITAT II in Istanbul 1996. HABITAT III was the first United Nations global summit after the adoption of the SDG-agenda. Every 20 years, leaders and representatives from civil-society, academia, business and politics gather to decide on global urbanisation issues. The 2016 conference gathered 35.000 representatives, and ended with the adaptation of the “New Urban Agenda” (Quito Declaration on Sustainable Cities and Human Settlements for All). The contributions by sub-national stakeholders such as local governments and civil societies were this time acknowledged as having the “same importance” as nation states (Engagement Global 2016). With the “Quito Implementation Plan”, an implementing mechanism was introduced which is based on the voluntary commitments of UN member states. The implementation of the plan will be monitored every four years, followed by an official report from the UN Secretary General.

With this New Urban Agenda, all the member states of the United Nations agreed to grant cities and city governments a more central role, and to promote the framework conditions for more sustainable and integrated urban developments. The aim of the agenda is to promote the financial and political conditions for local governments as well as to strengthen citizen participation on the local level. However, as is the case for all UN agreements, the outcome document of HABITAT III is not binding; it is only a guide.

The four mechanisms envisioned in this document for implementing the New Urban Agenda are:

1. National urban policies promoting “sustainable integrated urban development”.
2. Stronger urban governance “with sound institutions and mechanisms that empower and include urban stakeholders along with checks and balances, to promote predictability, social inclusion, economic growth, and environmental protection”.

3. Reinvigorated “long-term and integrated urban and territorial planning and design in order to optimise the spatial dimension of the urban form and deliver the positive outcomes of urbanisation”.
4. Effective financing frameworks.

This New Urban Agenda (NUA) aims to make cities sustainable, safer and resilient, as well as increasing the availability of amenities to all. Of particular relevance to Durban’s Resilience Strategy is the fact that the agenda recognises that informality needs to be acknowledged, that an enabling environment should be created in all informal settlements, and that ecological infrastructures are central to building sustainable cities.

According to Vanessa Watson (2016) from the University of Cape Town, urban planning is the mechanism through which much of the agenda can be accomplished. Paragraph 51 in particular calls for “urban planning and design instruments that support sustainable management, and to enhance resource efficiency, urban resilience, and environmental sustainability”. The New Urban Agenda can provide important ideas on how local governments can contribute to the successful implementation of the SDGs (Parnell 2016; Misselwitz and Villa Nueva 2015).

A group of Multilateral Development Banks, namely the African Development Bank, the Asian Development Bank, the European Bank for Reconstruction and Development, and the World Bank Group, issued a joint statement in support of Habitat III and committed to “support the implementation of the UN’s New Urban Agenda through direct financing, catalysing other resources, as well as domestic resource mobilisation” (World Bank 2016).¹²

The influence of the HABITAT agenda has been significant within the United Nations over the past two decades. Its main outcomes and agendas worked their way into the Millennium Development Goals (MDGs), and its influence can also be seen in the urban-focussed SDG 11. Had Africa’s engagement within HABITAT II in 1996 been limited, this has now definitely changed with the adoption of the Common Africa Position in Habitat III by the Heads of State at the AU commission summit in Kigali in July 2016. The Common African Position strategically makes reference to the AU Agenda 2063. It states, “the urgent need to harness the transformative potential of urbanisation in its various

¹² Transport and mobility was one of the key issues debated at the conference. Here, the “Transformative Urban Mobility Initiative” (TUMI) will support innovative and social- and environmentally-savvy projects in developing countries. The German government is one of the key supporters of this initiative.

facets to facilitate the reduction of poverty in all its forms and inequality as well as achieve an inclusive, integrated, prosperous, stable and peaceful Africa driven by its own citizens and representing a dynamic force in the global arena (UN Economic Commission for Africa / UNECA 2016)”.

Unfortunately, concrete answers were missing at the conference and only very general visions were given; instead civil society and academia led the way with a range of commitments to new initiatives. The usual high-gloss printed “toolkits” or “implementing branding kits” were issued at the end of the conference, but it is questionable if this really pushed the implementation of the agenda. HABITAT III was also not a very successfully marketed event, since for example at the COP21 event in Paris, HABITAT III was seen as an internal expert event instead of one which might raise urbanisation issues to the top level of political attention. According to Hans Schellnhuber (2017: 2), chair of the German WGBU, “the document does not make it clear that we need a paradigm shift on how cities need to be designed and built to make sure that we do not breach the planetary guardrails, protecting our natural life support systems”. A strong asset of HABITAT III was the presence of mayors from cities all around the world and especially from the C40 network, a network of almost 100 global cities, which raised attention with its demand that national and public banks should finance sustainable projects in cities to a larger extent than they do currently. Until now cities have often been very dependent on national government funding and therefore partly hamstrung in their actions.

3.4 From the debate on the Post-2015-Millennium Development Goals (MDGs) to the Sustainable Development Goals (SDGs): urban issues matter

The year 2015 was of great importance for the global development agenda, as here the path for the next decade was set. The international community agreed on 17 new Sustainable Development Goals (SDGs) aimed to transform the world towards sustainability. The 2016 Habitat-III conference developed the New Urban Agenda—the political strategy on the global United Nations level for the next two decades—with these SDGs in mind.

At the UN Conference on Sustainable Development (UNCSD; also known as the “Rio+20-Conference”) in 2012, the decision to announce new global goals for sustainable development was made. These SDGs were aligned with other fundamental global policies and actions in the field, for example “Agenda 21” and the action plan of Johannesburg¹³ (UNCSD 2012). Representing political objectives of the world community, the SDGs are of central importance for future global development in the

¹³ The Johannesburg Declaration on Sustainable Development was adopted at the World Summit on Sustainable Development (WSSD), sometimes referred to as Earth Summit 2002.

direction of more economic, social and ecological sustainability. As opposed to the MDGs, SDGs need to consider all dimensions of sustainable development and be valid for all states, and not only for developing states.

According to the outcome document of “The Mayors Meet”, a global meeting of mayors held at Columbia University in 2014 by invitation from the UN and the Indian Institute for Human Settlements, “well-crafted SDGs for the period 2015 to 2030 will cultivate accountability, advocate integrated thinking, and inspire public and private action” (IIHS 2014). SDGs complement the tools of international law such as global treaties and conventions by providing a mutual normative framework. At the Mayors Meet 2014, Durban’s former mayor James Nxumalo therefore stated (IIHS 2014):

“Agreement on an urban SDG in 2015 will be the first signal that the world has begun a new journey towards sustainability—one that recognises the transformative potential of the world’s cities, especially those in the global south, to restore ecological integrity, reduce inequality and increase well-being.”

(Durban’s former Mayor Nxumalo at “The Mayors Meet 2014”; cited after IIHS 2014)

Inclusive, productive, green, well-planned, safe and resilient cities are at the core of this special urban agenda. This is evident from the recent report of the UN High-Level Panel of Eminent Persons on the post-2015 development agenda. Its board of advisors promotes the unification of development and sustainability goals into a shared goal system with this report, and calls for a paradigm shift away from a pure development agenda to a global agenda which considers the economic, social and ecological dimensions of industrial countries, countries in transition and developing countries (UN 2013). The report, in which the former German federal president Horst Köhler also assisted, contributed to the development of the post-2015 development agenda.

Focussing on a specific urban SDG, ICLEI¹⁴ president David Cadman, who led the ICLEI delegation during the meeting, added: “An urban SDG must be built upon the participatory approach that was internationally agreed on in 1992 (...). Since one out of two citizens now live in cities and urban territories, agreeing on an urban SDG is not just an option, but imperative to reach global sustainability goals. The world’s cities and citizens need an Urban SDG as much as the national governments

¹⁴ ICLEI - Local Governments for Sustainability is the world’s leading network of over 1,000 cities, towns and metropolises committed to building a sustainable future. Durban is one of the member cities.

and the global community need the support of local and subnational governments, because no global targets or goals can be reached without us (ICLEI 2014)”.

Table 3: Overview of indicators for SDG-Goal 11 “Make cities and human settlements inclusive, safe, resilient and sustainable”.¹⁵

11.1	Housing and slum upgrading
11.2	Transport systems
11.3	Inclusive and participatory urban planning management
11.4	Protection of the world’s cultural and natural heritage
11.5	Disaster and natural hazard protection
11.6	Environmental impact of cities
11.7	Safe and accessible public spaces
11.a	Linking urban, peri-urban and rural areas
11.b	Implementing integrated policies towards the environment
11.c	Support of Least Developed Countries (LDC)

Source: Open Working Group of the General Assembly on Sustainable Development Goals 2014: 17

In September 2014, the UN adopted the draft version of the SDGs with 17 goals in New York, developed by the UN General Assembly’s Open Working Group (OWG) on Sustainable Development Goals. Seven of the 17 proposed objectives focus on continuing on the path chosen with the Millennium Development Goals. These include the eradication of poverty and hunger, healthcare, education for all, gender equality, access to drinking water and sanitation, and global partnerships. New goals were also formulated, namely employment for all, and a climate target to limit global warming to below two degrees’ difference, as compared to the beginning of industrialisation. In addition to SDG 11, the agenda also included the first independent objective for sustainable urban development ever. The specific indicators are shown in *Table 3*. The objectives of this goal are that by 2030 “people and environment-friendly living spaces, with affordable housing” should be created in increasingly overpopulated cities. Cities should become more sustainable and greener. For example, local governments

¹⁵ See attachment for a general overview of all indicators for SDG 11.

in developing countries should be supported in making cities more resilient to climate-related natural disasters. The final adoption of these new SDGs as part of a wider sustainability agenda took place in September 2015 at the UN Summit in Paris. The Open Working Group of the General Assembly summarised the SDGs' progress as follows:

“For the first time, the SDG draft also included an independent objective for sustainable urban development, proposed Goal No. 11: Make Cities and Human Settlements Inclusive, Safe, Resilient and Sustainable.”

(Open Working Group of the General Assembly on SDG's: 17)

A successful campaign for the urban SDG was launched by this network in September 2013 with the support of Cities Alliance, UN-Habitat, ICLEI, UCLG, Metropolis, and the Communitas Coalition for Sustainable Cities and Regions. In several documents and papers, the network stated why the world needs an urban SDG (see *fig. 3*). The first step here involves awareness: people need to be educated about the challenges and opportunities of sustainable urban development before they can act on this knowledge. Leaders and the public need this to ensure resilience. This includes mayors, universities, businesses, national and local authorities, community organisations and urban NGOs. Due to the interconnectivity inherent to cities, an integrated approach is helpful in allowing for modern technology solutions, innovative infrastructure design and smart systems. Space is limited in cities and must be effectively used through good planning and mixed-use of public spaces to ensure lower resource use and emissions. Furthermore, cities are not only responsible for the majority of global greenhouse gas emissions, but are also most vulnerable to the consequences of flooding and heat waves. It is for this reason that disaster risk reduction and resilience planning are a part of infrastructure design and city management, encompassing city-level targets and site-specific strategies.

Fig. 3: Expected accomplishments of a dedicated and stand-alone urban SDG



Source: SDSN 2013c

Parnell summarises this in a similar way. She states that the recent shift to city-centric policy is likely to intensify given SDG 11 (Parnell 2016: 529) which confirms that cities are critical and require particular focus plus policy and legal and financial instruments which to date have remained a challenge in Africa where “cities and city government are undermined and constrained” (Parnell 2016).

3.5 From urbanisation to transformation

3.5.1 Global urbanisation reports and their reference to transformation

The urban challenges mentioned in chapter 3.2 are of great importance for the global post-2015 development agenda mentioned in chapter 3.3 and 3.4. The new SDGs with the urban SDG 11 in particular will provide a common normative framework for all stakeholders involved in urban development and management. The SDGs aim to guide the public’s understanding of complex sustainable development challenges, and hope to inspire public and private action as a consequence. This international agenda-setting triggered significant donor and public funding around urban development. Global partnerships were created, for example between the United Nations and UN-Habitat, and between the Bill and Melinda Gates Foundation and several bilateral development cooperation partners such as DFID, USAID and GIZ. Private donors and a global network of development partners are currently putting personnel and money into urban development projects. Against this background the

Rockefeller Foundation established its 100 Resilient Cities campaign; a project which deeply impacts the urban development agenda of its partner cities around the world and puts questions of ownership and self-determination on the table.

The described global background and networks that have accordingly been formed are significant for this thesis as well as for all upcoming urban development trajectories. *Table 4* shows a broad general overview of global urbanisation reports with reference to transformation. Many of the reports focus on technical analyses of infrastructures, investment landscapes and economic policies. The reports by the UCLG 2013, the World Bank 2013, UN-Habitat 2011b and Corfee-Morlot et al. 2009 take a different approach and focus on governance. The same applies to the more actor-oriented approaches by Revi and Rosenzweig (2013), UKAID and DFID 2012 and UN-Habitat 2009b. In general, most of the listed reports only pay marginal attention to issues such as participation, public spaces, socio-cultural identity and the importance of citizens. According to a WBGU study (2016: 112), what is often missing is a “coherent embedding of the subject into a long-term strategic urban transformation concept that emphasises the scale and urgency of the change, and the systematic derivation of action fields that pursue a transformative goal”. The inclusion of affected groups and civil-society initiatives is usually described as an additional option which creates the impression of an add-on element only.

Table 4 presents an overview of recent global urbanisation reports by WBGU (2016b: 120), categorised according to problem description, focus or dominant perspective, and aims and recommendations. Most of the reports are actor-centred. This biased preselection of actor-centred reports is certainly due to the fact that the WBGU itself is a network of academics focussing on advising political actors. Given the aim and objectives of this thesis, this perspective is likewise favoured and therefore this overview by WBGU is selected. The majority of reports highlight that the bulk of the challenges must be tackled primarily at the city level. The UKAID report (UKAID and DFID 2012: 107) furthermore argues that necessary change in cities is only possible through a “transformation towards alternative development”. Revi and Rosenzweig developed a first and broad understanding of the concept of transformation and emphasised, like UN-Habitat (UN-Habitat 2013), “the extraordinary potential of cities for the transformation towards sustainability with reference to planetary guard rails” (Revi and Rosenzweig 2014: 32). These are all very pristine and broad concepts and terms.

Table 4: Recent global urbanisation reports

Problem description	Focus, dominant perspective	Aims, recommendations	Selected quote
Revi and Rosenzweig (2013): The Urban Opportunity – Enabling Transformative and Sustainable Development			
Poor living conditions in slums, climate-change mitigation and adaptation	Actor-centred <ul style="list-style-type: none"> Emphasis on the transformative potential of cities Consideration of guard rails, including climate-change mitigation: complete withdrawal from fossil energy system by 2050 	Goals <ul style="list-style-type: none"> End extreme urban poverty and improve living standards Universal access to basic services and housing Affordable housing for all Resilience and ecological sustainability Mechanisms to promote sustainable urbanization 	„Culture provides identity, agency, and tools for communities to fight poverty. Integrating diversity of culture into governance, based on the needs and expectations of citizens, facilitates participation, intercultural dialogue, and the practice of equality of rights.“ (Revi and Rosenzweig, 2013:36)
UN-Habitat (2013a): The State of the World's Cities 2012/2013 – Prosperity of Cities			
<ul style="list-style-type: none"> Many cities are places of social discrimination, inequality and exclusion Causes: standard urbanization model of the 20th century, which is largely based on land speculation, the privatization of public urban spaces, and the interests of the real-estate industry; it is often in conflict with the objective of urban prosperity for all 	Dimensions of urban prosperity <ul style="list-style-type: none"> Productivity Infrastructure Quality of life Social justice and inclusion Ecological sustainability 	Goals <p>The city of the 21st century is one that</p> <ul style="list-style-type: none"> reduces disaster risks, creates jobs, promotes social diversity, protects the natural environment, strengthens public spaces, creates conditions for prosperity Recommendations <ul style="list-style-type: none"> Promote innovations New urban planning must be in the public interest Strengthen legislation and regulations that promote the common good 	„As a decision-making tool, urban planning must better defend the 'public' against the menace of ever-expanding 'private' interests and its consequences: shrinking public spaces and reduced provision of public goods, which in turn affect more collective, intangible dimensions like quality of life, social interaction, cultural identity and social values.“ (UN-Habitat, 2013a:13)
UCLG (2013): Basic Services for All in an Urbanizing World			
Socio-economic disparities and insufficient supply of basic services for large sections of the urban population, especially in developing countries and emerging economies	Actors and urban governance <p>Regional chapters (Africa, Asia-Pacific, Eurasia, Europe, Latin America, Middle East and West Asia, North America, metropolitan regions)</p>	Prioritize investment in basic services/ infrastructures, develop financing strategies <ul style="list-style-type: none"> Disaster-resilient infrastructures for drinking water, sanitation and sewage disposal, waste management, energy supply and local public transport Governance recommendations for local, regional and national levels 	„Putting people first' means putting basic local services first.“ (UCLG, 2013:113)
UKAID und DFID (2012): Future Proofing Cities			
<ul style="list-style-type: none"> Cities as both polluters and victims of environmental risks: no development without environmental protection Cities in developing countries and emerging economies must take urgent action to ensure that their long-term economic development is not jeopardized by environmental risks 	Actor-centred <p>Integrated strategies to make cities future-proof</p>	Recommendations <ol style="list-style-type: none"> Develop future-proof urban strategies Mobilize funding Compile urban risk diagnose Strengthen powers for urban governance, planning and service system Improve the data situation as a basis for decision-making Conduct research to build a better basis for planning Identify risks to existing and planned investment portfolios Recommendations for five types of cities <ol style="list-style-type: none"> Energy- and carbon-intensive cities Cities with major climate change hazards Cities with regional support systems at risk (food, water, natural habitat) Cities with multiple risks Cities with a low risk profile 	„The central message of this report is that the earlier cities in developing countries take steps to future proof their urban development, the better. There is an important – but closing – window of opportunity for many cities to act now before they are locked into unsustainable and unsuitable development pathways.“ UKAID and DFID, 2012:ix)
WHO and UN-Habitat (2010): Hidden Cities – Unmasking and Overcoming Health Inequities in Urban Settings			
Extremely unequal distribution of health risks and their scale within cities	Solutions often lie beyond the health sector and require the involvement of many actors	General <ul style="list-style-type: none"> Disaggregated data basis is crucial for recognizing problems Solutions often lie outside the health sector Three strategic starting points <ol style="list-style-type: none"> Target-group-oriented measures to improve the situation of the poorest Narrow the 'health gap' between the best and the worst cared-for groups Reduce urban socio-economic disparities in general 	„Cities offer both the best and the worst environments for health and well-being.“ (WHO and UN-Habitat, 2010:12)

Source: WBGU 2016b: 120

Hardly any of the reviewed global urbanisation reports have a list of systematically-derived central transformation fields, and none of them are embedded in a coherent, higher-level transformation concept in which the required orders of long- and short-term time frames, acceleration requirements and consequences for urban governance are clearly enough described and translated into action needs. Generally, an increase in academic articles around the topic is observed, but most of these reports differ only in their recommendations regarding the solution to future urban challenges and the paths forward.

In general, *table 4* shows that there is a broad and general debate around this topic and gives some insights into the vast set of publications in this field such as Revi and Rosenzweig (2013), UN-Habitat (2013), UCLG (2013), UKAID and DFID (2012) and WHO and UN-Habitat (2010). What is important here is that most scholars and politicians now demand a further step for new attention to be guided by integrated thinking, which fosters accountability. It would then be possible for governance at the local level, i.e. cities, to be the generators of an integrated and sustainable development and to act as “change-drivers” (Sassen 2010: 13). At the 2013 United Nations General Assembly, it was described as follows: “A new era demands a new vision and a responsive framework. Sustainable development, enabled by the integration of economic growth, social justice and environmental stewardship, must become our global guiding principle and operational standard” (United Nations General Assembly 2013: 3).

3.5.2 The Sustainable Development Solutions Network (SDSN)

One of the most important stakeholders in the political SDG process was the Sustainable Development Solutions Network (SDSN). This network was launched by the former UN Secretary-General Ban Ki-moon in August 2012, and mobilised scientific and technical expertise from academia, civil society, and the private sector in support of sustainable development problem solving at different scales. *Fig. 4* shows all the group members across all world regions, which include Dr Debra Roberts from Durban and Professor Edgar Pieterse from the African Centre for Cities (ACC), Cape Town. Debra Roberts is also the Chief Resilience Officer (CRO) of the Rockefeller Foundation’s 100 Resilient Cities campaign which will receive attention at a later stage in this thesis.

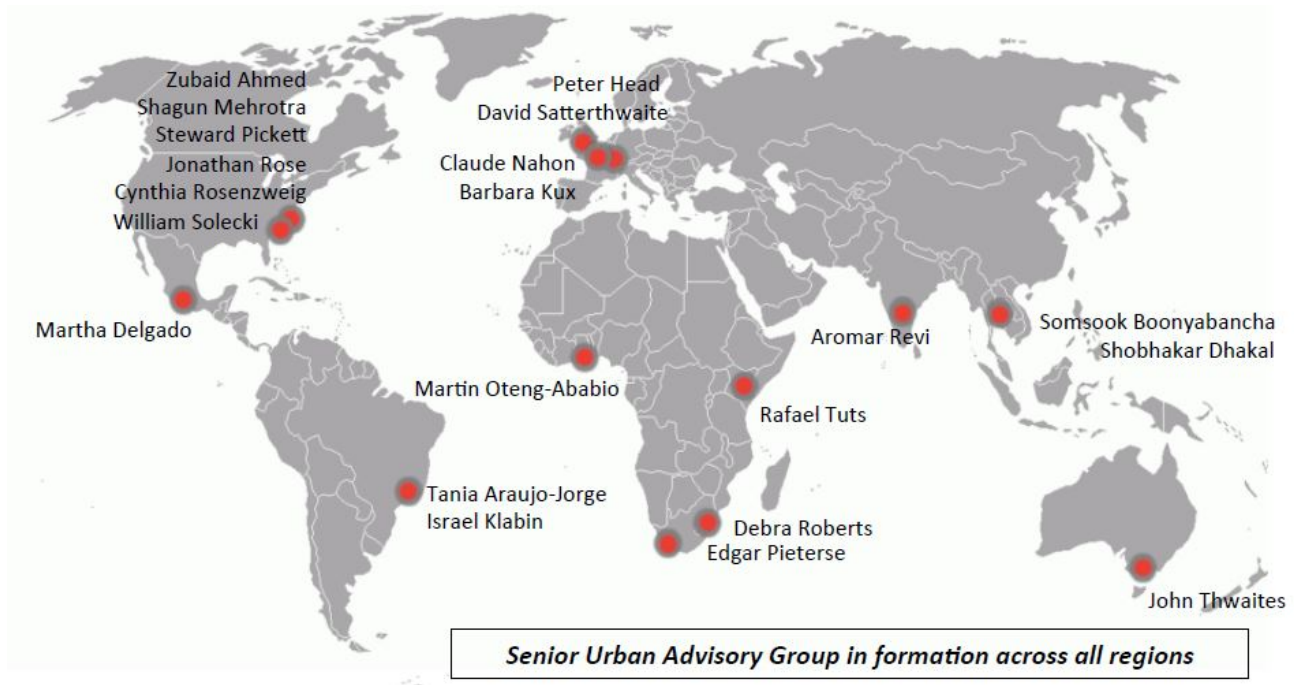
Officially, the SDSN “aims to accelerate joint learning and help to overcome the compartmentalisation of technical and policy work by promoting integrated approaches to the interconnected economic, social, and environmental challenges confronting the world” (SDSN 2015).

“A multi-sectoral and resilient agenda in urban management, accompanied by a common political vision, is needed to trigger urban transformation processes”.

(Sustainable Development Solutions Network 2013)

In 2013, the SDSN developed a paper called “The Urban Opportunity: Enabling Transformative and Sustainable Development” (SDSN 2013) as an important background paper to the post-2015 development agenda. In this paper, researchers and practitioners from various countries highlight the importance of urban transformation for reaching global development goals. Together with recent literature on the subject (IIED 2006; UN-Habitat 2009; Metropolis 2011), this paper makes it clear that a multi-sectoral and resilient agenda in urban management accompanied by a common political vision, is needed to trigger urban transformation processes in cities. This globally accepted and referenced paper serves as a starting point for the exploration of the emerging concept of urban transformation in this dissertation:

Fig. 4: SDSN Sustainable Cities Thematic Group Members



Source: SDSN 2013b

3.5.3 Transformative shifts in the knowledge-policy nexus

This forward-looking approach to urbanisation was also adopted by the World Bank’s Knowledge Platform on Urbanization (World Bank 2014). As *fig. 5* demonstrates, the World Bank promotes an alternative vision of what urbanisation now means, compared to how it was previously understood. It views urbanisation as a “necessary good”, shifting dramatically from earlier understandings of urbanisation as an “unnecessary evil”. The transformative capacity of urbanisation encapsulates a future good. Urbanisation is a game changer. For example, Zhou Xiaochuan, the governor of the People’s Bank of China (similar to the Reserve Bank of South Africa) noted in 2008 that “ten or more years ago, the Chinese central government resisted urbanisation because the authorities thought its pace was too rapid, this policy should be part of the list of ‘bad ideas’ because of the importance of agglomeration efficiencies” (cited in Walker 2015: 11). Today, the Chinese government has reversed its policy and understood the key role of urbanisation in structural transformation.

Fig. 5: Evolution of a Knowledge-Policy-Nexus

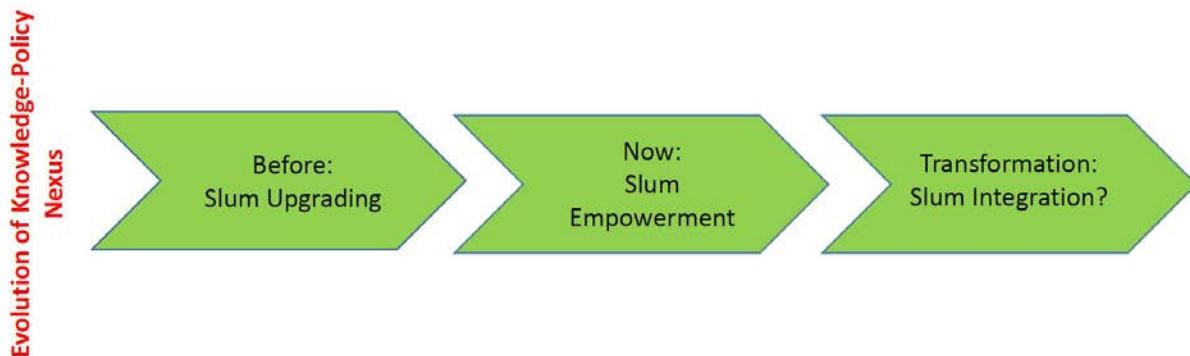


Source: World Bank (2014: 6)

This bridging sub-chapter shows how an evolution of the knowledge-policy nexus can lead to transformation. This is done with transformative examples from three different fields, namely “slum integration”, “compact cities”, and “rethinking urban governance” (*fig. 5-7*). Multiple layers of actors and cross-sectoral stakeholders make the task of intervention in urban development particularly challenging, especially because policies and actions often run in sectoral silos. In the first transformative field, “slum integration” (*fig. 6*), we see for example the problem of slums and urban poverty from a ring-fenced approach, which consolidates structural urban poverty (“slum upgrading”) evolving into a “slum empowerment” paradigm. Here, the transformative shift lies in rejecting ring-fenced approaches in favour of integration into broader frameworks of urban management (“slum integration”).

Suggested solutions by Buckey and Kalarickal (2005) to avoid further development of slums include demarcating land and reserving rights-of-way for subsequent road and infrastructure constructions before squatters move in and infrastructure provision becomes retroactively expensive. Essentially this means preparing for urbanisation with a basic spatial framework as a guideline.

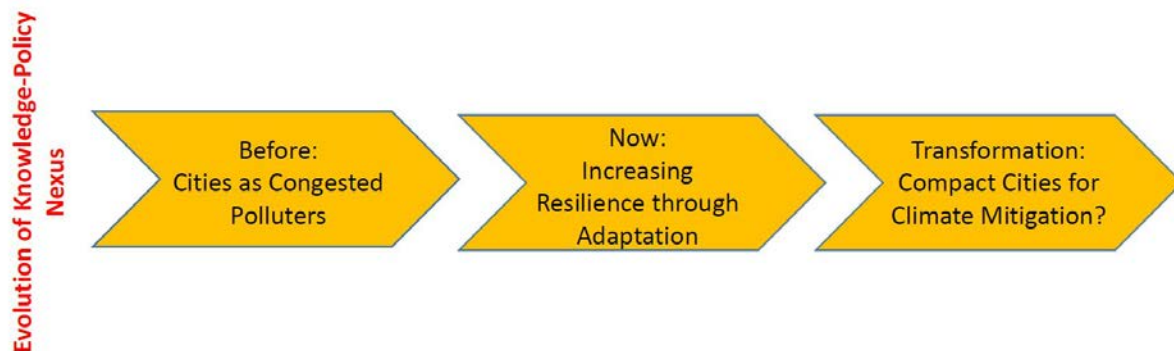
Fig. 6: Evolution of a knowledge-policy nexus: slum integration



Source: Own compilation after World Bank 2014.

In the second transformative field, “compact cities” (*fig. 7*), we see the debate shifting from cities viewed as “congested polluters” (before) to cities with “increasing resilience through adaptation” (now). The transformative shift here sees urbanisation as an environmental opportunity; compact cities can minimise the mitigation of emissions. In theory, the concentration of populations in smaller areas means services can be delivered more efficiently, allowing for public transport and the transportation of goods and people to cover shorter distances (Dodman 2009).

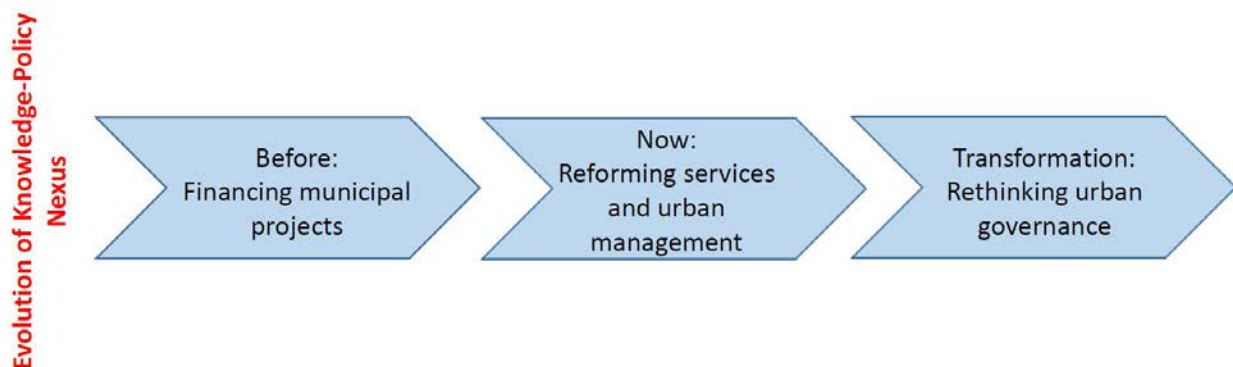
Fig. 7: Evolution of a knowledge-policy nexus: compact cities for climate mitigation?



Source: Own compilation after World Bank 2014.

In the third transformative field, “urban governance” (*fig. 8*), we see the debate shifting from the paradigm of “financing municipal projects” (before) to “reforming services and urban management” (now). The transformative shift here is a call for a new “rethinking of urban governance”. Progressive approaches of decentralisation are discussed, and a call for financial autonomy in cities is often heard, backed by the argument that cities are usually more accountable to national governments than to their own local citizens. This approach of shifting to more decentralised urban governance requires a major rethink on the roles, responsibilities and design of fiscal systems in different tiers of government. Questions arise around the topic of what the appropriate governance structures for managing metropolitan structures—and the inter-jurisdictional issues they bring about—should be. Since many cities are being restructured into metropolitan government areas (such as the Johannesburg Metro or the Metropole Ruhr), issues of inter-jurisdictional coordination are at the forefront. At another level, the discussion is also about creating or strengthening intermediate levels of governments above the city to manage urban spatial and environmental planning (Cities Alliance 2016).

Fig. 8: Evolution of a knowledge-policy nexus: rethinking urban governance



Source: Own compilation after World Bank 2014.

3.5.4 From policy to the concept of urban transformation: a conceptual rapprochement

But what exactly does the World Bank (2014: 6) mean by “transformation as a necessary good” and what exactly does the SDSN mean by “transformative development” (SDSN 2013a)? Finding suitable answers to these questions guides this entire dissertation process, including the case study in chapter 6, but what the current literature says is the following: Transformation is often a term used to describe far-reaching shifts in connection with fundamental political, social and economic changes and their

interactions (amongst others: GIZ 2011: 1; Stockmeyer 2011: 4). However, the concept of transformation is more than just a retrospective approach to describing history. In contrast to “development”, which is often seen as change without prior conditions and a target situation which determines project goals, transformation places emphasis on the change process itself (Stockmeyer 2011: 6). Transformation processes are aimed at a complex goal that resembles a vision rather than a final state that can be exactly described. Transformation stresses the multidimensional nature of change processes which cover different sectors, fields of action, groups of actors and modalities. These often involve differences in timing, divergences and setbacks. The political elite, public administration, informal and formal private sectors and civil society mostly have different interests, and intervene in the transformation process at different times and in very different ways. Such uncoordinated interventions also show the limits to planning transformation processes. The different paces of change in a process of transformation mean that different interventions influence each other, and the result is difficult to predict. In the course of a transformation process, the interim goals and points of intervention for managing the transformation also change (Stockmeyer 2011). In short, the path to sustainability is a process of transformation on a global and historical scale (GIZ 2011)¹⁶, where all systems and peoples are interconnected in complex ways.

Transformation in and by cities is nothing new. What is new is the global dimension of both urbanisation and the topics on the development agendas which confront cities, and which cities must contribute towards. The term “cities” usually includes local governments, citizen and their organisations, firms and associations. Cities are part of the social, economic and political structure of a country and beyond. Cities operate within this triad: locally, nationally and globally. IASS (2011) uses the term “(g)local political actors” in this regard. Cities in form of local government can be key actors on the path to more sustainability if urban transformation processes can be guided in this direction. We know that cities operate within this triad, but we don’t know exactly how this works or who influences the decisions and steps taken. The case of Durban’s participation in the 100 Resilient Cities campaign will shed some light on these processes.

¹⁶ Several conferences (among others: Development Policy Dialogue Berlin 2013 on “Cities in Transformation: Pioneers for Sustainable Development”; the GIZ Annual Conference 2012 on “Driving Transformation: The City as a Global Player”; the ZTG Conference 2013 Berlin on “New Governance Approaches for a Sustainable Transformation of the Society”) held in the last few years have covered this topic, and some high-ranking policy think-tanks (such as the Institute for Advanced Sustainability Studies (IASS 2011) and the German Advisory Council on Global Change (WBGU 2011) contributed very actively to the debate about the governance of urban transformation. This indicates increasing awareness of the topic.

Transformation processes cannot be planned in detail from start to finish, but they can be influenced through focussed interventions (GIZ 2011: 5). If we look at the Durban context, we find that the 100 Resilient Cities campaign by the Rockefeller Foundation is such an intervention.

3.6 Conclusion

This conceptual framework set the scene for the following research by making a case for the relevance of urbanisation and how academic literature, think-tanks and practitioners all over the world are looking for new urban development models. The literature and debates highlighted in this chapter suggest that, first of all, future urban development planning is very necessary, and secondly that it should be guided by a systemic approach. It was highlighted that such a systemic approach involves more than focussing on city development through single technical aspects or selective provisions. Urban development must be recognised more as a sociological or political term than an architectural term. This more holistic understanding is guided by the introduction of the new concept of urban transformation. The debate and discussion around this emerging term has been followed in this chapter, since the concept calls for an understanding of the underlying social and political root causes of urban challenges and the correlations amongst these challenges. Society is complex and so are cities, but the important question is how these “hyper-complex” challenges could be influenced by politics which in this case is local governance as described in this chapter.

Most of the international research by foundations, think-tanks or UN organisations is sponsored by nation states. It is therefore astounding that most of the organisations referred to in this chapter (UN DESA 2014, UNEP 2011, UNFPA 2007, WWI 2007, Institute for Advanced Sustainability 2011, World Bank 2016) speak out to champion fostering devolution processes from national government to local government, since local government is key to tackling the urbanisation challenges of the future. It was shown clearly that it is not the quantitative aspects or masses of scale that only matters when it comes to cities, but their political and social fabric and the fact that they can actively decide on their own path dependencies.

The chapter showed in its second part how the trajectory of seeing urbanisation as an “unnecessary evil” to a “necessary good” has changed. After the declaration of the SDGs and the New Urban Agenda at Habitat III, some experts (e.g. Parnell 2015) stated that there had been a clear shift in policy interventions and investments in that they were now specifically targeting cities. The 100 Resilient Cities campaign introduced by the Rockefeller Foundation is one such large investment.

Furthermore, a connection was deduced from the described theoretical background of HABITAT III and the debate around the SDGs, their relevance for the Durban case study, and this thesis in general.

What was shown with SDG 11 was that this finally adopted, stand-alone urban SDG has an impact on city development and it aims to guide the public's understanding of complex sustainable development challenges in cities, and to inspire public and private action as a consequence. It brings local governments, national governments, the private sector and civil society together to form strong partnerships, as shown in some examples in this chapter. As already mentioned, this international agenda-setting is resulting in significant donor and public funding around urban development. Global partnerships are being created and private donors and a global network of development partners are currently putting large amounts of funding into urban development projects. It is against this background that the Rockefeller Foundation established its 100 Resilient Cities campaign, which puts questions of ownership and self-determination on the table. The chapter also highlighted the process, strategy and arguments of key stakeholders and organisations involved in drafting and demanding urban related stand-alone SDGs. Many local governments already have very strong, positive track records of promoting sustainable urban development. The urban SDG No. 11 supports this and will provide higher visibility for urban issues with national governments, donors, foundations and private sector investors. How SDG No. 11 addresses the urban challenge and how cities promote a shift away from business as usual will be of great importance to the post-2015 development agenda.

In general, the global insights and networks that have been formed and which are described in this chapter are of great importance for understanding programmes such as the 100 Resilient Cities programme. With this learning, the next chapter will show different facets and consequences of rapid urbanisation with the aim to identify various development areas with respect to potential leverage effects on transformative urban development processes.

Chapter 4: The 21st century challenge and the urban opportunity

4.1 Introduction

This chapter elaborates on various urbanisation areas with respect to their potential leverage effects on transformative urban development. The development areas are selected according to their systemic relevance, their potential to avoid path dependencies and of course according to their transformative potential. They are important when it comes to interpreting and understanding the following chapters on transformation and resilience, as well as the implementation and construction of the 100 Resilient Cities project in Durban.

Building on the previous chapter, this chapter serves as a conglomeration of ideas and facts and examines why cities are likely to become more and more important in solving future human challenges and problems (chapter 4.2). It classifies global urban challenges according to social, environmental and economic agendas (chapter 4.3). Special attention is given to infrastructures and transport since infrastructure is key to any urban development (Swilling 2016: 21). Besides the global perspective, special focus is given to African and South African perspectives.

After highlighting the quantitative dimensions of cities, the chapter also focusses on the political and social fabric in cities which, together with the input of stakeholders, can actively shape the structure of a future city. Special focus is given to the prevention of urban violence and crime. The role of the youth is also a critical focus area in this chapter, given African urban demographics. Other topics are environment and climate change, inequality and its relation to poverty or technological innovation, and social cohesion—all closely linked in urban environments.

Cities are simply too individual and too complex for standardised solutions. Therefore, this chapter analyses the emerging risks and challenges which cities face, with a view to facilitating discussions on how best to address the challenges ahead and how to apply solutions that are location-specific, innovative and participative. As former UN General-Secretary Ban Ki-Moon said “our challenge is to connect these dots, so that advances on one can generate progress on others” (UN-Press 2012).

4.2 Urbanisation: one of the most dominant forces in global change

4.2.1 The global perspective

As noted in the introduction, by 2050 two thirds of mankind will live in cities. As the environmentalist and former director of the Worldwatch Institute, Lester Brown, warned decades ago, a pond that will be covered by the exponential growth of water lilies in 30 days is only half covered on the 29th day (Brown 1978). This statement is quite harsh to quote when applied to the future, but if one looks back, the last 200 years of population growth can be likened to the first 29 days of the lily pond. The last day of the lily pond, in our context being the next 40 to 50 years in Africa, will see the growth of the previous 29 days and 200 years respectively, double. The majority of this growth will take place in low- and middle-income cities where 80 percent of the world's population currently resides in 2020. The urban share of the world's population has increased from 13 percent in 1900 to 29 percent in 1950, and it is estimated to increase to 58 percent in 2025 (similarly, the urban share of the gross world product increased from 30 percent to 45 percent, to an estimated 75 percent in the same time period). It is also predicted that the majority of the world's urban population in 2025 will be living in Africa, Asia and Latin America, while the shares of Europe, North America, and Oceania are projected to decline steadily until 2025 and further.

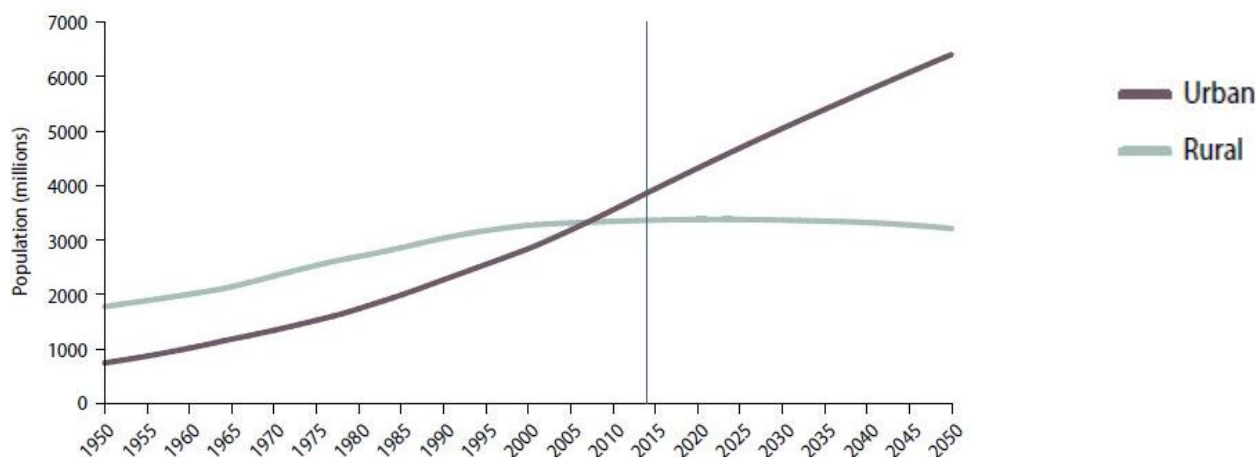
In *fig. 9*, we see that in 1950 only one third of the global population lived in urban settlements. The year 2007 marked the first time in history where the global urban population exceeded the global rural population (51 percent). By 2050, the urban population is expected to have grown to about 6.3 billion people, and two thirds of the total global population will be urban (UN DESA 2014: 7). According to the most recent statistics on urban development by the United Nations World Urbanisation Prospects¹⁷, the current urban population is close to 3.9 billion (approximately 54 percent of the global population). *Fig. 9* shows that the population of the world has grown rapidly from 0.75 billion in 1950 to 3.9 billion today—and in 2045, the world's urban population is expected to surpass six billion.

In order to address some of the complex challenges that urban areas face, it is important to understand what drives urbanisation. People move from rural to urban areas both within their own countries and trans-nationally, understanding that urban areas might offer attractive economic, social, cultural, and education opportunities. Jobs in urban areas are generally better paid and are less labour-intensive. Many other factors are also at play, such as shifting national and international migration patterns,

¹⁷ The UN DESA World Urbanisation Prospects are widely used throughout the United Nations and by many international organisations, research centres, academic researchers and the media.

international trade regimes, and macro-economic policies and disasters like droughts, wars and earthquakes (Satterthwaite et al. 2009). Conversely “urban infrastructures” attract people to cities and offer “opportunities” to migrants. These factors will be explored in more detail in the following chapters.

Fig. 9: Turnaround between the urban and rural population between 1950 and 2050



Source: UN DESA 2014

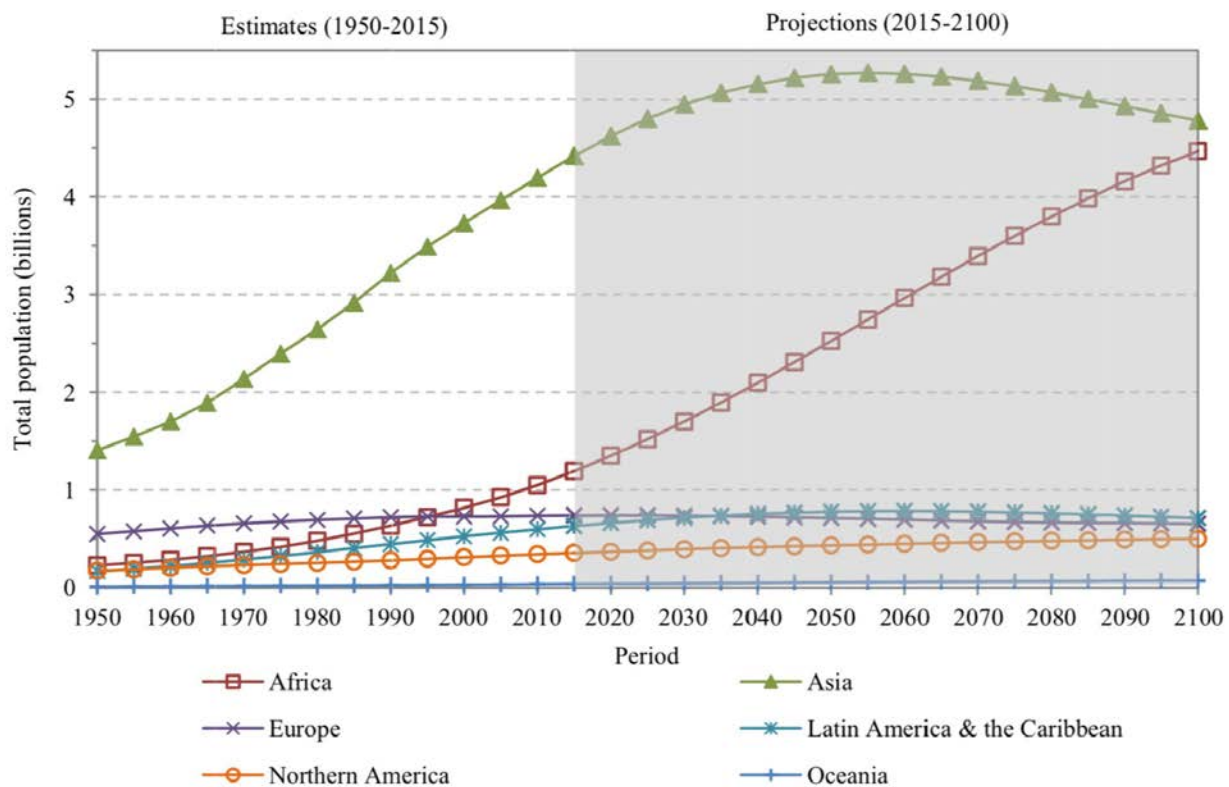
4.2.2 The African perspective

According to the most recent general population data from the World Population Prospects 2017¹⁸ (UN DESA 2017), the huge urban growth described in the previous chapter 4.2.1 will occur in developing countries, and especially in Africa. According to the medium-variant (see *fig. 10*), Africa will be the only continent with significant population growth between 2020 and 2100, while the populations in Europe, Northern America, Latin America, the Caribbean and Oceania will stagnate at low levels until 2100. Asia’s significant growth started in the 1970s and 1980s, whilst Africa’s population growth has only recently begun. It is projected that Asia’s population will reach its peak at 2050 by the latest. The UN projects that the African population growth will be sustainable and the peak will not be reached before 2100, by which time it will almost have equalled the total population of Asia (UN DESA 2017).

¹⁸ The 2017 Revision provides population projections for the period 2015-2100. There is only one series for the population estimates, but several series for population projections because different projection variants are calculated. Calculations are carried out by five-year periods using data classified by five-year age groups. Projections of stocks are presented for every year that is a multiple of five from 2020 to 2100.

According to UN DESA 2014, almost all of Africa's population growth will happen in large or medium-sized cities. In the next 20 years alone, African cities will double their population. Distribution of urbanisation varies greatly across the earth's surface. Europe, boasting 14 percent of the world's urban population, currently has 73 percent of its population living in urban areas. This is projected to increase minimally to over 80 percent by 2050. At the moment there are only 59 countries worldwide with an urbanisation rate of more than 80 percent. Among those with populations of at least 10 million inhabitants, the most highly-urbanised countries are Belgium (98 percent urban), Japan (93 percent), Argentina (92 percent) and the Netherlands (90 percent). By 2050 it is projected that a total of 89 countries are expected to have urbanisation rates of more than 80 percent (UN DESA 2014).

Fig. 10: Population by region: estimates 1950-2015 and medium-variant projection 2015-2100

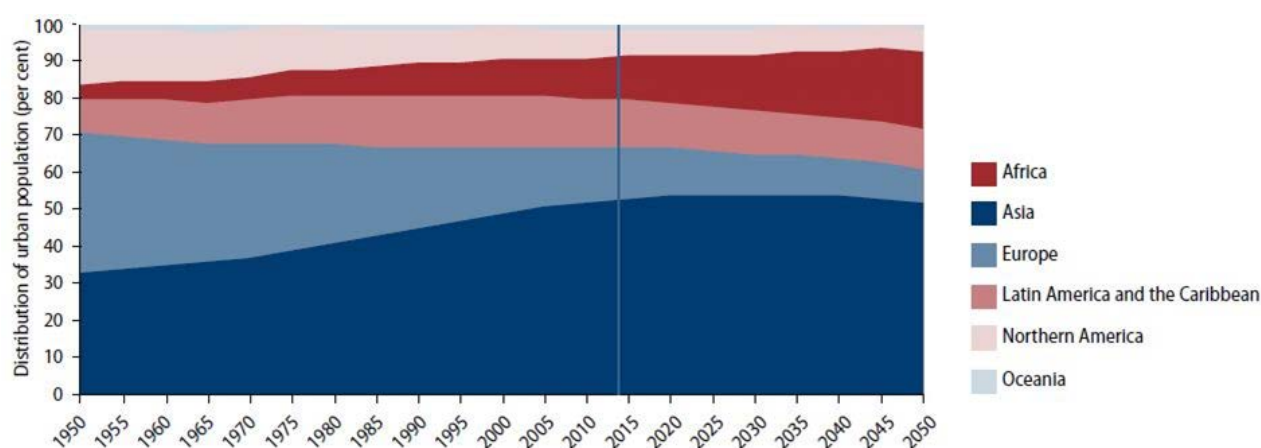


Source: UN DESA 2017

Fig. 11 and 12 show that the African continent is the only one where the share of the world's urban population is projected to grow between 2020 and 2050. By 2020, the urban population of Africa will have become larger than that of Europe and Latin America. This is especially remarkable given the fact that in 1950 Africa was the least urbanised continent, with only a 4 percent share of the world's urban population, while Europe was the most urbanised continent with 38 percent, closely followed by Asia with 32 percent. The rate at which this transition will occur in Africa is astonishing; far

outpacing the historical urbanisation of developed regions. While the population of London grew at 2 percent annually from 1800 to 1910, doubling every 25 years, Kigali grew at 7 percent from 1950 to 2010 and doubled within only 10 years (Jedwab et al. 2014). Even the rapid expansion of Asia's population pales in comparison; it will have grown by a factor of 3.7 between 1950 and 2050, while Africa's equivalent rate will be 5.18 from 2000 to 2100 (Fisher 2013). *Fig. 11* also shows that the upcoming Asian population growth in the next decades is considerably low in comparison with African population growth. Currently, Nigeria is the only African country ranking amongst the ten countries with the largest populations worldwide. It is expected that in 2100 Nigeria will be joined by three other African countries: Democratic Republic of Congo, Tanzania and Ethiopia (UN 2016).

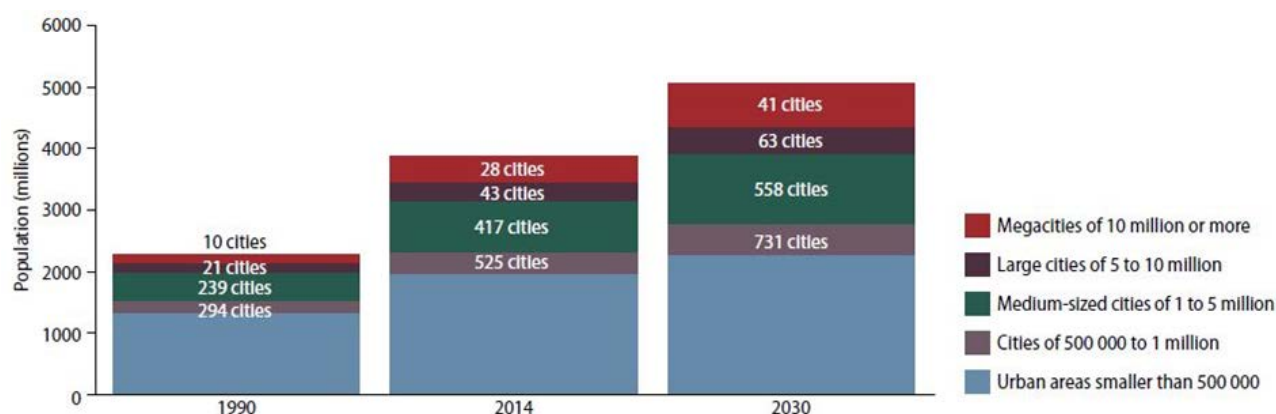
Fig. 11: Percentage distribution of urban population in regions between 1950 and 2050



Source: UN DESA 2014

As highlighted in *fig. 11*, in the next few decades urbanisation will increase worldwide, with Africa and Asia urbanising at faster rates than the rest of the world. In these continents, the rate of urbanisation is measured as the average annual rate of change of the urban percentage. In Asia it is currently 1.5 percent per annum and in Africa 1.1 percent per annum. Highly urbanised regions are urbanising at a slower rate of less than 0.4 percent per annum. Nearly 90 percent of the urban increase will take place in the urban areas of Asia and Africa. The fastest-growing urban agglomerations are medium-sized cities and cities with less than one million inhabitants on these continents (see *fig. 12*).

Fig. 12: Global urban population growth is propelled by the growth of cities of all sizes

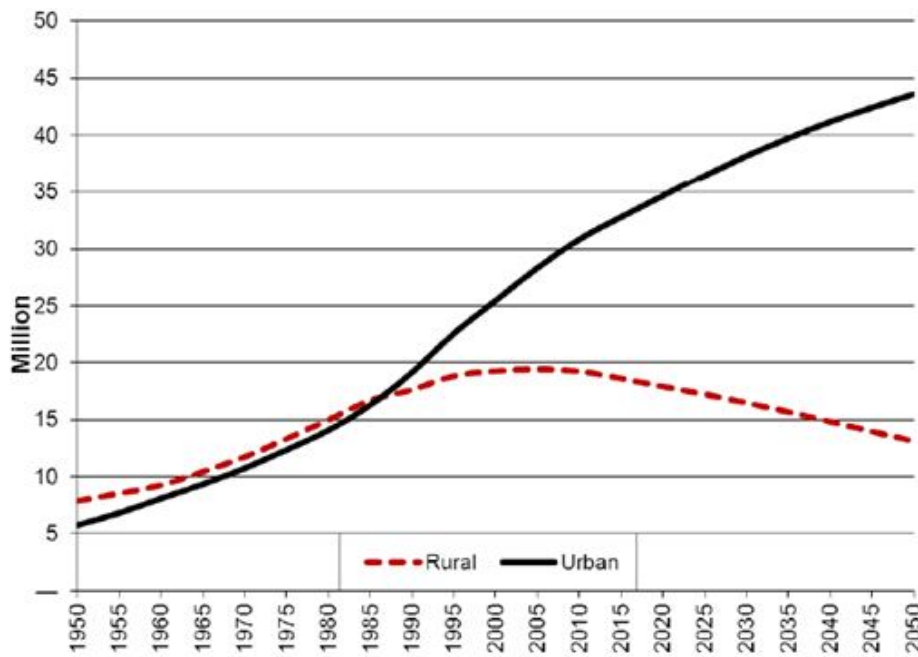


Source: UN DESA 2014

At this point, most of the world's urban population is concentrated in Asia (52 percent) and Africa (21 percent). It is interesting to note that the population growth will occur predominantly through natural growth (births exceeding deaths) as opposed to migration (UNFPA 2007). The London Urban Age Project calculated that in Lagos for example, the population grows by 58 individuals per hour. In comparison, London's population grows by only six during the same time period (Burdett and Sudjic 2007: 27). The world's rural population itself will also begin to show an absolute decline from about 2020.

If we take a closer look at South Africa, the same is happening here. An article issued by the South African Institute for Race Relations (SAIRR 2013) titled "South Africa goes with the urbanisation flow" gives detailed numbers: in 1990 a total of 52 percent of the South African population lived in cities. This increased to 62 percent by 2011. The United Nations Population Division estimates that this will reach 71.3 percent by 2030, and go up to 80 percent by 2050 (UN DESA 2014). This is also highlighted in *fig. 13* below. South Africa's relationship with urbanisation is however complicated and ambiguous. Even though the ANC's 2014 election manifesto emphasises rural development more than generating urban growth (CDE 2014: 2), this might be due to strategic political reasons since the largest ANC voter populations reside in rural areas, according to the results of the latest national and provincial elections by the IEC (2019).

Fig. 13: Urban and rural populations in South Africa, 1950-2050



Source: UN DESA 2014

According to the United Nations (UN 2018: 11) statistics office, the population of Durban totalled 2,6 million in the year 2000 and grew to 3,1 million in the year 2018. A total of 3,5 million inhabitants are expected by the year 2030. This means that eight percent of the total South African urban population is living in Durban (UN World Cities 2018: 11), giving Durban a population density of 1.502 people per square kilometre. Durban is currently South Africa's fourth largest metropolitan area, behind Johannesburg, Cape Town and Ekurhuleni.

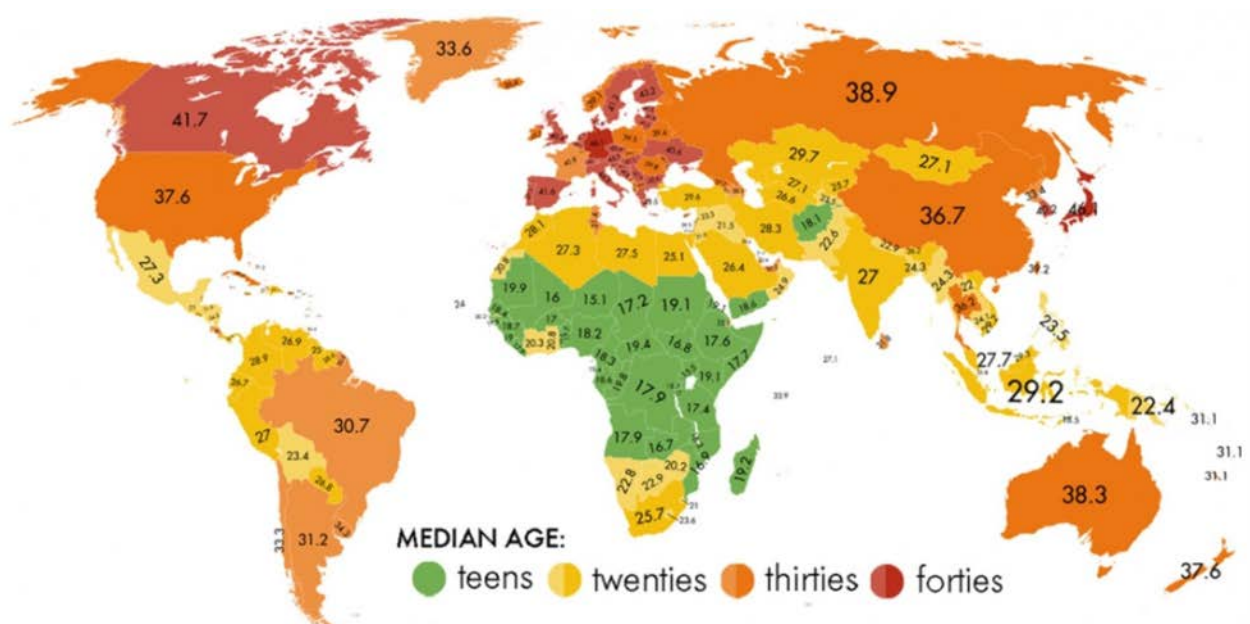
It is important to mention that African urbanisation is regarded as “non-conforming”, since it is not accompanied by economic growth as is the case in developed countries (Turok 2012). According to Pieterse, African cities are very distinct from cities in the north in terms of culture, education, industrialisation, informality, post-colonialism, violence and poverty. An understanding of what is taking place in African cities and the development of new concepts and theories of African urbanism has only recently become an area of focus (Pieterse 2011). Turok comes to the interesting but debatable conclusion that African urbanisation is different because it would have “taken place prematurely” (Turok 2012: 13).

The necessity of focussing on the problems and challenges faced by young people in urban areas becomes more visible when looking at the demographics: the absolute number of young people living in developing countries is higher than ever before. In 2013 approximately 1.4 billion people between 15 and 25 were living on our planet, out of which 1.1 billion lived in developing countries. This

number of young people represents an all-time high, posing a major challenge for their countries which are faced with the need to provide them with education and employment (UN DESA 2014: 3).

If we look at the median ages of countries' inhabitants across the world (*fig. 14* with data used from CIA World Factbook 2013), we see that almost all countries with young populations are located on the African continent. If we consider the median age population of a country population of 20 years and below ("teen populations", highlighted in green) we see nearly thirty African countries represented in this category (Oman and Afghanistan being the only non-African countries also represented in this category). The five youngest populations are Niger, Uganda, Mali, Malawi and Zimbabwe, with average ages between 15 and 17. Germany and Japan have the oldest populations with average ages between 46 and 44, and therefore belong to the group of the "forties" (highlighted in red).

Fig. 14: Median ages across the world

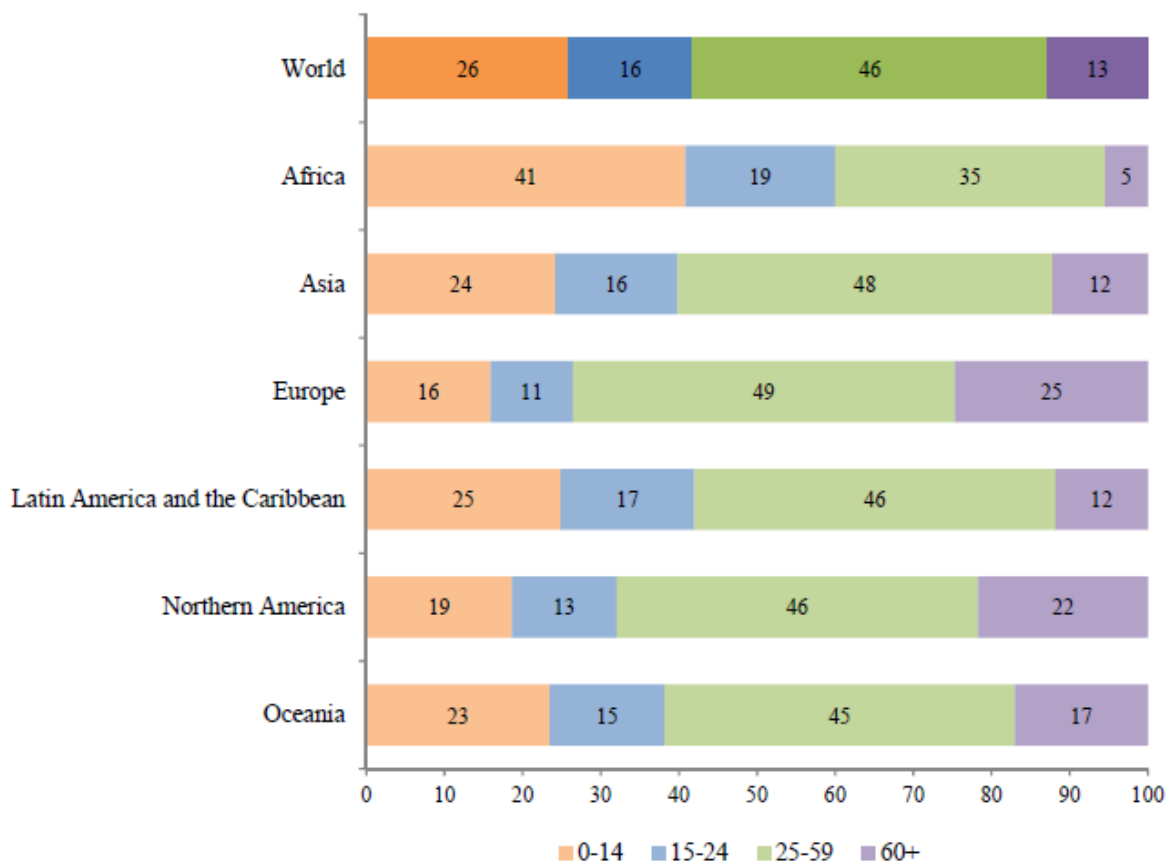


Source: Khosla 2014

According to the newest statistics from the World Population Prospects (see *fig. 15*), Africa is the only continent where the majority of the population (60 percent) is below 25 years old (Latin America 42 percent, Asia 40 percent). In Africa, the age group below 15 years is by far the largest age cohort, with 41 percent compared to other continents like Latin America (25 percent) and Asia (23 percent). In South Africa, 30 percent of the population is under 15 years and most of them (21 percent) are based in KwaZulu-Natal (Stats SA 2016). In Durban, the population cohort of people under 15 years grew from 25,3 percent of the population in 2011 to 29,5 percent in 2016 (Municipalities of South Africa 2018).

Since the 1990s, perceptions of youth have changed significantly. Young people are seen as “agents of change”: that is, as experts for the solutions to their own problems and the improvement of their lives (World Bank 2006: 32). Currently, international and national organisations like the World Bank, the UN-Children’s Fund (UNICEF), and the German Development Cooperation (GIZ) recognise young people as an autonomous target group. The World Development Report 2007 “Development and the Next Generation”, focusses especially on youth and concludes that there has never have been a better time to invest in the potential of youth for developing countries (World Bank 2006: xi).

Fig. 15: Percentage of population in broad age groups for the world and by region, 2017



Source: UN DESA 2017

Sustainability in democracy and rule of law will not be realised without the inclusion and participation of young people. This was highlighted both at Agenda 21 (chapter 5) and in the plan of implementation (clause 153) of the 2002 World Summit on Sustainable Development (WSSD) in Johannesburg.

In South Africa, the estimated youth unemployment rate in urban centres is 35 percent lower than in rural areas with 44 percent (CDE 2014: 3). Employed youth in larger cities tend to be in less precarious types of employment: less than 20 percent of working young people are employed in informal or domestic labour, compared with 30 percent in rural areas (CDE 2014: 3).

When one looks at the world's population, it is clear that in countries with rapidly increasing urban populations like Africa and Asia, the populations are young compared with other countries. Young people are moving to cities to find work, education, social lives and culture. This demographic shift changes ways of life, patterns of consumption and political structures (GIZ 2011: 1).

4.3 The global urban agenda and the challenges

4.3.1 Social agenda

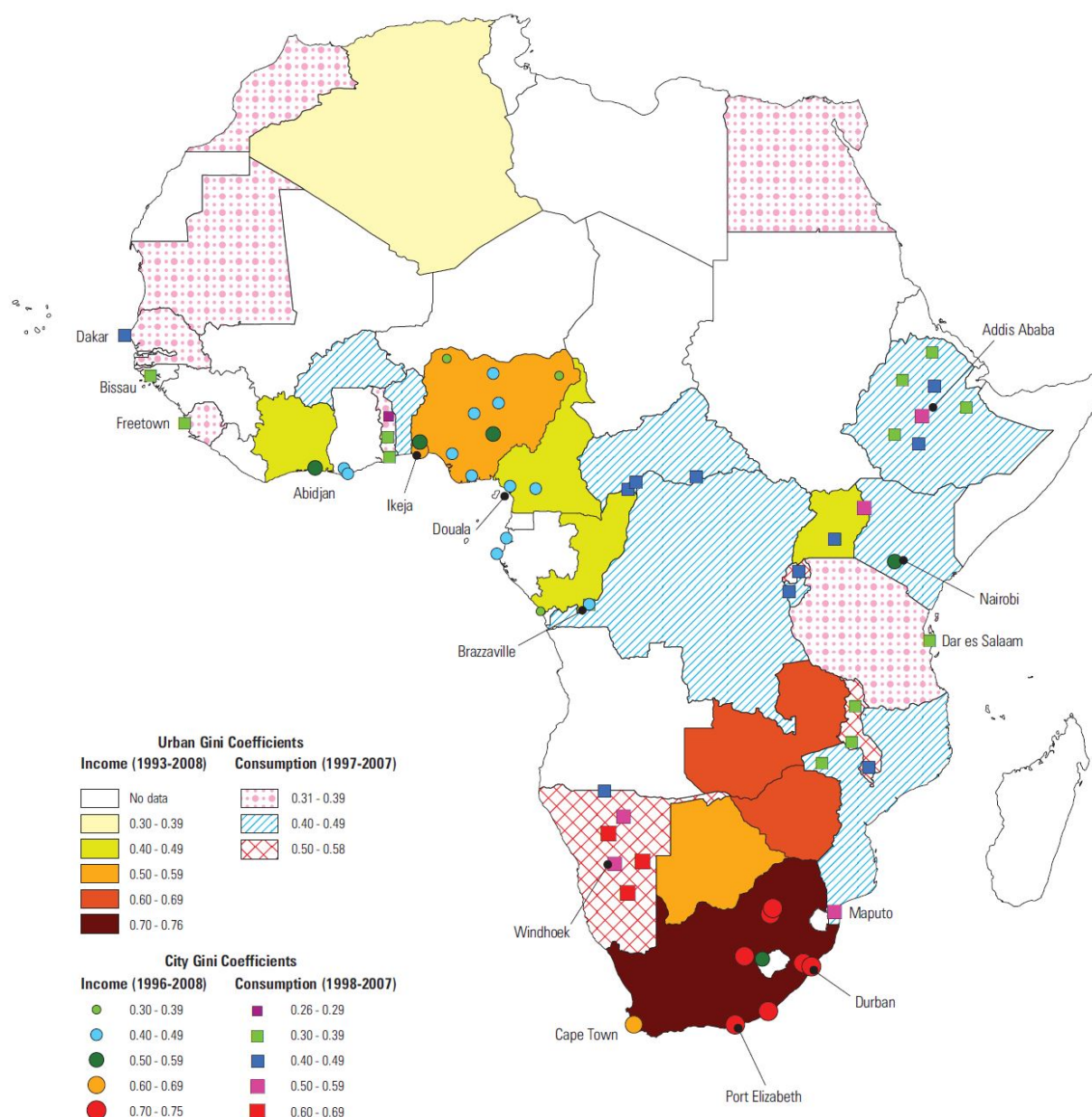
4.3.1.1 Inequality

Wilkinson and Pickett (2009) argue that addressing inequality leads to improved quality of life for all, not just the urban poor, and is therefore central to building resilience. Today the world is less equal than it was twenty years ago: 75 percent of cities have higher levels of income inequality than was true two decades ago (UN-Habitat 2016). The sample of Urban Gini coefficients in the UN-Habitat Global Urban Observatory (2009a) survey suggests that trends in the economic divide in Africa's urban areas are mixed. The results can be seen in *fig. 16* below. Of the thirteen countries reviewed, eight showed lowered values—though some only marginally—and five showed moderate to significant increases. Progress in reduction of poverty in Africa has been slow overall. Recent statistics from the World Cities Report 2016 (UN-Habitat 2016) confirm this trend, with South Africa (0.63) topping the list of most unequal countries in Africa according to the general Gini coefficient, followed by Namibia (0.61), and Botswana (0.61).

National surveys recently conducted in selected African countries show that the most significant reductions in Gini values in urban Africa took place between 2003 and 2006 in Uganda, and between 2002 and 2008 in Côte d'Ivoire (UN-Habitat 2009a: 89). The coefficient decreased from 0.48 to 0.43 in Uganda at a time when annual growth was calculated at rates of around six percent per year. The coefficient decreased from 0.51 to 0.44 in Côte d'Ivoire, even though the annual GDP growth rate was less than one percent. This also shows that economic growth does not necessarily correlate with inequality. Uganda and a few other African countries (such as Tanzania, Benin and Rwanda) managed to reduce urban consumption inequalities in a dynamic economic environment with GDP growth ranging from 4 to 6.5 percent. Gini coefficients have increased in several African countries. These

countries include Burkina Faso, Ethiopia and Egypt, and here the Gini coefficients have increased by 7.8, 11.8 and 13.2 percent respectively. The Gini coefficient of Zambia has also increased by 8.2 percent, despite the annual GDP growth rate of about 5.5 percent between 2003 and 2006. Zambia now finds itself in the “extremely high” inequality bracket. Consumption inequalities have widened in Mozambique too, but only marginally.

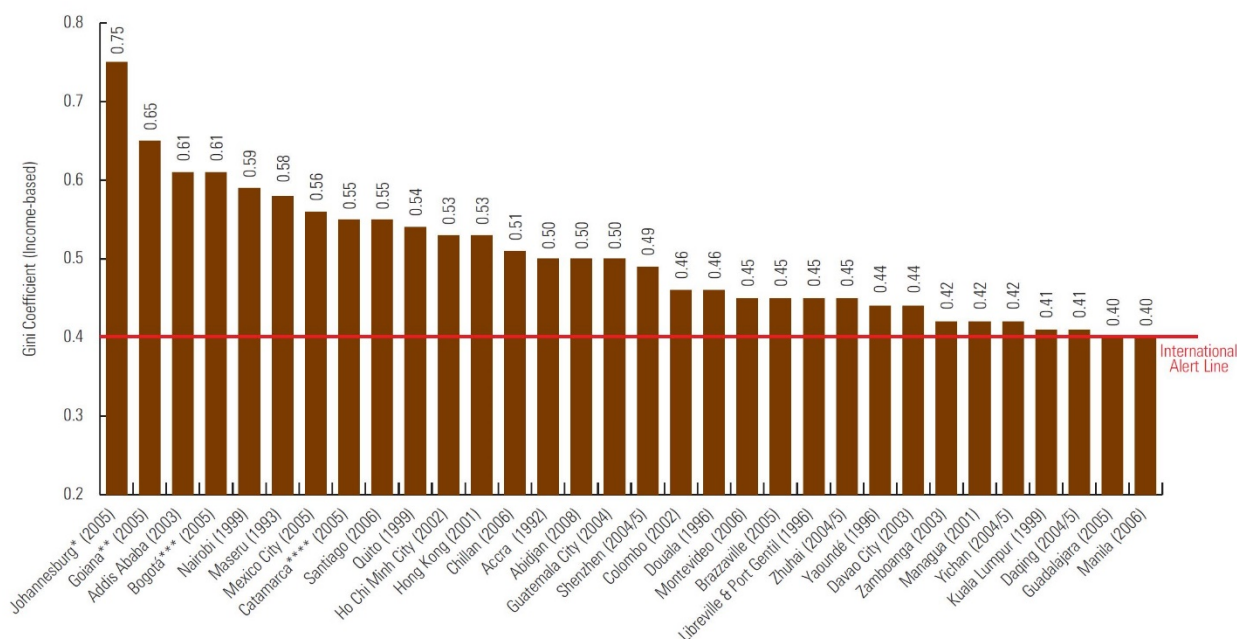
Fig. 16: Urban Gini coefficients across sub-Saharan Africa



Source: UN-Habitat 2010: 66

The most unequal cities in the world, based on income-based Gini coefficients, are shown in *fig. 17*. They are all situated in Africa, Asia and South America, with Johannesburg claiming the top spot by a wide margin (0.75). Addis Ababa (0.61) and Nairobi (0.59) are ranked 3rd and 5th most unequal cities in the world respectively. Interestingly enough, six other South African cities closely follow Johannesburg, namely East London (0.75), Bloemfontein (0.74), Pietermaritzburg (0.73), Pretoria, Durban and Port Elizabeth (all 0.72), and Cape Town (0.67) (UN-Habitat 2009a: 73). The “international alert line” is much lower, with 0.40. Worryingly, according to the South African Cities Network (SACN), Durban’s Gini coefficient went up between the years 2011 and 2013 which means inequality is still rising in Durban (SACN 2016: 336). On the other hand, levels of poverty in Durban are decreasing. In 2001, 40 percent of the population lived below the poverty line, decreasing to 30 percent by 2011 (SACN 2016: 336). Durban is the only city in South Africa—apart from Msunduzi/Pietermaritzburg—not to have improved its human development index (HDI) between 1996 and 2013, and has the second-lowest life expectancy (after Msunduzi). In 2013, SACN (2016: 336) expected the HDI to be around 6.2, and the three indicators for Durban which make up the HDI were expected as follows: life expectancy at 58.7 female and 53.4 male, literacy at 88 percent, and gross value added at 316.1 billion ZAR.

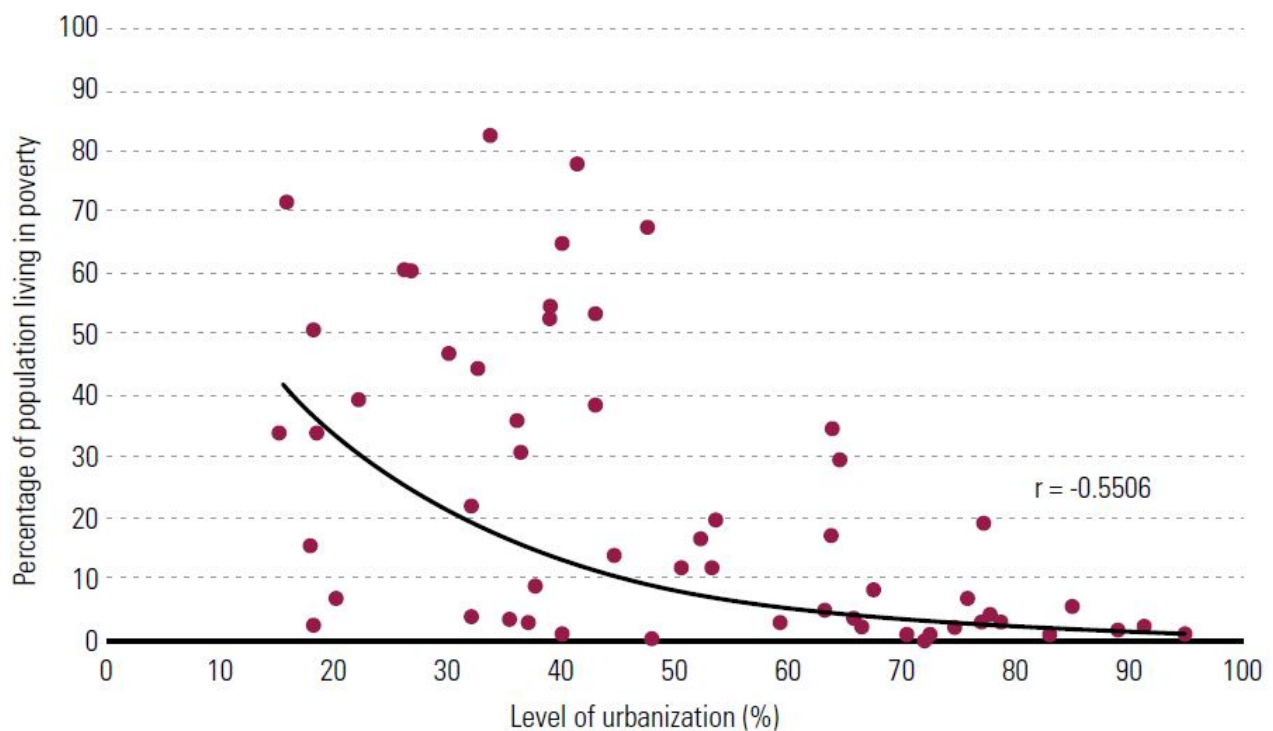
Fig. 17: Most unequal cities in the world (income-based Gini coefficient)



Source: UN-Habitat 2010: 72

When one looks at simple poverty rates, urbanisation can play a key role in eradicating poverty. As illustrated in *fig. 18*, highly urbanised countries are associated with low levels of poverty and high levels of human development. Urbanisation has helped millions escape poverty through higher levels of productivity, employment opportunities, improved quality of life via better education and health, large-scale public investment, and access to improved infrastructures and services. This shows the great potential which urbanisation could have on minimising poverty levels. Currently, this is not yet the case in sub-Saharan Africa. Here, a total of 55 percent of the population lives in slums (ISS 2016). The African Economic Outlook 2016 predicts that Africa could see its slum population triple by 2050 if current developments continue (AfDB et al. 2016: 154).

Fig. 18: Urbanisation and poverty



Source: UN DESA 2014

4.3.1.2 Urban safety & security and the “youth bulge”

As focussed on in the last chapter, Africa’s future is urban and young. Besides inequality and poverty, challenges such as safety and security¹⁹ will become an important focal point in urban areas. This

¹⁹ In cities, the terms “safety” and “security” are often used interchangeably. In fact, in the German language, these translate to only one word (“Sicherheit”), and there is no differentiation. However, from a political and academic point of view, it makes sense to differentiate. According to Johnston and Shearing 2003 as well as Wood and Shearing 2007,

raises a number of important questions. How can urban crime prevention and policing keep pace with these challenges? Will Africa's urbanisation translate into a better and economically prosperous life for all, or is it set to increase violence?

According to the statistics from UN-Habitat, at least once in every five years 60 percent of all city dwellers are victims of crime (UN-Habitat 2007: 55). In Africa, this number is 60 percent. Urban violence prevention strengthens local democracies, promotes economic integration and plays a critical role in resilient and transformative cities (GIZ 2014). Recent literature such as Moser and McIlwaine (2014), Moser (2014) and Muggah (2014) suggest that instead of trying to eradicate violence and crime, policymakers need to focus on empowering local communities to contest and confront the structural and political causes that lead to urban violence.

"Safety is a foundation that we all need in order to build our lives, strong communities and a strong nation."

(Cartwright and Shearing 2012: 23)

If we look at urban areas and bigger cities, crime rates are much higher in large cities than in either small cities or rural areas, and this situation has been relatively pervasive for several centuries (Glaeser and Sacerdote 1996). According to the 2016 State of Urban Safety in South Africa Report, urban safety is crucial to development. In South Africa urbanisation generally goes hand-in-hand with high rates of crime and violence "because of factors such as extreme inequality, unemployment, inadequate services and health provisions, social exclusion and overcrowding" (South Africa Cities Network 2016: 11).

Incidents of violence, whether politically or criminally motivated, are common in Africa's cities and towns, and just like poverty, violence is urbanising. Urban violence reflects the already-given structural violence which exists in the form of poverty and hopelessness (ISS 2016: 21). Armed conflicts,

security is seen as the degree of resistance to, or protection from, harm. It applies to any vulnerable and/or valuable asset, such as a person, dwelling, community, item, nation, or organisation. Security is the more technical term, covering the process of establishing safety and relying on those who are responsible for ensuring safety (such as the police). Safety is the condition of being protected from harm or other non-desirable outcomes, health and wellbeing included. Safety has both emotional and physical attributes, and both must be ensured for safety to be achieved. Safety is more than not being victimised and it implies the feeling of being safe. The existence of both safety and security is important because they are interrelated, and the absence of one necessarily affects the other.

riots and protests are also on the rise in Africa. The often-oppressive state responses to protests entrench these problems. For example, in South Africa's Gauteng province (which includes the cities of Johannesburg and Pretoria) the Pretoria-based ISS (2016) counted 1.900 violent protests in the last ten years—more frequent than in any of the other current or emerging African megacities.

Both private and public investors steer clear of high-risk districts, and this negatively impacts the socio-economic stability of the country as well as the population's quality of life. A perceived lack of security puts a city's development efforts in jeopardy. According to GIZ (2014), the solution to this problem involves an integrated and preventive approach looking at infrastructures and at a systemic prevention approach especially focussed on young people. Violence and conflict weakens the democratic and economic development of cities, and contributes to decreased levels of economic growth of even entire national economies. Conversely, local democracies and economic development are strengthened if a decrease in violence, conflict and crime is achieved.

The role of the youth is a critical area of focus when it comes to safety and security, given the African urban demographics highlighted in chapter 4.2.3. The role and impact of young people on democratic and economic development, participatory governance and social cohesion is part of the current debate in academic research, and is important for future development (Feldes 2013). Some researchers see huge potential in the youth for the development of cities, while others are more pessimistic and correlate, for example, the numbers of young people (mainly of young men) with the likelihood of violent conflicts (Abbink and van Kessel 2005; Wagschal 2008). The majority of researchers see a strong correlation between the interdependencies of jobs, poverty and violence.

Young people without proper school education or vocational training are more likely to commit crimes because of their experienced or perceived lack of individual development. The *relative deprivation* approach captures this phenomenon quite accurately: "Relative deprivation refers to a perception of being deprived of something and is able to account for why some people, both young and old, living in a deprived environment do not engage in crime as well as why some do" (Weber 2003: 21). If the youth cohort is reasonably well educated but there are no jobs, or they are politically or economically marginalised, this will often trigger youth protests and cities are the main locus of these protests (Urdal 2011). The well-known "Arab Spring" uprisings in 2011 exemplify these types of urban protests; we now increasingly see them in sub-Saharan Africa as well. In Ouagadougou, Burkina Faso, urban youth-led protests in 2014 led to the resignation of long-term President Compaoré after 27 years in power. In South Africa, so called "service delivery protests" have been shaking communities and the hegemony of the ruling African National Congress (ANC). Another very prominent example is the *#FeesMustFall* student protest witnessed in South Africa over the last few years,

which has finally shed light on other political fields such as social cohesion. Here, cities are the main hotspots of these protests.

Statistically, people between the ages of 15 and 24 make up the majority of both victims and perpetrators of crime—everywhere in the world. Most statistics show a strong demographic factor: young men between 15 and 30 are disproportionately more frequently, sometimes simultaneously, perpetrators and victims of violence (Imbusch 2010: 17). Many investigations (among others Heinsohn 2006; Wagschal 2008; Wagschal and Metz 2017) show that if the majority of the population are male youths and are confronted with high rates of unemployment, the potential for violent unrest is extremely high. In fact, this plays an important role for example in the context of migration. The discussion regarding whether crime is more frequently committed by migrants and refugees than by locals, divided German society at the beginning of 2017 and became a prime focus of the election campaigns for the 2017 national election in Germany. The typical refugee who arrives in Europe from Africa is male and young.

If we think about the increase in youth populations previously described, it becomes clear that the youth needs to be the focus of prevention efforts, otherwise violence and crime will increase dramatically in urban areas. The World Bank 2007 World Development Report urgently demanded the implementation of youth participation mechanisms, enabling the youth to participate in society and exercise a voice in political arenas. If there is no real representation of youth in a society, the frustration resulting from being unheard easily spills over into acts of violence (World Bank 2006: 12). Accordingly, youth violence and juvenile delinquency are an important element in international development cooperation. According to Peter Imbusch (2010: 20), an internationally-known sociologist and expert on violent youth conflicts, youth violence causes extremely high economic and social expenses for a nation, and therefore must be considered one of the biggest development barriers. This could lead to the destabilisation of a country in the medium to long term, both economically and politically. High levels of violence also lead to the political instability in states.

“The economic and social costs of violence are such that it should be considered one of the most significant barriers to development.”

(Imbusch 2005: 20)

According to Fuller (2004), a youth bulge exists where at least 20 percent of the population are youth between 15 and 24. In this context, one can see a youth bulge in almost all African countries. Fuller also adopted a “youth bulge approach” in regard to the participation of young people: “[T]he existence of a generous youth population is in itself automatically a negative element for any society. In well-functioning societies, a youthful population can add to the vigour and productivity of society (...). But if society lacks the social infrastructure to integrate, employ and care for a growing population, the potential demographic benefits of a youthful population instead become a serious drain on the resources of the state and forms a dangerously unstable element within society” (Fuller 2004: 5).

It should be mentioned that these views are not completely indisputable. Urdal (2004) for example, could not completely confirm Fuller’s thesis when following an investigation which included 207 violent conflicts all over the world between 1950 and 2000.

4.3.1.3 Urban violence and crime prevention in South Africa

As we saw in chapter 4.3.1.1, South Africa is one of the countries with the highest inequality world-wide—and with the highest rates of violence. The country has a high rate of murders, assaults, rapes, and other crimes compared to most other countries. The South African Crime Statistics reveal for example that in the period from March 2012 to April 2013 alone there had been 16.259 murder cases in the country, with the highest numbers in KwaZulu-Natal (3.629) and Gauteng (2.997). What is clear is that violence and crime are more concentrated in urban areas like Johannesburg, Cape Town and Durban, with homicide rates between 39 and 36 per 100.000 inhabitants respectively than in rural areas (SAPS 2013). After a peak in the crime statistics in Durban in the year 2012/2013 (179.030 crime incidents), the total numbers decreased to 160.122 in the year 2015/2016 (eThekweni 2017: 10). Even though the general crime statistics for Durban are much lower than the ones for Johannesburg or Cape Town (SACN 2019: 11) they are still higher than is seen for example in Chicago or Rio de Janeiro. On the other hand, Durban has the second-lowest rate of assault and third-lowest rate of non-violent property-related crime, ranked fifth for robbery (down from fourth in 2015/16), and has relatively low rates of sexual offences (SACN 2019: 62). The most unsafe places in Durban, according to crime statistics, are the two townships KwaMashu and Umlazi (SABC 2018).

The reasons for violent crime in these hotspots are mainly alcohol and the misuse of firearms combined with youth unemployment, weak social cohesion, and social norms which are generally pro-violence (Seedat et al. 2009). Community members and households in marginalised areas are particularly vulnerable. They generally face crime without high walls or good lighting, and with little access

to security services. The stark differences between rich and poor and the “spatial legacy of apartheid” (Christopher 2001) are most obvious in townships.

The South African government has developed a comprehensive national violence prevention policy namely the “White Paper on Safety and Security” (Civilian Secretariat for Police Service 2016). However, implementation at the local level is generally weak. Crime rates have declined since the end of apartheid but remain 4.5 times higher than the global average (SAPS 2016). Unfortunately, the most recent statistics do not reflect this continuing decline. Between 2012 and 2016, the murder rate has again increased by 20 percent and the number of armed robberies has risen by 30 percent (SAPS 2016). This occurred during a period when the annual budget of the South African Police Service (SAPS) increased by 50 percent. It is important to note that the value of such statistical numbers must always be challenged in this field. The official crime statistics by SAPS always only show the official registered cases, and not those cases which are not recorded and which remain in the dark. These statistics therefore do not present true numbers, and this must be taken into consideration.

Table 5: Protests in municipalities in South Africa per year between 2004 and 2013

Year	Number of protests
2004	10
2005	34
2006	2
2007	32
2008	27
2009	107
2010	111
2012	173
2013	155

Source: SA Local Government Research Centre 2012: 45

If we look at the number of protests in South African communities between 2004 and 2013 (see *Table 5*), these have steadily been rising every year since 2004, when there were only 10, to 173 in 2012,

and 155 in 2013. Between 2007 and 2011 there was an average of 12 protests per month, and in 2012, 80 percent of these protests turned violent. According to Parnell and Pieterse (2010: 149), collective violence is always a reflection of structural economic and socio-political exclusion.

In the past, it was widely thought that urban violence could be addressed through added resources or new policies that focus on increased security. This often leads external agencies to focus on technical solutions that are easy to implement but fail to tackle the structural causes of violence. Approaches that prove most effective tend to privilege consultation and dialogue with communities, coordination with multiple layers of government, and a proactive as opposed to reactive approach to urban safety and security (Muggah 2014: 353). Increasingly, a community policing approach has become the organisational paradigm of public policing in South Africa, as Baley and Shearing (1996: 604) add, “community policing governments can develop the self-disciplining and crime-preventive capacity of poor, high-crime neighbourhoods. Community policing incorporates the logic of security by forging partnership between police and public. Since safety is fundamental to the quality of life, co-production between police and public legitimates government, lessening the corrosive alienation that disorganises communities and triggers collective violence”.

In one of the largest and most violent townships in Cape Town, Khayelitsha, local gang wars have led to the temporary shutdown of all services delivered by the city. During a six-month gang war between the “Taliban” and the “America” gangs, schools were closed, transport was disrupted and health services in the community were restricted. As this example shows, crime is concentrated in specific places.²⁰ Against this background, in June 2018, South Africa’s Police Minister announced a new high-density stabilisation intervention to tackle crime. It included the deployment of desk-based police officials to the streets, particularly in “identified hotspots” such as Khayelitsha in accordance with the new community-policing philosophy. “Hotspot policing” is now more often accompanied by social and infrastructural crime prevention initiatives. In Khayelitsha, for example, a municipal project called “violence prevention through urban upgrading” aims at reducing crime, increasing safety and security, and improving the social conditions of communities through urban improvements and social interventions.

This project is unique in South Africa insofar as it integrates all forms of development concepts, not only infrastructural upgrading of urban spaces. The project combines planning efforts by state institutions with community-based protection measures (VPUU 2015). This includes connecting policy frameworks, private security and neighbourhood watches, and easier access to justice for residents.

²⁰ In the most recent crime statistics, two percent of police stations recorded 20 percent of all murders in the country, and 13 percent recorded 50 percent of the murders.

The project uses different lenses, one being a “situational crime prevention” approach. The project seeks to reduce crime opportunities by increasing the associated risks and difficulties of committing crime. It is assumed that positive changes in the physical environment ultimately lead to safer communities. Changes such as “active boxes” are used in this approach: small three-story buildings with offices, a caretaker flat and a room for community patrollers, which are built close to the so-called “micro hotspots” mentioned above. Another approach used in the project is “social crime prevention” which promotes a culture of lawfulness, respect and tolerance. The project focusses on three areas: patrolling street committees, law clinics (in collaboration with the University of the Western Cape), and social interventions such as school-based interventions and early childhood development programmes. The implementation is carried out using local resources to the greatest extent possible. A visible decrease in crime rates in Khayelitsha has been recorded since implementing the project (Graham et al. 2011: 70f.). These examples show how necessary it is for any urban transformation process to consider various aspects of urbanisation, such as safety and security challenges. The example in the next chapter presents a very innovative solution in this field.

The counterpart to South Africa’s townships is its wealthy urban suburbs. South Africa is one of the most unequal societies in the world, and its suburbs are a clear reflection of this inequality. At the end of apartheid, rising levels of crime saw dramatic changes in the suburbs; a typical development for countries in transition, particularly for those characterised by high levels of inequality. With the demise of the inner-city economy, businesses together with their employees started to move to the suburbs. Inner cities were abandoned and crime became dispersed. With the associated increase in fear of crime, suburb dwellers began building higher walls and erecting electrified fences as a means of defence. This initially attracted strong support, and was advocated by the private security industry.²¹

To date, high walls have become an accepted part of the suburban landscape. Solid, high walls are viewed as obstacles to policing: natural surveillance by neighbours and patrolling by police or private security services are limited. Against this background, another interesting approach to tackling crime is the “city without walls” project in Durban where academics, the Metropolitan Police Service, private security firms and local communities are working together by advocating for the breaking down of walls. Selected communities and institutions such as the Alliance Française in Durban (following the Goethe-Institute experiment in Johannesburg) participated in the project, the aim being to replace existing boundary structures with transparent and see-through boundary structures, or none at all. The

²¹ In South Africa, the number of private security companies doubled in the last twelve years and now outnumbers the public police force by three to one.

rationale for this was based on research conducted in Durban which unequivocally showed that lower crime rates and more social cohesion exist in neighbourhoods where walls are low, transparent or non-existent (Marks and Overall 2015: 3). But convincing middle-class communities to break down their walls—physically and metaphysically—is not easy.

Fear, anxiety and alienation have become key markers of city dwellers in South Africa. Given all these factors, policing inner cities and urban communities is one of the greatest challenges for the next centuries. At the 2016 Tswalu Dialogue on “The Future of African Cities”²², which was jointly organised by the German Konrad-Adenauer-Stiftung (KAS) and the South African Brenthurst Foundation²², it was highlighted that the legitimacy of people charged with ensuring public safety and order is a key emphasis in every security environment, and that an increase in the numbers of police or army is not necessarily the best antidote to insecurity. According to the ISS (20016), an extended community order or partnership policing approach is much more desirable—but here, more research needs to be done, especially regarding the strategies of policing of urban slum districts or townships.

4.3.2 Ecological agenda

4.3.2.1 Cities as drivers of climate change

With more and more people moving to cities, cities will become the centre of attention in future environmental challenges. As previously mentioned, cities are largely responsible for—but also most vulnerable to—the effects of climate change. They face climate change from two sides: as drivers of climate change and as victims of climate change.

According to recent data from the German Development Bank (KfW 2014), it is currently assumed that the doubling of a population would mean at least a tripling of land surface use. In the following three decades, cities will need as much additional land surface as has been built in the entire history of mankind up until now. With unchanged construction technology, production of the required building materials would cause 15 times the global CO₂ emissions of 2008 (KfW 2014). The largely impervious areas of cities could lead to the formation of heat islands, which contribute to global warming. An upward trend in average income and city lifestyles is generally more resource-intensive and consequently more energy-intensive than in rural areas.

Cities make up only 0.4 percent of the earth’s surface area, but produce 70 percent of the world’s greenhouse gases (Worldwatch Institute 2007). By 2030, this figure will have risen to 76 percent

²² The annual Tswalu Dialogue brings together high-ranked African politicians with development and security experts and civil-society representatives.

(International Energy Agency 2008: 12). CO₂ emissions however, do not necessarily correlate with urban density. For example, the dense city of Cape Town produces less CO₂ per person than the South African average. The crucial part is that the urban spatial form determines city energy. For example, US-American cities with large built-up areas produce more greenhouse gases than a dense European city. The problem is that decisions that are made today are often limited by past decisions, for example apartheid urban planning in South Africa (Bertaud et al. 2007).

A report by the International Institute for Environment and Development IIED (Dodman 2009) brought together the findings of several studies published in the past thirteen years on the effects of cities on global emissions, and concluded that the per capita emissions from cities are generally lower than the average for the countries in which they are located. According to the report, “high densities and large population concentrations can also bring a variety of advantages for environmental management” (Dodman 2009: 15). The density of city buildings, smaller-than-average dwelling sizes and reliance on public transportation contribute to this positive fact. This shows that by using new innovative, smart and eco-friendly housing and building techniques, cities can minimise their greenhouse gas contribution and make use of the effects of scale—but path-dependencies must be avoided.

“The need for cities to reduce their emissions is well-established, but the need to adapt to climate change and build resilience in cities is not as widely integrated into urban planning” (World Bank 2013: 76). Change is necessary to transform cities into environmentally-friendly spaces. This is possible through the necessary decoupling of economic and urban development from CO₂ emissions, which until now has not been accomplished. For example, Durban’s industrial emissions are twice as high as its residential emissions (28,3 percent against 15,3 percent; SACN 2019: 337). Furthermore, energy consumption has increased significantly in recent years, not only in Durban (from 123,7 million GJ in 2007 to 210,2 million GJ in 2011), and is mostly driven by the transport sector which is the largest contributor of greenhouse gases (SACN 2019: 337). Cities must apply economies of scale to provide sustainable transport solutions where people, concentrated in urban areas, must use tramways, electro buses and/or cable car systems, supported by the compact city model in which bicycles and walk lanes are also provided and used. Regarding the use of fuels, petrol and diesel together still make up more than 50 percent of the total source of fuel in Durban and South Africa, and coal makes up a large percentage of this fuel mix. Renewable energy sources need to be more strictly promoted by all spheres of government. In Durban especially, wind, water, and solar energy provide excellent opportunities for a renewable energy mix.

4.3.2.2 Cities as victims of climate change

The physical damage in cities caused by climate change could set back development progress by many years. The SwissRe (2014) conducted a study involving the 616 largest cities in the world (roughly about 1.7 billion people representing 25 percent of the world population and producing 50 percent of global GDP), two thirds of which are located in developing countries and countries in transition. The study examined their vulnerability to natural hazards. Due to urbanisation occurring predominantly in coastal and delta areas, flooding represents the highest risk. Even with optimistic assumptions about rising sea levels between 2030 and 2070, if adaptation measures are not applied the estimated cumulative costs over this period add up to US \$2,500 billion. This flood risk is followed by earthquakes and storms as significant risks, and metropolitan areas need to have plans in place to protect themselves against several hazards happening simultaneously, and also need to adapt to the impacts of climate change.

Most of the world's largest cities are located on rivers, low-lying coastlines²³ and areas susceptible to the most severe impacts of climate change (World Bank 2010). In short, cities are often hotspots for risks (Burdett 2011: 42). Asian cities are especially prone to flooding and hurricanes; highlighted through a detailed Climate Vulnerability Ranking for major coastal cities in Asia titled "Mega-Stress for Mega-Cities" (WWF 2009). Unfortunately, there is no similar in-depth ranking for African and European cities at present. An IIED Study from 2009 titled "Climate Change and the Urban Poor" assessed the risk and climate change resilience in 15 of the world's most vulnerable cities, including coastal cities like Dar Es Salaam in Tanzania and Maputo in Mozambique, where the biggest threats are rising sea levels, flooding and coastal erosion. Many of the coastal cities in the least developed countries (LDC) are found in tropical areas with hot and humid climates and low-lying land, both of which heighten vulnerability (IIED 2009: 2). Dryland cities like Khartoum in Sudan and Bamako in Mali face desertification of infrastructures, increased water scarcity and more frequent sandstorms because of climate change. Cooler inland and high-altitude cities like Zimbabwe's Harare and Zambia's Lusaka will also be affected by climate change.

While many developing cities will have the opportunity to avoid the path of their partners in the global north and adopt greener growth, the threat from climate change remains significant. The four major implications of climate change in urban areas from the IPCC's 5th Assessment Report are temperature rises (above 2.5-4 degrees compared with pre-industrial levels, more frequent hot days and urban heat island effects), rising sea-levels and ocean acidity (0.45-0.82m higher with consequences

²³ According to World Bank (2010) 15 of the 20 Megacities in 2008 are located in low elevation coastal zones.

on low elevation property, coastal vegetation and ecosystems as well as due to acidity decreasing production of fish and shellfish), drought (reduced arable land productivity, lower crop yields, insecure freshwater availability, problems for power-station cooling and hydropower electrical production, and increased water-related diseases) and lastly extreme weather events (increased flooding, winds, cyclones and storm surges).

Climate change and environmental degradation also affect water availability. This occurs through well-known scenarios such as changes in the recharge of groundwater aquifers, increased glacial melting, more precipitation, warmer and shorter winter seasons as well as warmer and potentially drier summer seasons (AMWA 2007). These changes will lead not only to shortages of water but also to a higher probability of floods. Another problem, especially in developing countries, is non-revenue water which is lost before it reaches the end customer, either through leaks or through theft. In Durban for example, 25 percent of the water is classified as non-revenue water (SACN 2019: 337). Studies on climate change and global warming conclude that if today's investments are not redirected, many problems associated with dependence on fossil fuels will worsen. The Intergovernmental Panel on Climate Change (IPCC), The UN-Environment Programme (UNEP) and the IEA (International Energy Agency) warn that time to reduce greenhouse gas emissions is running out. If the world does not act decisively, global surface temperatures will rise by more than two degrees on average and climate change will take a dangerous path in less than a decade.

A detailed overview of the contribution cities make to climate change and the impact climate change has on cities, combined with policy directions, is presented by UN-Habitat in their Global Report on Human Settlements focussing on cities and climate change (UN-Habitat 2011). Mitigation will not progress quickly enough to evade substantial climate change impacts, therefore adaptation is necessary. Urban planners and managers must consider measures to adapt city buildings, industry, institutions, infrastructures and services to the impacts of climate change (Satterthwaite et al. 2009).

Simultaneously, given the scale of expected impacts, adaptation cannot be the only response to climate change. Both mitigation and adaptation are not only necessary, but complementary (Wilbanks and Sathaye 2007). Integrating mitigation and adaptation efforts will curtail the odds of duplication or maladaptation, and produce more robust climate change policies. The three most successful incentives which lead C40 cities²⁴ to reduce emissions are, according to IPCC (2014), subsidies and fiscal incentives (66 percent), followed by prescribed building standards according to green and sustainable building construction (50 percent), and awareness and consultations (53 percent).

²⁴ The C40 Cities Climate Leadership Group (C40) connects 90 of the world's largest cities.

Poor location and design of the built environment, which includes infrastructure, can lead to catastrophic risks. These include losses associated with temperature extremes, rising sea levels and violent winds. For example, 800 people lost their lives and a further 20.000 were left homeless after the 2011 floods and landslides in Sao Paulo and Rio de Janeiro. Another example is Hurricane Katrina which caused a loss of more than 90.000 jobs, 800 deaths, a US \$3 billion loss in wages, and total financial losses estimated at US \$200 billion in New Orleans alone. Cyclone Yasi in Australia in 2011 caused over US \$20 billion in damage due to flooding alone, a large percentage of which occurred in urban areas (ICLEI 2011). It is for this reason that cities are increasingly recognising the need to plan for climate change by developing stand-alone climate plans or integrating them into existing plans and policies.

4.3.2.3 Pollution, waste and public health

With increasing urbanisation comes increasing pollution and waste. None of the most populated fifty cities in the world meet the air quality standards of the World Health Organisation (van der Heijden 2016). The relation between waste generated per capita and the percentage of the population residing in urban areas is different in various regions of the world. The relation is almost directly proportional. The more urbanised, the more municipal solid waste is being generated per capita (World Bank 2013: 73). The largest amount of solid waste is generated in the developed OECD countries, even though recycling practices are often followed in these countries to help curb the problem.

Together with poverty, the problems of pollution and waste lead directly to problems in the health sector of cities. Cities with higher degrees of equality which includes factors like lower incidence of slums, small numbers of slum dwellers with shelter deprivations and lower income disparities, have less frequent occurrences of ill health. It follows that public health is largely poorer in more unequal cities with blatant material differences in basic service provision and housing (Save the Children 2015).

In Durban, especially the South Durban Basin area is important given the history of Durban as an industrial port city. The South Durban Basin is the industrial hub of Durban and home to two large petrochemical refineries, a large paper mill, motor manufacturers and at least 5.000 businesses, 22.000 households and 200.000 residents (eThekweni Municipality 2019). Poor conditions, pollution and neglect by the state has led to political community activism in these areas where previously disadvantaged communities are living in close proximity to polluted industrial zones. KwaZulu-Natal's 2018 Environmental Outlook Report has named the Durban South Basin as one of the worst hotspots for high air pollution levels (Pillay 2018). Strong civil-society groups were formed to fight against

the city's neglect of this area and to raise local, national and even international awareness of the accused prioritisation of economic interests over community interests. The South Durban Community Environmental Alliance (SDCEA) was formed as a civil-society umbrella organisation, and to date, over eight community-based organisations and two non-government organisations exist under the banner of the organisation. The SDCEA tries to provoke proactive government action by highlighting academic studies which show that air pollution is a severe health problem for the community (Jagernath 2011). The case of the Durban South Basin is a good example of how a strong civil-society can come together and put pressure on policy levels, but also shows how unresponsive a municipal government can be. Officially, the local government's answer lies in their "Air Quality Management Plan" (Pillay 2018) which however had not yet been implemented at the time of writing.

4.3.3 Economic agenda

"Urbanisation and economic growth go hand in hand, in fact no country has ever attained middle-incomes without urbanising, and none has reached high income without vibrant cities that are centres of innovation, entrepreneurship and culture."

(World Bank 2014: 2)

While economic growth and urbanisation usually happen in tandem, equitable distribution of opportunities and benefits remains a challenge. According to UN-Habitat 2011, strong urban economies are essential for poverty reduction (UN-Habitat 2011). Today, urban economies have an 80 percent share of the national GDP (UN 2016). The overall contribution of cities to national income is greater than their share of the national population, for example Kinshasa accounts for 13 percent of the population of the Democratic Republic of Congo but for 85 percent of the GDP (UN 2016: 6).

Fig. 19: World's top 100 economies in terms of GDP

Rank	Entity	Category	Revenue/GDP (\$ billion)	Rank	Entity	Category	Revenue/GDP (\$ billion)
1	China	Country	17,188.7	51	Switzerland	Country	452.6
2	United States	Country	16,490.2	52	Royal Dutch Shell	Corporation	429.1
3	India	Country	6,983.8	53	Sweden	Country	426.4
4	Japan	Country	4,524.3	54	China Petroleum & Chem.	Corporation	423.3
5	Russian Federation	Country	3,633.8	55	Kazakhstan	Country	422.2
6	Germany	Country	3,523.0	56	Washington, DC	Metro area	420.4
7	Brazil	Country	3,124.6	57	São Paulo	Metro area	409.3
8	Indonesia	Country	2,552.5	58	Hong Kong	Metro area	395.5
9	France	Country	2,463.9	59	Dallas	Metro area	392.3
10	United Kingdom	Country	2,460.8	60	Chile	Country	389.4
11	Mexico	Country	2,044.0	61	Mexico City	Metro area	383.7
12	Italy	Country	2,026.8	62	Romania	Country	380.9
13	Korea, Rep.	Country	1,696.2	63	Austria	Country	374.7
14	Tokyo	Metro area	1,536.9	64	Exxon Mobil	Corporation	374.6
15	Saudi Arabia	Country	1,532.6	65	Guangzhou	Metro area	361.5
16	Canada	Country	1,521.3	66	British Petroleum	Corporation	360.5
17	Spain	Country	1,475.8	67	Peru	Country	354.7
18	Turkey	Country	1,434.2	68	Ukraine	Country	354.3
19	New York City	Metro area	1,334.2	69	Tianjin	Metro area	353.5
20	Iran, Islamic Rep.	Country	1,290.0	70	Singapore	Metro area	347.8
21	Australia	Country	1,015.2	71	Nagoya	Metro area	345.8
22	Thailand	Country	1,014.3	72	Shenzhen	Metro area	345.3
23	Nigeria	Country	1,000.9	73	Boston	Metro area	342.3
24	Poland	Country	910.5	74	Istanbul	Metro area	331.5
25	Egypt, Arab Rep.	Country	900.1	75	Norway	Country	329.6
26	Pakistan	Country	849.4	76	Philadelphia	Metro area	329.4
27	Los Angeles	Metro area	818.0	77	Suzhou	Metro area	322.3
28	Seoul-Incheon	Metro area	804.2	78	San Francisco	Metro area	314.7
29	London	Metro area	794.4	79	PetroChina	Corporation	312.3
30	Netherlands	Country	770.1	80	Taipei	Metro area	311.1
31	Malaysia	Country	731.4	81	Jakarta	Metro area	305.4
32	Paris	Metro area	679.8	82	Rotterdam-Amsterdam	Metro area	304.8
33	South Africa	Country	672.3	83	Czech Republic	Country	301.8
34	Philippines	Country	659.1	84	Buenos Aires	Metro area	300.3
35	Osaka-Kobe	Metro area	638.2	85	Chongqing	Metro area	300.0
36	Colombia	Country	607.7	86	Milan	Metro area	296.7
37	United Arab Emirates	Country	586.6	87	Qatar	Country	292.0
38	Shanghai	Metro area	564.7	88	Bangkok	Metro area	291.7
39	Chicago	Metro area	535.4	89	Busan-Ulsan	Metro area	281.9
40	Algeria	Country	527.7	90	Atlanta	Metro area	279.9
41	Moscow	Metro area	526.0	91	Delhi	Metro area	279.1
42	Venezuela	Country	514.7	92	Portugal	Country	272.2
43	Iraq	Country	500.1	93	Greece	Country	267.1
44	Vietnam	Country	487.2	94	Toronto	Metro area	262.7
45	Beijing	Metro area	481.1	95	Kuwait	Country	262.3
46	Bangladesh	Country	473.9	96	Israel	Country	259.0
47	Köln-Düsseldorf	Metro area	461.3	97	Seattle	Metro area	254.2
48	Houston	Metro area	459.4	98	Miami	Metro area	249.7
49	Belgium	Country	458.0	99	Madrid	Metro area	249.4
50	Wal-Mart Stores	Corporation	453.0	100	Volkswagen Group	Corporation	248.6

Source: The Chicago Council on Global Affairs 2016: 4

A total of 10.5 percent of the world's population reside in the top ten mega city regions where 25.1 percent of the world's products are produced²⁵ (Florida et al. 2011). Africa does not yet feature prominently; the only African hub of global economic activity is the Gauteng Province, which includes the city of Johannesburg. According to Florida et al (2011: 25), East Asian cities in Japan, China and Singapore are leading together with cities from the “old economic centres” in Europe (London, Paris) and the United States (New York, The Great Lakes, Los Angeles). In general, the top 100 largest cities account for 35 percent of the global GDP. *Fig. 19* shows the 100 top world economies including countries, cities and companies. A total of 34 out of the 100 top world economies are city regions (coloured in brown), interestingly some multinational companies are also accumulating a larger GDP than some nation states (coloured in blue).

In South African cities, economic activity is disproportionately concentrated, especially in the largest metros in which 59 percent of the country's economic output is generated by only 37 percent of its population (CDE 2014: 2). In Durban, the focus city of this thesis, the gross value added (GVA) between 2001 and 2011 more than doubled, and Durban's average household income grew at a similar rate to that of Cape Town, from ZAR56.222 in 2001 to ZAR112.830 in 2011, which is about 10 percent higher than the national household income of South Africa (SACN 2019: 337). The International Monetary Fund notes with importance that until the year 2035, policies are required to gradually transition jobs from the informal sector—which accounts for about 90 percent of the 400 million jobs in low-income sub-Saharan African countries—to the formal sector (IMF 2016: 25). Transformation processes must therefore include solutions to questions around formal and informal economies, always considering the local context.

Climate change was discussed in detail in a previous section, but not as it relates to the economy. Natural disasters which affect businesses take both an economic and a human toll. As much as 25 percent of small businesses that fail due to a shock never recover (Rodin 2014). In addition, because of globalisation, the shutdown of production in one part of the world can devastate manufacturing in other parts of the world, since economic losses ripple across the globe. An example of this was evidenced after the tsunami and earthquake in Japan. Economic resilience equips cities to deal with a range of challenges before they happen which potentially saves billions of dollars.

When it comes to innovation and technology, cities and urban excellence clusters are in the forefront of global economic activity. An analysis of the OECD (2017) identifies the dominance of cities and

²⁵ US \$7.891 billion.

metropolitan areas in generating global innovations. A total of 93 percent of the world's patent applications are filed by inventors living in metropolitan areas that are home to less than 23 percent of the world's population. Ten metro areas account for just two percent of the world population, but are home to the investors in 24 percent of the world's patent applications. They are, in descending order: Tokyo, San Jose, New York, Boston, Kanagawa, Shenzhen, Osaka, San Diego, Los Angeles and Seoul.

4.3.4 Migrants and refugees

4.3.4.1 The African case

The bestselling book by Doug Saunders titled “Arrival City: How the Largest Migration in History is Reshaping Our World” (2011) explains the world's “largest human migration” from the perspectives of very emotional individual migration stories. Saunders affirms that in addition to organic population growth, a strong rural-to-urban migration trend is afoot in Africa, which is partially the consequence of a growing youth population that prefers urban lifestyles and sees greater educational and economic opportunities in cities. These pull-factors are supplemented by push-factors in many rural regions such as conflict, poverty, natural disasters, disease, resource scarcity, environmental strain from growing rural populations and climate change (Africa Research Institute 2012: 4; Saunders 2011). However, according to Saunders (2011), there is very little planning at the city level for migrants, particularly in cities that are already resource poor, which stands in large contrast to European cities.

The African Research Institute supports this analysis and states that “the predominant growth factor in most African urban populations is the natural increase, rather than net in-migration” (Africa Research Institute 2012: 1). According to their study (2012: 4), drought and conflict played important roles in some of the 18 African countries studied, but economic factors were predominant factors in in-migration.

Migrants predominantly move into urban areas but attempts have been made to tackle this phenomenon with an integrated approach. Even though the New Urban Agenda of HABITAT III describes general rights of refugees and migrants in cities, the lack of reference to migration in the preparation for the New Urban Agenda is criticised, amongst others, by the International Organisation for Migration (IOM 2015). According to UNHCR estimates, almost 60 million people were forcibly displaced in 2014. Of these, 38.2 million were internally displaced refugees. A total of 19.5 million people were forced to leave their home countries—an increase of 2.9 million in comparison to 2013. The majority

of these refugees (86 percent) were hosted by neighbouring developing countries such as Uganda or Kenya (UNHCR 2015).

According to the International Labour Organisation, in 2016 more than 180.000 migrants started the risky journey from Africa via the Mediterranean Sea to Europe, the majority originating from Western African countries. In 2016, 5.000 did not survive the journey. In 2017, approximately 400.000 African migrants were expected in Europe (Drechsler 2017). International media reports on migration crises in Europe, however, obscure some of the bigger movements of people elsewhere in the world—not least in the South African province of Gauteng, where 250.000 migrants have been arriving each year in a province with about 13 million residents (The Brenthurst Foundation 2016: 9). According to a study by the African Network of Germany, 90 percent of African migrants in Germany send money from Germany back to their home countries, amounting to 1.2 billion Euro per year (Petersen 2017) which constitutes an important economic factor in many African countries.

4.3.4.2 The South African case

According to the UNHCR (2016), South Africa and Germany are currently facing the largest backlog of registered asylum applications worldwide (*see fig. 20*). These growing numbers could be attributed to recent political crises in some countries in the Middle East and Northern Africa (Germany) as well as on political turmoil and economic decline in several countries in sub-Saharan Africa (South Africa). By June 2015, South Africa had registered 798,100 undecided applications (almost 490,000 of them in Johannesburg), while Germany followed second with 311,600 (UNHCR 2015: 13). Due to these significant refugee and migrant flows, the South African experience is of particular relevance compared to other countries.

South Africa is the primary destination country for migrants within the region and the continent as a whole, with very little outward migration and comparatively few people choosing other destinations (although countries such as Botswana and Namibia receive a small number annually). The scale of intraregional movement has grown markedly since the end of apartheid, and the total number of people entering South Africa annually from other SADC member states, for whatever purpose, has increased from approximately one million in 1990 to over five million in 2005, a period of only fifteen years (Crush et al. 2005). According to the International Organisation for Migration, there were 2.4 million migrants in South Africa in 2013 and 230,000 asylum seekers awaiting refugee status deter-

mination (IOM 2013). These figures exclude irregular migration which is nearly impossible to accurately quantify, although most analysts suggest that the figures would be significantly higher if illegal entrants were counted.

Fig. 20: The worldwide distribution of pending asylum applications (2015)



Source: UNHCR 2016: 10

South Africa has consistently blocked efforts to reduce obstacles to free movement in the SADC and has adopted an almost hostile approach to inward migration, choosing to see it as a threat to national security and a source of rising unemployment rather than a potential catalyst for economic growth (Feltes, Musker and Scholz 2018: 556). This policy approach has resulted in an increasingly restrictive immigration regime and consequently a large number of undocumented migrants. Public resentment of foreign nationals has been stoked by political parties and prominent figures, and reinforced by the official stances of government.

What emerges from an examination of both the regional governance of migration in the SADC and the experience of foreign nationals living in South Africa, is near hostility towards migrants from other countries in the region. Where other regions in Africa, notably ECOWAS, have achieved far more sophisticated regional instruments and greater freedom of movement, SADC remains closed to most cross-border flows (Feltes et al. 2018: 572). This is mainly because of a sustained attempt by South Africa, which holds preponderant power in the region, to restrict movement into the country.

Xenophobic attacks against foreign nationals in Durban have more than once made headlines in national and international newspapers. In 2008, more than 60 people were killed in xenophobic riots nationwide. In 2015 these incidents recurred on a smaller scale. Some of the riots started in the townships in Durban, spiked by statements from the Zulu king. A Pew research poll conducted in 2018 showed that 62 percent of South Africans viewed immigrants as burdens on society, who take jobs and social benefits away from local nationals (Pew Research Center 2019).

4.3.5 Infrastructure

Recent reports by the World Bank (Hoornweg and Freire 2013) and UNEP (Swilling et al. 2013) emphasise the significant opportunities for innovation and transformation to be gained by increasing levels of investment in urban infrastructures. It is interesting to note that the rate of urban construction over the next 35 years could equal the historical rate up until the present (van der Heijden 2016). Whilst in 2010, urban infrastructure investments summed to US \$2.5 trillion per year, it will be more than US \$10 trillion per year in 2025 (World Bank 2014:42).

Infrastructural development has failed to keep pace with the rapid urbanisation process. Worldwide, approximately 750 million people have no access to adequate sanitation and 150 million no access to clean drinking water (WWAP 2015). In low-income countries, about thirty percent of city dwellers have no access to electricity and around 75 percent lack access to modern energy sources for cooking (IEA and World Bank 2015).

Nearly two-thirds of responses from the UN-Habitat survey show that in Africa the average commute by public transport from residence to workplace exceeds one hour. In South Africa, these figures are even more of a concern. Over 22 million people in South Africa commute daily via public transport and of these, 19 million use taxis (Nkosi 2015). The average time spent travelling to work is 63 minutes. On a typical working day in Durban, 25 percent of public transport users travelling by bus leave home as early as 5 a.m. according to the eThekweni Transport Authority Integrated Transport Plan Update 2010-2015. One of the most important reasons why taxis dominate the public transport market is because nearly three quarters of households can reach a taxi service within one kilometre of their home. There are approximately 200.000 public taxis on the road, and 65 percent of weekly public transport users travel by taxi versus 21 percent by bus and 15 percent by train (Nkosi 2015).

Some countries have implemented very effective strategies to target public transport problems. They manage land use and urban transport in a way that ensures better access to jobs and amenities. Bus Rapid Transit (BRT) systems have been launched in five cities in South Africa and currently this is

the main public transport initiative (Turok 2012). They are delivered by local government and generously funded by national government. The system consists of modern buses running on dedicated lanes in the middle of main roads. Based on the Latin American experience, it is anticipated that the BRT system will form a good foundation for an integrated transport network offering efficiency, safety, affordability and reliability. Careful handling of the taxi industry and continued government support will determine the extent of and speed at which the service can be rolled out, since the first phases have proved to be more expensive than expected.

Examples from Africa and Latin America show major progress in this field. In Johannesburg for example, the municipality recently improved the new Bus Rapid Transit service “Rea Vaya” to improve access to the city’s resources and services. In Bogota, Colombia, investment in the Transmilenio Bus Rapid Transit System has proved beneficial in several areas such as reduced carbon dioxide emissions, increased physical activity levels, diminished congestion, road safety, increased mobility and access to labour markets, as well as reduced transit times (Montezuma 2005). The scheme was also cleverly designed to connect 13 major slum areas around the capital cities.

Cape Town was the first city in South Africa to introduce a BRT system (“MyCiti”), Johannesburg is constantly expanding its “ReaVaya” system via the project “Corridors of Freedom” into urban townships, and Durban recently devised a new strategy with major infrastructural improvements planned for the future with the “Go Durban!” project. Until the “Go Durban!” project is implemented, there will continue to be a lack of public transport in the city.

“The promotion of an accessible public transport system is the second most effective way of reducing inequalities in Africa.”

(UN-Habitat 2011)

Urbanisation can be seen as a synonym for the growth of slums, since almost every third city dweller currently lives in inhumane environments without continuous access to water, sanitation and energy (UNFPA 2007). Although the Cities Alliance and many other global and national organisations have promoted a vision of “slum-free cities”, 828 million people still live in slums, most of which are in Africa (United Nations 2016). With this number increasing every year, the need for resilience is becoming critical. Slums, favelas, shantytowns and townships, which all describe the same poor urban living conditions around the world, are growing and continue to grow. Roy (2011: 223) proposes that

slums should not be viewed in an apocalyptic way, but rather as places of “habitation, livelihood, self-organisation and politics”.

Siemens published a report “The Affordable Metropolis” (Siemens 2011) asking how the world’s expanding towns and cities are going to be able to afford the infrastructure investments necessary to achieve economically sustainable growth. In the report, new research calculated the estimated capital investment required between 2010 and 2020 for the infrastructures of cities and towns in ten countries. The largest investors would be the USA with 2,684 billion Euros, followed by China with 2,521 billion Euros, and Germany with 439 billion Euros. This huge amount of money cannot be provided by the public sector alone; the private sector will likewise have to make investments. Rapid urbanisation means a need for increased housing. By 2025 it is expected that the largest markets in China will be housing, transportation and communication, health care and recreation, personal products, and education. China is much more forward-looking when it comes to cities than India which has under-invested in its cities (McKinsey Quarterly 2010: 3).

In the next 20 years, millions of buildings will either be built in an energy-efficient manner or renovated accordingly. Smart devices, connected to and controlled by intelligent energy networks, will help to enhance efficiency. Buildings will have walls and roofs with built-in solar panels and will act as small power plants that feed electricity into intelligent local networks.²⁶ The question is: How does this translate to developing countries where infrastructures and electricity supplies are well below the standard of developed countries? A benefit could lie in the fact that they are not tied to a pre-existing ageing power grid and can therefore immediately begin with a sustainable energy future. It is easier to build up infrastructures based on widely available renewable energy sources right from the start. Similar to the way in which developed countries use mobile networks and do not require extensive landlines, developing countries could save time and money in their transformation to a new era of renewable energy. They could build new decentralised systems from the start. Without great risks, decentralised structures can be created to supply energy to cities, later to entire regions, and eventually reach beyond national borders (Otto 2012: 2).

²⁶ The city of Munich is aiming to, by 2025, receive 100 percent of its predicted necessary 7.5 billion kilowatt hours of energy through renewable energy sources. The Bavarian capital would be the world’s first city with more than one million inhabitants to achieve this. This is made possible by linking local regional projects; in 2010 Munich was already being supplied with 50 percent of its energy from renewable sources.

In South Africa, the dominant approach to housing the urban poor has been through state-provided subsidised RDP housing programmes.²⁷ In 2004, a Breaking New Ground (BNG) policy was developed to address the shortcomings of the 1994 Housing White Paper. The BNG supported upgrading of informal settlements, but the political will and commitment needed to support this approach was never realised (Huchzermeyer 2011). The national Department of Housing has only recently recognised that it cannot continue to deliver RDP housing at the pace and scale that is required, which means that there is a large housing backlog in most South African cities. The official housing backlog in Durban is 238.000 households, over 800.000 or approximately 22.4 percent of the city's population live in informal settlements (eThekweni Municipality 2017). Informal settlements are a critical element in the provision of housing for the urban poor, and need to form part of the solution to the city's housing challenges.

Between the years 2000 and 2030, 400.000 square kilometres will be constructed for urban use, doubling the world's built up urban area (World Bank 2014: 1). According to the prominent study "Making Room for a Planet of Cities" (Angel et al. 2011), the current urban planning paradigm championed in Europe and the United States (the "containment paradigm", also known as urban growth management, compact city, or smart growth) is inappropriate for rapidly-urbanising countries in Africa, Asia and Latin America. Instead, Angel calls for a new paradigm to come to terms with rapid urbanisation, namely the "making room paradigm".

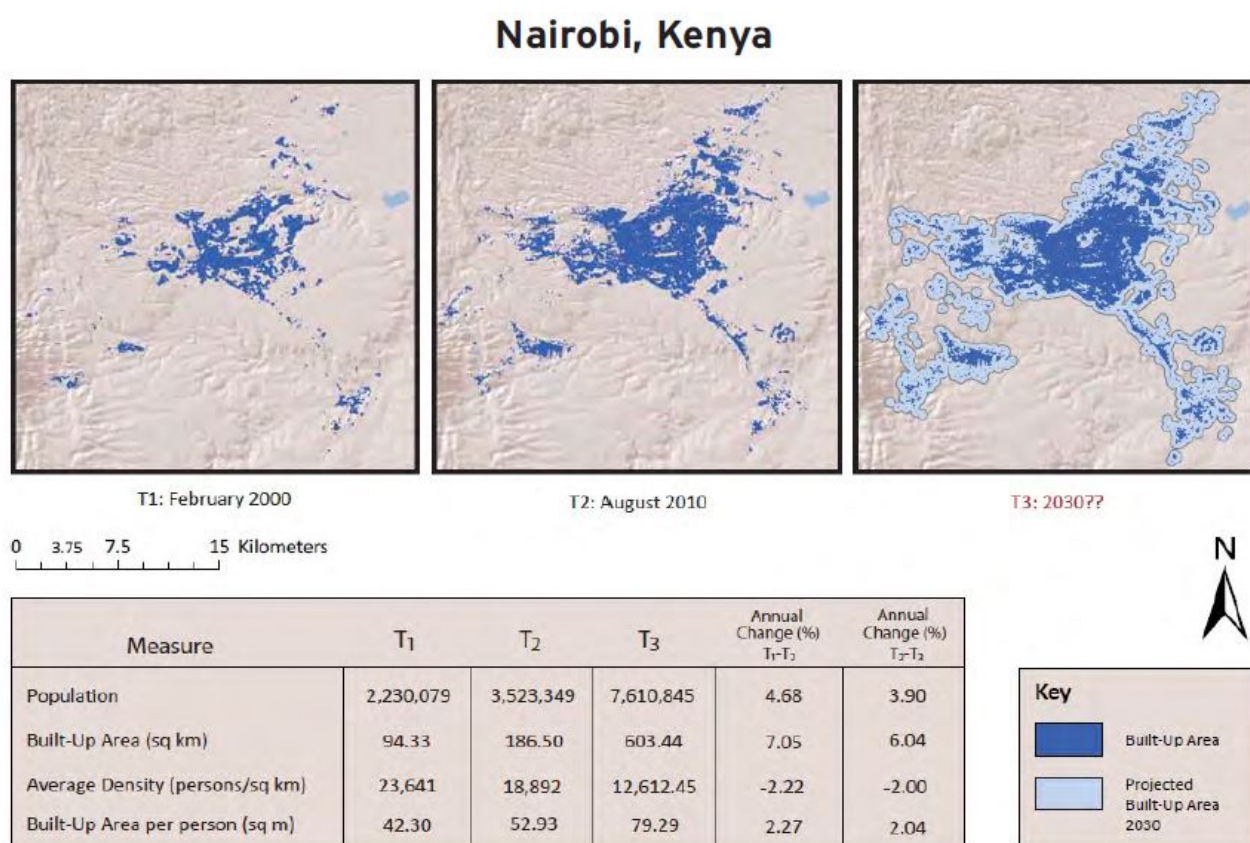
The making room paradigm draws on data collected from a sample of 120 cities and extracted from a large database. It is based on the realisation that rapid urban population growth and rapid concomitant urban expansion is inevitable. Cities therefore need to secure land for essential public works—much like an arterial infrastructure grid with a hierarchy of public open spaces—well in advance of expansion so that they can become more equitable, sustainable and efficient. The containment paradigm in Seoul, Korea has led to a serious loss of housing affordability. Bangkok in Thailand in contrast did not try to contain its expansion and has created a lot of highly affordable housing.

Some of the key findings from Angel et al. (2011) are that on average, densities in developing countries are double those of Japan and Europe, and densities in Japan and Europe are double those of Australia, Canada, and the United States; and on average between 1990 and 2000, the annual growth rate of urban land cover has been twice that of the urban population. A global study of urban growth paths finds that when city populations double, urban land area triples since urban dwellers demand

²⁷ RDP houses are named after the national state's Reconstruction and Development Programme (RDP) which was developed in 1994 to guide transformation in South Africa.

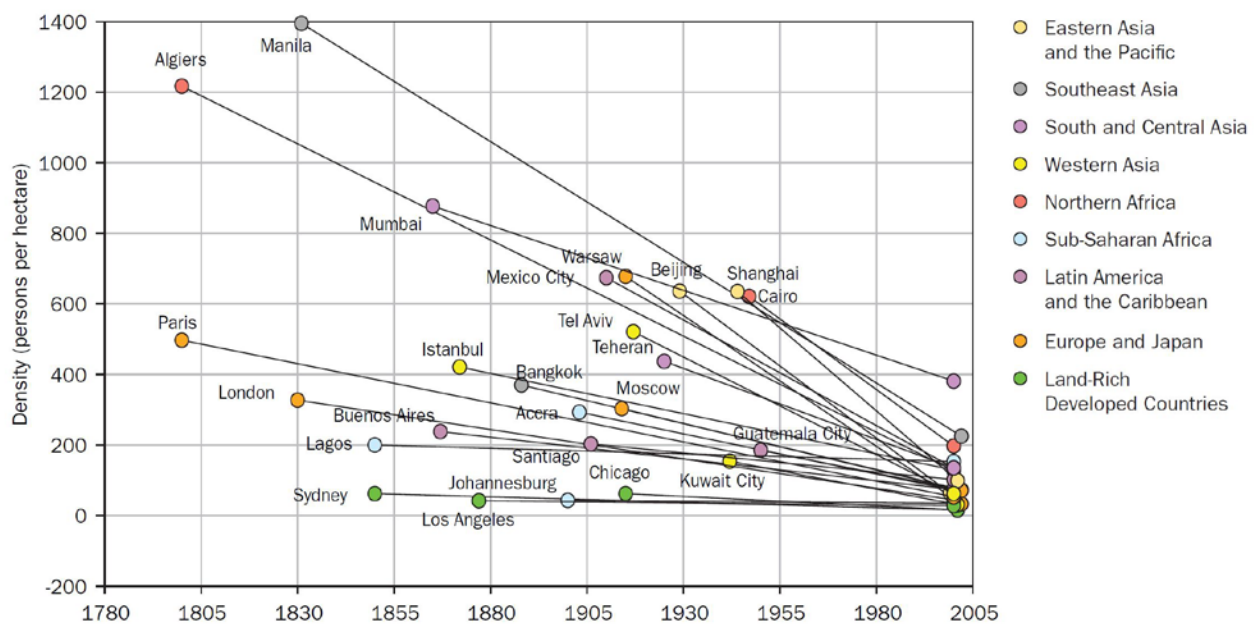
more land per person as incomes rise (Angel, Sheppard and Civco 2005). This is shown in the example of Nairobi below (*fig. 21*) where the population will double, and there will be an additional “two Nairobis” next to it. This shows how cities are de-densifying and becoming spatially more inefficient. *Fig. 22* depicts the same phenomenon in 25 representative cities by showing declining densities between 1780 and 2005.

Fig. 21: Population and area growth of Nairobi, Kenya between 2000 and 2030



Source: UN DESA 2014

Fig. 22: The general decline in built-up area densities in 25 cities, 1800-2000



Source: Angel et al. 2011: 23

The “making room paradigm” proposes that there is an effective and sustainable way for local governments to engage in the great process of urbanisation. It involves the abandonment of prevailing paradigms as irrelevant and ill-suited for cities which are scheduled to grow several times bigger in the coming decades. The adoption of an alternative (making room) paradigm offers a strategy that aims to accommodate population growth rather than to constrict or contain it. In Durban, much research has been done on the so-called urban development line (UDL) which debates the often-fluent boundary between the city and the rural hinterland (Sim et al. 2015). Especially important in the case of Durban is the fact that most of the surrounding areas are governed by traditional authorities such as the Ingonyama Trust.

“In theory, the concentration of populations in smaller areas like compact cities means services can be delivered more efficiently, [and] public transport and the transportation of goods and people need to cover shorter distances.”

(Dodman 2009: 189)

4.4 Conclusion: the urban opportunity - enabling transformative and sustainable development

This chapter elaborated on various urbanisation areas with respect to their potential leverage effects on transformative urban development. The chapter described in detail and presented a collection of problems, along with ideas and facts which—without claiming to present the right solutions—offered a kind of “toolbox” which could make a case for transformative and resilient urban development. The chapter examined why cities are crucial in solving upcoming human challenges and problems, and classified global urban challenges according to social, environmental and economic agendas. It began by citing figures which indicate that for the first time in the history of humanity, half of the world’s population lives in cities. The world’s urban population is expected to increase by 84 percent by 2050, from 3.4 billion in 2009 to 6.3 billion in 2050 (UN DESA 2018). It is projected that over 95 percent of population growth will take place in urban areas, and that almost all of this growth is expected to take place in Africa and Asia (UN DESA 2014). These urbanisation processes will thus not be driven and shaped by European or other western societies, but the developments will have a huge impact on global and also on western societies.

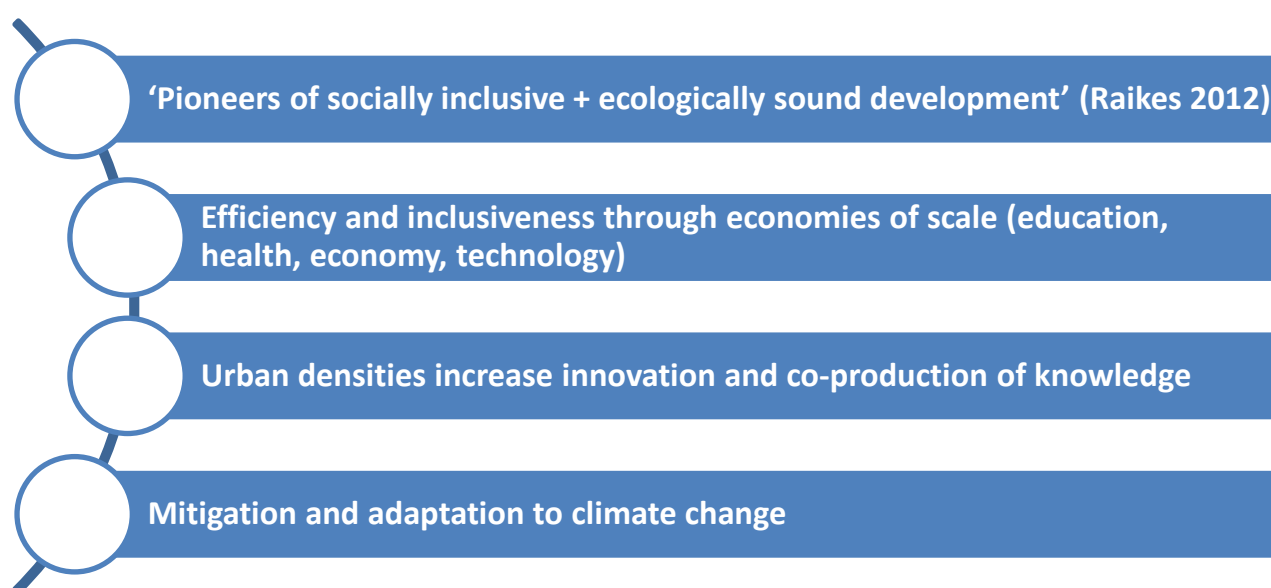
Building sustainable, liveable and resilient cities will require policy changes and a radically-new set of governance practices. Chapter 4.2 showed that the world continues to urbanise at a very fast rate. It was emphasised that African cities, and the youth in particular, should be at the centre of attention. A resilient city must be youth-focussed, especially in the areas of economic and social development. Youth will be a potent future political and cultural force for change. “A generation of young people without hope is arguably the most frightening thing a society can have” (Cartwright and Shearing 2012: 84). It was also shown that cities are often seen as demographic disasters (a “planet of slums”²⁸) but that, on the other hand, one could also focus on the dynamics of urbanisation to create some kind of motor for development. Numerous cited reports, academic analyses and networks articulated the idea that cities are well-placed to lead the way to urban transformation.²⁹ The described appearance of urban inequality and poverty or the fragility of urban systems such as infrastructure and informality in cities of the global south are particularly worrying, but could also foster transformative change more rapidly than might be the case in cities of the global north.

²⁸ With his bestselling book “Planet of Slums” (2011), the US-American urbanist Mike Davis explains his negative predictions for the future of rapidly urbanising cities. Davis describes why rising poverty leads to rising extremism and the danger of demonising urban informal economies.

²⁹ As shown above: Hoornweg and Freire 2013; Kamal-Chaoui and Roberts 2009; LSE Cities, ICLEI and Global Green Growth Institute 2013; Suzuki et al. 2009; Swilling et al. 2013; UN-Habitat 2012; UNEP 2010.

Chapter 4.3 underlined some of these most challenging action areas for interventions which have transformative potential, clustered according to social, environmental and economic agendas. The chapter highlighted that cities offer great opportunities to expand access to services such as healthcare and education for large numbers of people, in an economically efficient manner. They have the potential to provide public transportation, housing, electricity, water and sanitation for a densely settled population. The chapter also showed in detail that urban economies have large and diversified labour markets, and that cities are engines of economic growth, playing important roles in the flow of goods, finance and information. The growing concentration of people and infrastructure enables industries to produce goods in cost-effective ways, thus attracting fast-growing sectors of the economy. Analyses show that the demographic dividend could generate 11 to 15 percent GDP growth between 2011 and 2030 (Mills et al. 2017: 10). It was also shown that such growth would depend on providing improved education and skills, sustainable infrastructures and systems to employ young people, as well as efficient governance to make this happen. Some of the opportunities raised in this chapter are summarised in *fig. 23* below: cities are “pioneers of socially inclusive and ecologically sound development” (Raikes 2012), they inherit efficiency and inclusiveness through economies of scale (education, health, economy, technology), they increase innovation and co-production of knowledge, and support mitigation and adaptation measures to climate change. These four dimensions could be starting points for any transformative process in a city. The chapter showed that urbanisation processes possess a lot of positive elements for urban transformation processes, but also considerable negative challenges.

Fig. 23: Cities as an opportunity to start transformation processes



Source: Own compilation

In general, cities today face the same challenges they always have, from short-term shocks to long-term stresses. Today, however, against the backdrop of urbanisation, globalisation and climate change, these disruptions come faster, stay longer and have the potential to become full-blown crises with long-term negative outcomes. However, cities also offer opportunities for transformation because of their capacity to be innovative, govern for change, and create more sustainable and just ways of living as a result of efficiency gains, human creativity, adaptability and technological innovation (United Nations 2016).

The described transformative action fields in this chapter outlined approaches on how cities can find development pathways that are in line with the normative values described in this and the last chapter. These action fields cannot be considered in isolation, but must be seen as part of a systemic development because they are very interconnected. One of the contemporary transformative action fields, namely the “making room paradigm” was introduced in chapter 4.5. It is a conceptual framework for minimal yet meaningful control of the urban expansion process. It was shown that the prevailing containment paradigm is irrelevant and ill-suited for the growing cities of the global south. The adoption of this alternative “making room paradigm” offers an urban development strategy that aims to accommodate urban population growth rather than constrict and constrain it.

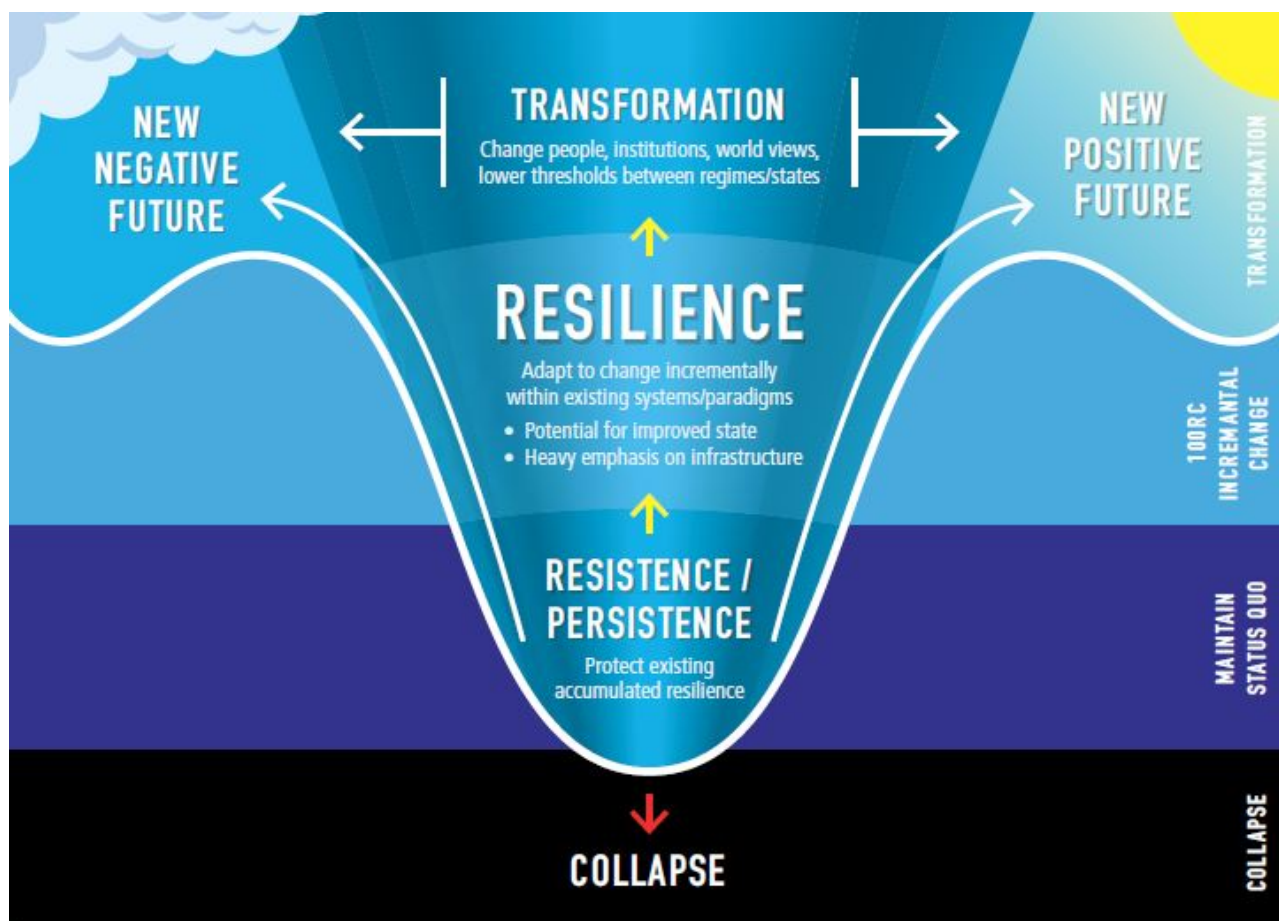
Whilst the global policy debate is moving from seeing urbanisation as a danger, to harnessing the gains from urbanisation as described in chapter 3, the jury is still out on the choice, timing, sequence and location of policy instruments or investments that can help to enhance social progress, economic efficiency and environmental sustainability, while balancing social, spatial and environmental equities. Governance will be the focus of the following chapters highlighting how the identified challenges can be dealt with on the ground through local governance. The future challenges for cities, as described in detail in this chapter, need to be tackled with different and innovative policy approaches. The next chapter introduces the two concepts of urban transformation and urban resilience as multi-sectoral and multidisciplinary approaches, and the challenges identified in this chapter will be expanded on in the following chapters.

Another example was the envisioned paradigm shift in urban safety and security interventions from those who aim to reduce violence, seek to manage it or ultimately contest its underlying structural causes (Moser and McIlwaine 2014). These paradigm shifts are examples for forward-thinking and progressive models. With such examples and demonstrations, the chapter aimed to give the necessary background to the formulation and interrogation of the concept of urban transformation which will be presented in the next chapter.

Chapter 5: The city of the future: transformative and resilient?

5.1 Introduction

Fig. 24: Resilience as a boundary state between resistance and transformation



Source: Solecki et al. 2017

Future challenges for cities, as reviewed comprehensively in the previous chapter, need to be tackled with different and innovative policy approaches. In this chapter, the concepts of urban transformation and urban resilience as multi-sectoral and multidisciplinary approaches are introduced. The chapter describes the genesis and development of the two concepts before it introduces in detail the concept of urban transformation with all its facets and its specific meaning in this thesis, followed by the concept of urban resilience and its specific role for broader transformation processes. Cities tend to change faster than we can understand the conditions of the changes, and many of these conditions operate in contradictory directions and at different scales. This means that solutions are often not

simple, and require thinking that is both matrix and nodal in nature (Redman and Jones 2005). Following the summarised broad urbanisation trajectory discussed in the previous chapter, this chapter analyses the concepts of urban transformation and urban resilience, and how they relate to one another.

The concept of urban transformation is still emerging; chapter 3 showed that the topic is strongly embedded in current global urban agendas such as Habitat III and the Sustainable Development Goals. Some high-ranking policy think-tanks have contributed very actively to the debate, and this chapter shows how broad these transformation processes are, and how the complex goals they are aimed at resemble a vision rather than a final state which can be exactly described. Transformation has the multidimensional nature of a change process covering different sectors, fields of action, groups of actors and modalities.³⁰ According to the WBGU (2011: 1), the concept stands for a new understanding of processes of urban change, requiring systemic changes in infrastructures, regulatory and lifestyle regimes, and new cooperative systems between politics, society, economics and academia. *Fig. 24* from Solecki et al. (2017) gives a glimpse of how resilience and transformation can relate to each other—resilience, for example, defined as a boundary concept between resistance and transformation. For Solecki, transformation cannot happen without resilience. Or at least, transformation will be fragile and incomplete if cities are not resilient. This figure from Solecki—which was frequently referred to during the 100 Resilient Cities project in Durban—together with other approaches are discussed extensively in this chapter.

A finding which most authors share concerns the lack of research and basic literature on this emerging topic (e.g. Pelling 2011; WBGU 2016; GIZ 2012). This thesis, and especially this chapter, aims to contribute to the research by interrogating multiple trajectories and generating a better understanding of urban transformation.

In the first part of the chapter, the emphasis is on the role of local governance in urban transformation processes, since governance and politics are central to understanding, analysing and shaping transformation. According to Patterson et al. (2016: 2), transformations are deeply and unavoidably political and need to be recognised as such. After a brief recourse to the governance theories of political philosophers of the 17th and 18th century (Hobbes, Locke, Popper etc.), the chapter focusses on more modern political governance theories such as the “nodal governance” model by Shearing and Wood (2003) to show the evolution of these concepts from political science theories. It shows that governance systems are always plural and include many different stakeholders, but it is crucial that the role

³⁰ e.g. Sustainable Development Solutions Network/SDSN 2013; German Advisory Council on Global Change/WBGU 2011 and 2016; Institute for Advanced Sustainability Studies/IASS 2011.

of state institutions is understood as an “anchor” which remains central to urban transformation (Howlett and Ramesh 2017). However, despite receiving growing attention in recent years, the ways of understanding and analysing governance and politics remain underdeveloped in the academic literature on urban transformation (Patterson et al. 2016: 2). Therefore, this chapter analyses the role of local governance and how its visionary and participatory involvement can play a key role as a change agent in any transformative process.

In the second part of the chapter, one of today’s current “buzzword” is introduced, namely resilience. This term appears to have moved from the fringe to mainstream. Google searches for “resilience” have never been higher (Carr 2017). The United Nations Office for Disaster Risk Reduction recently launched a “Making Cities Resilient Programme”, the World Bank launched a “City Resilience Program” (2018-20202), the Centre for Resilient Cities opened a research lab in 2015 in the United States, and the UN Office for Disaster Risk Reduction (UNISDR) developed a “City Resilience Action Planning Tool” (CityRAP). Companies such as Siemens are investing more and more funds in this area of interest, as are the World Bank and international city networks and development partners. The Resilience Alliance framework is referred to in this chapter, as it provides the most comprehensive and widely accepted understanding of what constitutes resilience and how it can be achieved.

Before the chapter concludes, other terms used in the international and South African context are presented and clarified, as it is important to be aware of the differentiations between similar concepts such as “urban transition”, “urban regeneration” and “urban renewal”. This is especially important given the different understandings in South African and international contexts. As an excursus, the successful example of urban transformation in the story of the Colombian city of Medellín is presented. The conclusion summarises the complexity of transformation processes presented in this chapter.

5.2 Transformation as a new paradigm of change in development theory

The current development paradigm in international development cooperation, namely “catch-up development” is still the approach used in most western countries (DIMR 2012; Stockmeyer 2011). The term was created, amongst others, by US-President Harry Truman after the end of colonialism in the 1950s. Development was primarily seen as economic development, and developing countries were expected to catch up with the economic development of industrialised states in due course. This was supposed to lead to the global development of all countries. Leapfrogging, which means skipping certain developmental steps, was not intended. Even though the implementation of this paradigm

came with significant problems, it is still used as the dominating paradigm in international development cooperation. Important international agreements such as the Paris Declaration and the Accra Plan for Action are based on this paradigm (Stockmeyer 2011). However, the paradigm has always been heavily critiqued, and this criticism has intensified over the last few years. Decades ago, the United Nations Children's Emergency Fund (UNICEF 1987) and the UN Economic Commission for Latin America and the Caribbean (UN CEPAL 1996) called for an economic "adjustment with a human face" in their criticism of the neoliberal structural-adjustment programmes of the World Bank and International Monetary Fund. The following areas have been subject to criticism according to UN CEPAL (1996) and Stockmeyer (2011):

- The direct relation between funding and impact; more external funds would lead to more impact (as one sees in the Paris Declaration).
- The implied alignment between external and local stakeholders in the form of joint assistance strategies.
- The dichotomy between planning and implementation with a clear emphasis on planning.

This critique of the prevailing assumptions in the existing development paradigm and other concepts has been debated over the last few years, as has the concept of urban transformation. Transformation in general is a political, not a technical, process. According to Stockmeyer (2011) and Grindle (2001), the concept has the following characteristics:

- It focusses on the change process and not the final goal; the thinking around the process is guided by values throughout the design,
- synchrony of dimensions; the policy and implementation have equal rights,
- outputs and outcomes are only starting points for the development of new and revised indicators; the achievement of one objective opens up further objectives which support the process,
- learning takes place in a "double loop" since change processes faces new challenges,
- it alludes to reform management, "groping" or "muddling-through",
- it can be used to overcome the "information problem" during reforms; the latter occurs when stakeholders are unaware of the necessary information to steer these processes, and
- it is an approach in which analysis and action accompany each other.

Innovative sectoral approaches such as green urban economy, smart cities, urban farming, urban mining, nexus approaches, new mobility concepts and new participation concepts such as the use of ICT technologies or urban crowdsourcing are elements of transformation, but do not constitute the broader transformative process of change. They are starting elements accompanying a wider programme which includes citizen participation and institutional development.

5.3 The concept of urban transformation

5.3.1 Urban transformation as a change process

Change, as well as correcting isolated deficiencies and problems, are not enough in themselves. Development cannot be seen as the final goal or a precisely defined state which is planned and implemented from start to finish. The challenges facing cities today involve much more than finding technical solutions to individual problems.

Developing sustainability requires focussed and fundamental changes in social, economic and often political structures (Feola 2014). In cities these structures are dependent upon one another; they influence and shape each other. Cities are moulded by the processes and affect them in turn. Urbanisation is both an expression and a designer of transformation. In one of her articles, sociologist Saskia Sassen introduces a new understanding of the term “city”. She highlights the “complex systemic and multi-scalar capacities of cities” which inherit massive potential for the transformative role of cities (Sassen 2010: 1).

Transformation is often used to describe far-reaching shifts in fundamental political, social and economic changes and their interactions, leading to new patterns of interactions and outcomes (de Haan and Rotmans 2011; Hackmann and St. Clair 2012; O’Brien 2012; Feola 2014). The concept is more than just a retrospective approach to describing history. In contrast to “development”—which is often seen as change without prior conditions, or a target situation which determines the project goal—transformation emphasises the process of change (Stockmeyer 2011: 6).

Transformation stresses the multidimensional nature of change, covering different sectors, fields of action, groups of actors and modalities (van den Bergh et al. 2011). These often involve differences in timing, divergences and setbacks. The political elite, public administration, informal and formal private sectors and civil society each have different interests, and intervene in transformation processes at different times and in very different ways. According to these definitions, transformation could be best understood as a nexus, or a nodal network of intersections, convergences and collisions.

Given this background, there are always inherent limits to the planning of transformation processes. The different paces of change in a transformation process mean that they influence each other and yield results that are difficult to predict. In the course of a transformation process, the interim goals and points of intervention for managing the transformation also shift (Stockmeyer 2011). The path to sustainability is a process of transformation on a global and historical scale, where all systems and peoples are interconnected in complex ways (GIZ 2012).

Visionary city managers and agents of change in municipalities are important for the implementation of urban transformation processes. It is not a sectoral or fragmented process, but an integrated one. Cities are complex and rely on a composite network of interconnected institutions, infrastructure and information. Being integrated means that individuals, groups, organisations and other entities have the ability to bring together disparate thoughts and elements into cohesive solutions and actions (Patterson 2017). According to Günter Meinert, an urban expert working for the German development agency GIZ, urban development has long been seen as a planning task only and this “selective additive understanding” is still widespread in international cooperation today (Keppeler 2012: 17). Many urban development challenges around housing, administration, ecology, migration or safety and security are however too complex to resolve without an integrated approach. According to Keppeler (2012: 17), “urban development has to be seen as a transformation process, in which social, cultural and economic factors are interconnected and have to be shaped and controlled through the policy”.

According to Antanas Mockus, the former mayor of Bogotá, a city cannot be changed through regulations, legislation and investments alone. A city can only change if its inhabitants change with it (Keppeler 2012: 14). The process has to include what is organic and not simply mechanical. In the case of Bogotá, the mayor focussed on transforming the city through “moral norms” already embedded in city thinking and behaviour. In cases where individuals do not follow the standards of moral norms, it would be necessary for the limits to first be pointed out by others in their immediate environment (family or neighbourhood), before the state intervenes with so-called “norms of the policy and judiciary” (Keppeler 2014: 14).

5.3.2 Preconditions for urban transformation

The German Advisory Board for Global Change (WBGU) is an independent scientific research council made up of nine highly distinguished professors from universities and think-tanks who advise the German government on developmental and environmental problems, monitor and assess research for the achievement of sustainable development, and provide early warnings of new issue areas (WBGU

2017). Every two years the WBGU publishes a report. The 2016 report “Humanity on the move: Unlocking the transformative power of cities” examined the transformation of cities towards sustainability. In this report the WBGU (2016; 2011: 1) defines transformation as changes in “infrastructure, ways of production, regulatory systems and lifestyles” and the need for “a new collaboration between society, academia and businesses, and the government. It includes the need to overcome political and institutional path dependencies and blockades”.

The 2016 report predicts that “cognitive, technical, economic and institutional path dependencies, a policy of business as usual”, highlighted through an “unstructured, quasi-automatic urbanisation” would “lead to a non-sustainable world cities society” (WBGU 2016: 515). Only if cities and urban societies are sufficiently empowered can they successfully follow urban transformation pathways.

The WBGU discusses relevant conditions for the success of transformations by showing that a “concurrency of multiple change” (Osterhammel 2009: 36) can trigger historic waves and comprehensive transformations. Development cannot be seen as the final goal. To trigger social dynamics of change, which could lead to urban transformation, the council suggests a combination of preconditions at different levels which need to be taken into account for the following debate around the 100 Resilient Cities campaign (WBGU 2016; 2011):

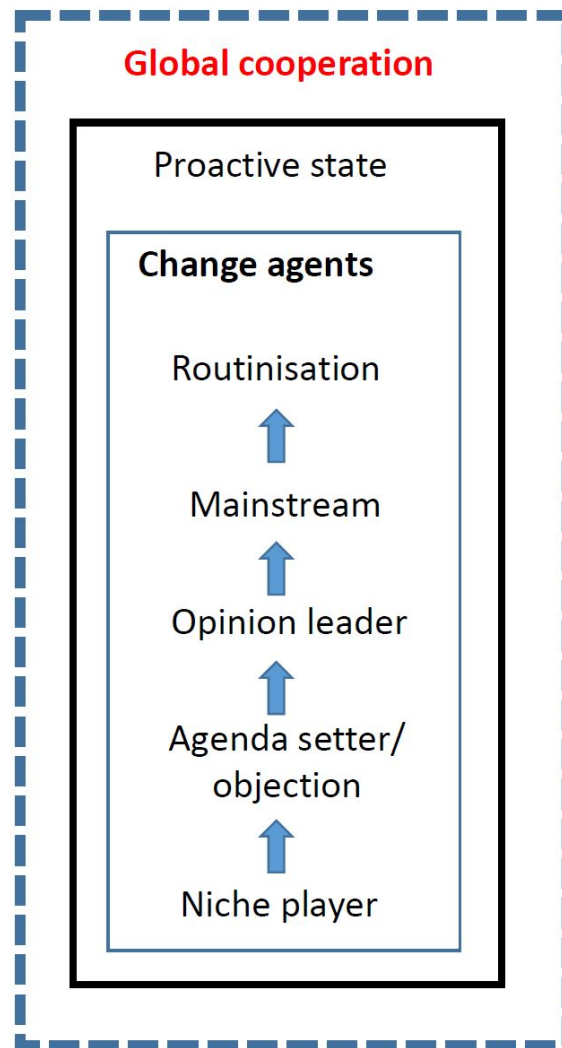
- Change must be knowledge-based.
- Change relies on change agents to leave path dependencies behind.
- Change counts on the cooperation of national and international networks and communities and the establishment of governance structures as indispensable driving forces for intended transformation momentum.

5.3.3 Urban transformation and change agents

Change agents have a central role to play in transformation processes as pioneers and drivers of change. The WBGU (2011: 9) defines change agents as “individuals or small groups which are initially involved as marginalised protagonists but gradually increase the impact of an innovation until it finally becomes established as a new social routine”. This process is illustrated in *fig. 25*. Change agents often start out as niche players which stand apart from the mainstream. After becoming agenda-setters, the process attracts more attention from larger society and the environment, and if the agenda setter becomes an opinion leader this usually leads to mainstreaming of the debate. After years or even decades, a continuous routine evolves and transformation is reached. Change agents can be

embedded in all sectors of society. Local governments are often called change agents in urban transformation processes (World Bank 2010; Sassen 2010).

Fig. 25: Agents of change in urban transformation processes



Source: WBGU 2011: 9

5.4 The governance of urban transformation: local governments as key role players

5.4.1 The need for a participatory and innovative urban governance

As described in the previous chapters, urban transformation is deeply political. Transformative processes are usually highly contested, as different stakeholders will be affected in very different ways

and may stand to gain or lose as a result of change (Meadowcroft 2011; van den Bergh et al. 2011). The control mechanism and therefore key in these processes is local governance (IASS 2011). Benefits can only be realised by competent and accountable local governance (Satterthwaite 2011). Governance of urban transformation is more complex, dynamic and variable than governance of urban development projects, and the control of its mechanisms is crucial to urban transformation (GIZ 2012). New forms of governance and policy-making might be necessary (SDSN 2013a: 2).

Governance is basically understood as the structures, processes, rules and traditions that determine how people in societies make decisions, share power, exercise responsibility and ensure accountability (Folke et al. 2005; Lebel et al. 2006; Cundill and Fabricius 2010; Leach et al. 2007; Scoones et al. 2005), while urban governance is usually understood a bit more precisely as “acts of state and non-state actors and institutions with the aim of organising the local affairs of a city and its urban society” (WBGU 2016: 21). The WBGU defines transformative urban governance as organisational and procedural structures and decision-making based on a normative compass according to the criteria highlighted in chapter 5.3.2. Besides local government, it is also crucial to include citizens in the process so as to create legitimacy and better-informed networks and approaches (WBGU 2016: 22; Satterthwaite 2011). For this purpose, arenas for public discourse and spaces for experimentation must be created and new ICT technologies must play an important role in future improved citizen participation. Politics must make intended transformations agreeable to the vast majority (acceptance), obtain their consent (legitimation) and invite cooperation (participation).

5.4.2 The role of the local government in political sciences theory

For such participatory and innovative urban governance processes to be implemented, local governments must be key role players or “anchors”, but at the same time new modes of governance are also required—for example institutional innovations, flexible policies and interdisciplinary management (SDSN 2012). In the best way, local governments need to become “change agents” or “change drivers” as described in chapter 5.3.2. City managers and their teams are largely responsible for developing and implementing urban transformation strategies.

As far back as the 17th century, Thomas Hobbes in his well-known book “The Leviathan” wrote quite negatively that without central power there would be anarchy and life would be dangerous (Hobbes 1969). Hobbes was one of the first theorists who legitimated central government and the rule of an absolute sovereign. Some years later, John Locke (1632-1704) added the warning that civil authorities should only rule with the consent of those who are being governed. From a totally different back-

ground and political school of thought, Karl Marx and Friedrich Engels argued in the early 19th century that property must belong to the state only as one of its central functions, and that the state should distribute it for human welfare. US-based libertarian political theorists of the 20th century argued for a marginal state, recommending that “the only legitimate function of the state must be to protect individuals from internal and external threats to their security and property. The least government possible is the best government possible” (Hospers 1971). Karl Poppers in his work on “the open society” in 1945 also contributed to this school of thought, but added that individual freedom and social critical thinking must be included in any form of government (Popper 1955).

Modern political schools of thought now turn the lens from “government” towards “governance”, and adapt the above-mentioned radical theoretical approaches to today’s modern democracies with educated and participatory citizenry. During the 1980s and 1990s, market-based governance techniques were still the preferred alternative to the “state-only” paradigm, but this preference has tilted towards network governance in recent years (Howlett and Ramesh 2017: 317). Recent “network governance” or “collaborative governance” arrangements combine both governmental and market-based alternatives, but Howlett and Ramesh identify many problems in network governance systems and therefore support the concept of the state as an “anchor” playing a “steering” and not a “rowing” role. The occurrence of privatisation, deregulation, decentralisation and other government approaches are often mentioned as concrete manifestations of a development which has led to new forms of governance. Scholars such as Capano et al. support the view that governments will continue to play a key role as anchors in policy-making, and that if this fact is not taken into consideration governance would be anchored to a merely normative or prescriptive view rather than an empirically robust one (Capano et al. 2015: 311). Advocates of this institutional approach such as Scharpf (1997) argue that any governance through networks must be conducted via delegation from legitimate political institutions, and that this delegation can be withdrawn at any time from the state through instruments such as the law, budgets, and organisations that are available to create governance within society (Scharpf 1997). Governance theorists such as Guy Peters take a more intermediate view and argue that basic functions must be performed by a central “anchor” state but that for a political system to solve problems, the inclusion of other stakeholders is still central (Peters 2014: 301). The best scenario for ready-for-transformation local government would be to have a competent local government with a good mix of politicians and experts who have access to financial resources (including private sector and tax schemes) and good connections with the rural hinterland as well as with the national government. The last point is critical. Here, in the book “Beyond Smart Cities: How Cities Network, Learn and Innovate”, Campbell (2010) discusses examples of several cities which have achieved important transformations, and which already have networks such as the 100 RC in operation.

5.4.3 Urban transformation as a multi-stakeholder process: the “nodal governance system”

Even though local government is considered the key role player or anchor, urban transformation processes must be driven by local partners in a multi-stakeholder process. The different stakeholders, namely local and national government, civil society, the private sector and supporting partners from regional or global levels should, amongst others, all engage in dialogue and cooperate with each other. In democracies, governance is always plural and the state cannot act fully independently. Clifford Shearing’s nodal governance system speaks to this approach. He argues that: “[g]overnance today is characterized by a plurality of actors (states, corporations, the WTO, institutions of ‘civil society’, criminal and terrorist gangs) forming more or less interconnected governance networks; a plurality of mechanisms (force, persuasion, economic pressure, norm creation and manipulation); and rapid adaptive change. Nodal governance is an elaboration of contemporary network theory that explains how a variety of actors operating within social systems interact along networks to govern the systems they inhabit” (Burris et al. 2005: 3).

Shearing submits that state-centred governance is challenged by a proliferation of “public”, “private” and “mixed” auspices and providers (Shearing and Wood 2003). With this analysis, Clifford created a theoretical approach that gives no prior significance to (local) governments and highlights the important role of all other stakeholders in a “multilateral” or “polycentric” system where paths will always meet at some point. He supports his approach with the timely fact that in the last decades the neoliberal system of privatisation and deregulation has increasingly been used by local governments which disseminate political influence to other stakeholders and not only to governments. State agencies thus serve as “regulators in the distance” (Clarke and Newman 1997). Nodes are normally but not necessarily points on networks, and networks are a prime means through which nodes exert influence (Burris et al. 2005: 33), and according to Shearing and Wood (2003: 26), “nodes may not come together to form networks at all”. Shearing adds with this to political theories such as that of the philosopher Friedrich von Hayek who identified “the epistemological limits on human organization and planning” and appreciated markets rather than governments “as a means of bringing order to complex systems by coordinating diffused knowledge and capacity” (Burris et al. 2005: 32), even though Shearing does not share the liberal market-based approach which Hayek does, and calls for a regulatory intervention by the state to secure equality in the system. Quéro and Dupont (2017) used the nodal governance model to understand node relationships in the field of local security governance for example. They looked at the creation and roles of different stakeholders and how resources are exchanged between nodes and identified three categories of nodes: 1) the most involved nodes that

lead the network, 2) the actors who, while active, do not participate at the same level as the leading team and 3) the nodes that use more resources than they provide (Quéro and Dupont 2017: 283). Analyses like this show the complexity of nodal governance structures.

Concerning the practical project planning, *fig. 26* shows a practical example of governance as a multi-stakeholder, or “nodal”, process. As the core of this thesis is the 100 Resilient Cities project of the Rockefeller Foundation an example how such a process is seen by another western development agency, the German GIZ, is chosen. According to GIZ (2012), the main five stakeholders in governance processes are local government, national government, civil society, private sector and supporting partners (from regional or global level). Local government is always best positioned to design and start transformation processes and engage local stakeholders since they are closer than national governments to the citizens they serve. Local government also makes sure that projects and plans are integrated in local policy priorities and frameworks and it is the only stakeholder which has the authority to implement projects and plans in the municipality. It is between the five main stakeholders in governance processes, according to GIZ, where the seven most crucial issues have to be debated and organised in a “valued partnership”, namely to adjust organisations, increase awareness, elaborate strategies, enhance knowledge, mobilise funding and implement strategies whilst engaging in dialogue and cooperation (see *fig. 26*). Even though local governments, especially in developing countries, have clear constraints regarding technical and managerial capacity, Patel (2015) submits that many private and non-state stakeholders have begun to support local governments by providing support for transformation and resilience processes in cities. A national government might not play an active role in local resilience projects but for any transformational process a change of national policies and frameworks is important. Many responsibilities such as housing and economic models or finances often rest with national governments only, as for example it is the case in South Africa. Awareness raising is thus crucial to start transformation processes, and civil-society can be strong drivers to initiate dialogue.

The need for more knowledge and data for example might not be very obvious in the beginning but will increase over time. Academia, the private sector, think-tanks and businesses are often very active in this field. Supporting partners such as development agencies or regional institutions also have a complementary supporting function. According to GIZ (2011), financing options should be analysed very early in the process since financial capacity is crucial to start a transformative process.

The diagram illustrates the roles of different actors in the implementation of the Sustainable Development Goals (SDGs). The actors are represented by blue circles, and the central actions are represented by red rounded rectangles.

Actors (Blue Circles):

- Supporting partners (regional or global)
- Local Government
- National Government
- Civil Society
- Private sector

Central Actions (Red Rounded Rectangles):

- mobilize financing
- implement strategies
- adjust organizations
- enhance knowledge
- engage in dialogues + cooperation
- elaborate strategies
- increase awareness

Flow and Interaction:

- Supporting partners (regional or global) → Local Government
- Local Government → National Government
- National Government → Civil Society
- Civil Society → Private sector
- Private sector → Supporting partners (regional or global)
- Local Government → implement strategies
- Local Government → engage in dialogues + cooperation
- Local Government → elaborate strategies
- National Government → adjust organizations
- National Government → increase awareness
- Civil Society → increase awareness
- Private sector → enhance knowledge
- Private sector → mobilize financing

It is important to highlight that the role of each partner in a multi-stakeholder process depends on the specific situation and varies over time but that local governments and authorities are crucial for urban transformation processes. Both state and non-state stakeholders have their own sets of skills, resources, and knowledge and feed this into the governing process circle. Lastly, taking ownership of the process is also important.

5.5 Urban resilience as a step towards urban transformation?

5.5.1 The origins of the concept of resilience

The concept of resilience is shaping science, policy and practice in cities around the world, through programmes such as the Making Cities Resilient Campaign implemented by the UN Office for Disaster Risk Reduction (UNISDR), UN-Habitat's City Resilience Profiling Programme, the United Nations Sustainable Development Goals (SDGs) and the Rockefeller Foundation's 100 Resilient Cities campaign. With wider use of the term, resilience is increasingly seen in academic debates as a contested concept (MacKinnon and Derickson 2013). Vale (2014) claims that in contrast to "sustainable" and "developmental" discourses that offer relatively vague notions of commitment, resilience adds a strategic meaning to protection from potential threats to society, the economy and the environment (cited in Mehmood 2016: 407).

The concept of resilience does not have a single source; it originates from different schools of thought. The most prominent disciplines include ecology (Holling 1996), disaster risk management (Wisner et al. 1994; Cutter et al. 2008) and body-society which includes psychology (Rutter 1987). These disciplines have all shaped different concepts of resilience. In the engineering literature, resilience means a return to the original form. Ecological resilience means transforming into a new stable state or equilibrium. Social resilience, on the other hand, is understood as the process by which communities withstand shocks without significant upheavals (Adger et al. 2002; Mehmood 2016; Beilin and Wilkinson 2015). Resilience emerged in psychology in the 1950s and has seen increasing interest since 1980, especially related to child development (Alexander 2013: 2710; Masten 2001: 228).

In general, resilience has deep roots in ecology and is still dominantly used in the environmental sciences (Xu and Marinova 2013: 911). Clancy Holling, the founder of the Resilience Alliance³¹, defines resilience more as a systems approach (Berkes et al. 2002: XII; McGreavy 2015: 8). According to Holling (1973: 14), resilience is "a measure of the persistence of systems and of their ability to absorb change and disturbance, and still maintain the same relationships between populations or state variables". His contribution is seen as the beginning of applying the concept to "human" systems in the 1990s, followed by an increasing interest in social-ecological resilience and its initiation in development and urban studies (Adger 2000: 347; Welsh 2014: 17; Tierney 2015: 3).

Many scholars in the social sciences also argue that resilience is a systems approach and has to be seen as a process, socially constructed in a changing and complex system (Chambers 1997: 193; Manyena 2006: 438; Walker and Salt 2006: 11; Bankoff et al. 2015: 12). Referring to resilience as a

³¹ The Resilience Alliance is a multidisciplinary international research consortium.

dynamic concept places the focus on resilience building and includes the possibility of adaptation (Mitchell and Harris 2012: 2; Aldunce et al. 2014: 257). Nevertheless, a “critical transfer” of ecological systems-thinking into the social sphere and disaster context is crucial, being aware of additional factors such as power relations (Cannon and Muller-Mahn 2010: 623; Hudson 2010: 13; Tanner et al. 2015: 23) as well as socio-cultural, historical, political, and economic factors (Lewis 2008: 2).

5.5.2 Finding a definition of the concept of resilience

The Disaster Resilience Journal (2015) identifies 42 definitions of resilience. Although recent attention might imply that resilience is a new concept, the term has existed for a long time and has been applied in diverse disciplines. The word itself originates from the Latin root *resilire*, which describes a state of “springing back” (Davoudi 2012: 300). Many policies in disaster resilience use the term to refer to a “bounce back” capability, first applied in physics and engineering to describe a material’s resistance to shocks (Davoudi 2012). Resilience thinking is not new; according to Walker and Salt (2006: XI), “many traditional societies give high priority to the need to manage their environment to reduce risks and buffer themselves from droughts or other surprises”. According to an analysis by Xu and Marinova’s (2013: 925), the use of the term increased since 1973, with a further increase since the establishment of the Resilience Alliance in 1999.

Resilience is often defined in terms of ensuring that humanity operates within planetary boundaries, producing adaptive spatial, social and institutional forms that can deal with stress and withstand shocks in contexts of uncertainty (Steffen et al. 2015; Braun 2014; Rockström et al. 2009). Walker et al. (2004: 5) define resilience as “the capacity of a system to absorb disturbance and reorganise while undergoing change and still retain essentially the same function, structure, identity and feedbacks”.

The Stockholm Resilience Centre, with its focus on socio-ecological resilience, defines it as the “capacity of a system to continually change and adapt yet remain within critical thresholds” (Stockholm Resilience Centre, 2017). In this context, “resilience is the capacity of a system, be it an individual, a forest, a city or an economy, to deal with change and continue to develop. It is about the capacity to use shocks and disturbances like a financial crisis or climate change to spur renewal and innovative thinking” (Stockholm Resilience Center 2017). According to ARUP (2014: 3), the term resilience has in the last years moved away from traditional disaster risk management; the concept now “accepts the possibility that a wide range of unpredictable disruptive events—both stressors and shocks—may occur”. For Ernstson et al. (2010: 532), “a stronger resilience theory for human-dominated ecosystems such as cities is critically needed because such ecosystems are spreading across Earth”.

Consequently, knowledge about and understanding of resilience is being consolidated in a number of different disciplines and sites, resulting in diverse and contested definitions and approaches as the global and local struggle for control over the concept plays out. Given the variations in meaning, the usefulness of the term depends heavily on how it is understood and enacted in regionally-specific contexts. In the end it has to be noted that, according to Klein et al. (2013), “after thirty years of academic analysis and debate, the definition of resilience has become so broad as to render it almost meaningless”.

5.5.3 The socio-ecological systems (SES) vs. the socio-ecological relations (SER) approach

There are two main approaches to resilience: the socio-ecological systems (SES) approach and the socio-ecological relations (SER) approach (Wakefield and Brown 2014; Miller 1980). In the socio-ecological systems (SES) literature, resilience is defined as the capability of a system to bounce back from a stress or a shock “such that it resumes its original configuration, shape, functional relationships or trajectory afterwards” (Welsh 2014: 1). This is determined by its “responsiveness, ability to cope and learn, and its level of vulnerability and self-organisation” (Welsh 2014; Folke 2006).

On the other hand, the socio-ecological relations (SER) approach to resilience explores the relation between society and the environment and focusses on the role of power in these relations (Miller 1980). This approach is of great relevance to the local context of Durban’s 100 Resilient Cities project in this thesis. According to Miller (1980), power and politics impact on how resilience is defined and experienced in different contexts. Citizens can decide on the values and rules of society. However, authority is always assigned to some people more than others, and consequently some are able to exercise more power than others.

According to the SER literature, participation is key and the onus is on local government to identify multiple stakeholders and to ensure that the form of resilience that emerges reflects the context, multiple voices, concerns and challenges of that city so as to enable transformation (Duffield 2011; Welsh 2014; Swyngedouw 2005). Here, resilience also needs to be considered in terms of who benefits, by whom and for what reason or purpose (Friend and Moench 2013; Meerow and Newell 2016).

In the SER approach, deliberate efforts to encourage resilience building “from below” present opportunities to produce new relations between citizens and the state through the development of skills, as well as through new forms of engagement and sharing of resources (Joseph 2013; Neocleous 2013 cited in Wakefield and Braun 2014). The SER approach to resilience requires flexibility, innovation, partnerships and the co-construction of knowledge.

5.5.4 A critical view of resilience and the importance of local ownership

Resilience can become less meaningful and yet another “buzzword” (Tanner et al. 2015: 8) or create acceptance for various definitions (MacAskilla and Guthries 2014: 670). A criticism arises around the positive attribution to the concept itself, arguing that the term in its original meaning is quite neutral (Béné et al. 2012: 13) or even negative (Mitchell and Harris 2012: 5). More precisely, it is argued that resilience can sustain “negative” states, increasing vulnerability and risk factors and achieving the opposite of its intended aims (Hanley 1998: 226; Levine et al. 2012: 2; Sudmeier-Rieux 2014: 68). Resilience does not necessarily decrease vulnerability or risk, and being resilient does not necessarily protect a society from being simultaneously highly corrupt, unsustainable or inequitable (Levine et al. 2012). Some critics are concerned that resilience could actually be a danger regarding the promotion of short-term actions rather than tackling the root causes of social problems and vulnerabilities (MacKinnon and Derickson 2012). The general problem is that a “bouncing back” status to normal conditions is not desirable and could even lead to negative outcomes. More critics are therefore focussing on an examination of “bouncing forward”, which comes with a clear developmental approach and is a necessary precondition for further examination in this thesis. The opponents and proponents of resilience are captured in the following section, highlighting the main theoretical concepts.

The theory by David Chandler is related to state-building and governance and is useful for shedding light on the conceptualisation and promotion of resilience. Chandler presents a post-liberal approach and situates resilience in a complex systems theory. He advocates that “changing or adapting behaviour and understandings needs to come from within; resilience cannot be ‘given’ or ‘produced’ by outside actors, only facilitated or inculcated through understanding the mechanisms through which problematic social practices are reproduced” (Chandler 2013: 276). He criticises the liberal top-down approach of exporting liberal institutions into developing countries and systems, where local “recipients” are not “ready” to implement these new concepts. Regarding resilience, he argues that while on the one hand intervention is seen as necessary, on the other hand the responsibility regarding the outcomes rests with local actors. Chandler therefore views resilience as an approach contrasting the liberal idea of state-led technocratic concepts (Ibid: 279), since outsider intervention cannot be the solution (Chandler 2014a: 5). In another paper, Chandler advocates that “policy debates have shifted away from intrusive forms of coercive international governance and towards existing practices and knowledge, to be worked with on the basis that local capacities for resilience need to be at the heart of approaches” (Chandler 2015: Z). He argues that organisational learning is taking place in moving away from “top-down” understandings towards more diverse concepts (Chandler 2014b: 39). It becomes apparent that Chandler is in favour of the resilience concept, and that he views it as an approach

to establish more “local empowerment”. Chandler’s view poses the question of how local agents would drive the policy process as well as the practicalities and efficiency in resilience building.

The absorption of the term into neoliberal discourse (Joseph 2013) focusses on resilience as maintaining the status quo; a stable state and a largely engineered response to threats or shocks to the system (Walker and Salt 2006 cited in Beiling and Wilkinson 2015: 1206). As opposed to Chandler, Julian Reid criticises the overall concept of resilience and situates it within neoliberalism, although he claims that it has not emerged from neoliberal doctrines, but as a criticism of them (Reid 2013: 2355; Evans and Reid 2015: 37). He criticises the resilience debate because it “legitimises neoliberal systems of governance and institutions” (Reid 2013: 355), and adds that resilience takes the political power to change away from the people, leaving them only with a passive adaptive capacity (Evans and Reid 2015: 42). Evans and Reid further criticise the claim behind the liberal notion of resilience as being “the fundamental property which peoples and individuals worldwide must possess in order to demonstrate their capacities to live with danger” (Evans and Reid 2014: 2). Although Evans and Reid acknowledge the resilient components of “people taking ownership of their dangers” and “encouragement to learn from catastrophic events for the future”, they see the intention behind resilience as obstructing the possibility of envisioning a world free of danger and “action, imagination and transformative potential” (2015: 203). Evans and Reid (2015: 84) argue that vulnerability and its acceptance is a prerequisite for resilience.

Joseph further argues that resilience is not a systems approach, as suggested, but a form of governance that emphasises individual responsibility (Joseph 2013: 38). For him it fits well with neoliberalism, promoting individual adaptability and social mobilisation. Relevant to this context, the integration of “local” knowledge has received much attention from research scholars and is, according to Muriel (2012: 482), challenged as whose knowledge is actually used, whose resilience is addressed and what the intention is. Researchers such as Joseph (2013) argue that resilience needs to be based on local ownership.

The next chapter interrogates the 100 Resilient Cities project to assess whether resilience-building comes from the local sphere or remains an outside intervention to set developing countries “on the right track”.

5.5.5 The concept of urban resilience

According to Beiling and Wilkinson (2015: 1205) and Fathi (2014: 4), there are only a few academic articles about the social-ecological aspect of resilience and its urban applications. The concept has mainly been understood as a more technical concept targeting disasters. Over time, more publications

and a more general understanding of urban resilience has emerged, together with various definitions (Brand and Jax 2007; Fathi 2014: 4).

Meerow reviewed the scholarly literature in a comprehensive analysis and concluded that the existing definitions are “inconsistent and underdeveloped with respect to incorporation of crucial concepts found in both resilience theory and urban theory” (Meerow et al. 2016: 38). Resilience has recently re-emerged as an approach to addressing environmental, socio-economic and political uncertainty, complexity and change. Cities, as a result of their concentration of the world’s population, resource consumption, environmental risks and ability to be innovative, have become sites of experimentation for building resilience in both theory and practice (Meerow et al. 2016). At the AAPS Conference 2015 in Cape Town, for example, Professor Ivan Turok of the Human Sciences Research Council referred to urban resilience as a “multi-faceted boundary concept” and “useful analytical framework”.

According to Alberti et al. (2003), urban resilience is measured according to “the degree to which cities are able to tolerate alteration before reorganising around a new set of structures and processes”. A city’s resilience is also determined by its institutional and community capacity to respond to stress (World Bank 2013). Here, according to the World Bank (2013: 81), a paradigm shift is necessary to give equal emphasis to capacities, as opposed to the traditional technical approach of focussing on exposure to hazards. Resilient cities are in essence urban areas that support sustainable income generation, good quality service and infrastructure provision, as well as access to health, education, and information systems (World Bank 2013: 89).

Urban planners can benefit from deconstructing local causes and mechanisms of urbanisation, and identifying challenges and opportunities to build resilience within systems (Satterthwaite et al. 2009). Urban resilience is a very complex concept. Francis Wesley and her colleagues at the Stockholm Resilience Centre submit that in urban areas socio-ecological systems are linked, are complex adaptive systems, and that cross-scale coordination is critical (Stockholm Resilience Centre 2017). A framework for urban resilience developed by the Resilience Alliance is shown in the next chapter.

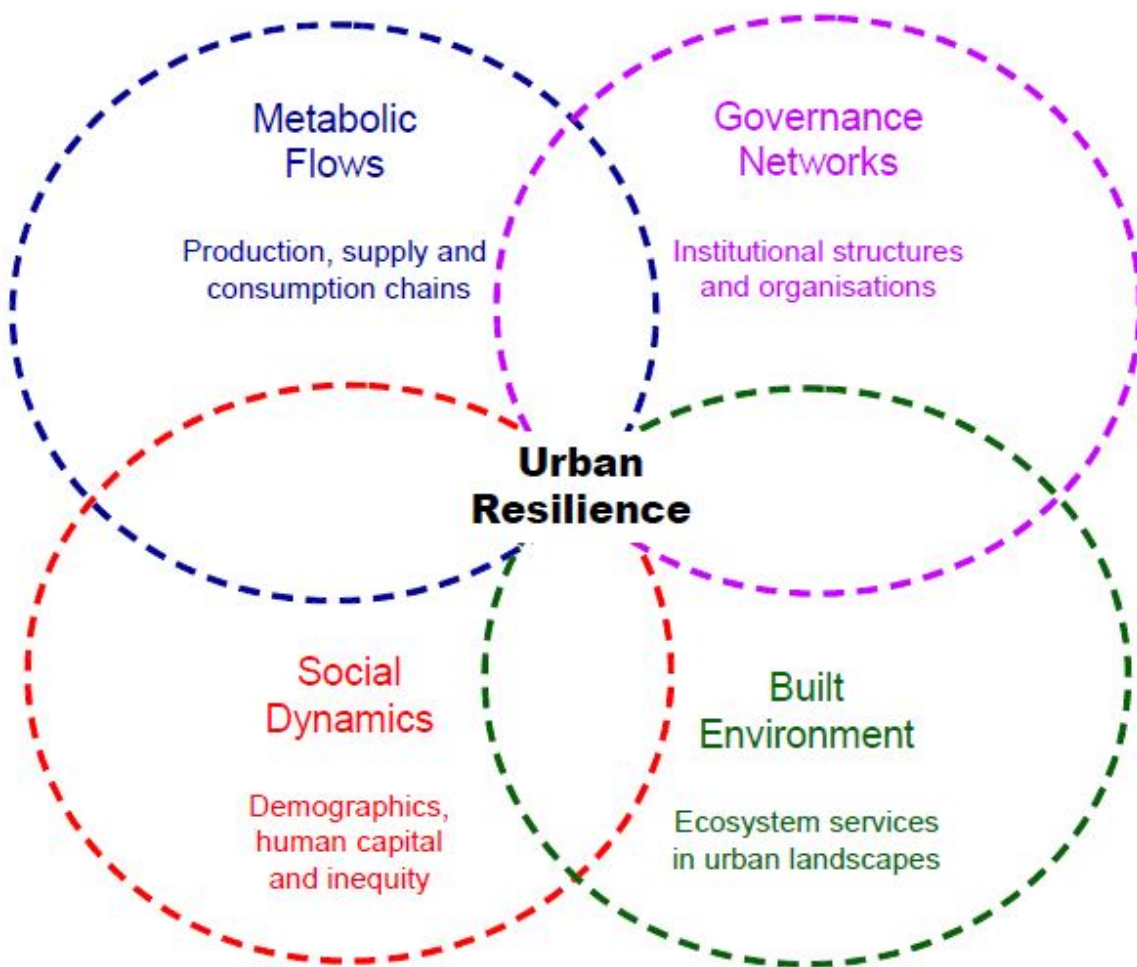
5.5.6 Transforming urban systems towards sustainability: The Resilience Alliance framework

The Resilience Alliance is a highly distinguished group of international and interdisciplinary scholars and practitioners who were amongst the first scholars to establish a systemic framework on “Sustainable Urban Futures”. The Alliance is acknowledged as “the key conduit for urban resilience thinking” (Berkes et al. 2003: 15). According to Rockstroem (2003: 870), the latter defines resilience in a comprehensive way that includes the factors required to absorb shocks and to reorganise afterwards. The

Alliance calls for a new research approach, one that “sees cities as living systems, constantly self-organising in many and varied ways in response to both internal actions and the influence of external factors” (Resilience Alliance 2007: 3).

The Alliance basically highlights that a resilient and transformative agenda needs to be aligned with the four core dimensions of urban transformation: the built environment, governance networks, metabolic flows and social dynamics. This framework provides a multi-level understanding of resilience in urban systems for addressing the challenges mentioned before. These dimensions are highlighted in *fig. 27*.

Fig. 27: The four dimensions of urban resilience



Source: The Resilience Alliance 2007: 10

According to the Resilience Alliance (2007: 10) framework in *fig. 27*, resilience in urban systems is determined by:

- Governance networks (institutional structures and organisations), the support provided by government to society, and the ability of the latter to learn, adapt, and reorganise to meet urban challenges; in short collaborative and flexible governance.
- Social dynamics (demographics, human capital and inequality) between citizens; more civic engagement and mutual trust.
- Metabolic flows (production, supply and consumption chains) that sustain urban functions and societal wellbeing rather than a focus on input-output models³².
- The built environment and society's relationship with it, which determines urban form and spatial relations.

The Resilience Alliance principles are: maintaining diversity and redundancy, managing connectivity, managing slow variables and feedbacks, fostering complex adaptive systems thinking, encouraging learning, broadening participation and promoting polycentric governance systems (Resilience Alliance 2007). They also propose that urban managers should become less concerned with prediction and control and more concerned with organic, adaptable and flexible urban management principles to be implemented experimentally and through learning-by-doing (Felson and Pickett 2005 cited in Resilience Alliance 2007: 16).

5.5.7 Urban resilience and urban transformation

Many scholars now argue that urban resilience is not only about bouncing back, but that it is also about adaptation and transformation, enabling future systems to “bounce forward” to new and more transformative states (Shaw 2012; Pisano 2012; Meerow and Newell 2016). Pelling (2011) and Pisano (2012) focus on three aspects which pave the way towards this: namely resilience, adaptability and transformability. In their analysis, and as discussed in chapter 5.5.1, resilience is understood as a socio-ecological system which changes and reverts back to its original state. This stable state is shifted through adaptability, which is the capacity of the system to adjust its responses to different internal and external stressors and processes. Finally, transformability is the ability of a system “to cross

³² An example is the diversification of fuel sources which would move the system to a highly efficient and optimised state, and which is not path-dependent to a specific source of energy.

thresholds, producing new development trajectories and path dependencies”, often through novelty and innovation at points of crisis (Pisano 2012).

Coming back to the figure introduced in the introduction in chapter 5.1: here, Solecki et al. (2017) described resilience not as an end goal but as a boundary state between resistance/persistence and transformation. They define resistance or persistence as “protecting existing accumulated resilience” while maintaining the status quo. This can lead to resilience, which is defined as an adaptation “to change incrementally within existing systems or paradigms” whilst having a heavy emphasis on infrastructure. Resilience could in turn lead to transformation, which is a “change in people, institutions, world views” with lower thresholds between regimes. Transformation finally leads to a positive or negative future.

Stepping up from urban resilience to urban transformation requires the strengthening of foundational elements such as functional natural ecosystems or ethical leadership, and the willingness to minimise negative resilient systems such as inappropriate economic development models or inequalities that could undermine transformative progress (Roberts and Douwe 2015). A transformative process requires a radical shift in systems, institutions and regimes. Resilience is not a singular concept but rather part of a continuum of other responses to future challenges. The key challenge for resilience practitioners lies, according to the South African urbanists Roberts and Douwe (2015), in determining when to start implementing changes in appropriate and incremental ways within the context of existing development paradigms, and when to drive more radical interventions in order to achieve more transformative outcomes.

5.6 Differentiation to other terms used in the international and South African context

5.6.1 Urban transition

In South Africa, the terms under discussion have different usages and nuances. “Urban renewal” for example refers mostly to township renewal, while “urban transformation” refers mostly to the spatial transformation of apartheid cities (Christopher 2001). “Urban transformation” is often used in conjunction with the post-1994 sociopolitical and spatial transformation agenda as contained in the Constitution and legislation up until the present (Sobantu and Noyoo 2017; Jürgens and Donaldson 2012). According to the South African Cities Network (SACN 2013), urban transformation in South Africa would aim to redress the “spatial legacy of apartheid and to effect equitable distribution of resources, access to urban amenities and opportunities and so forth”.

“Transition” is defined as a change in a singular urban regime or area, as opposed to the transformative change of an entire system (Patterson et al. 2017). A transition is an intentional and politically-influenced change—for example a change in the path dependency of social institutions—whereas “transformation” refers to simultaneous changes in political, economic and cultural spheres (von Jorck 2015). The term “transition” is often used with environmental city agendas, especially mitigation, which can be area-based and not an in-depth change process. Most transition concepts include multi-level perspectives (niche, regime and landscape), where transition is understood to support change at multiple levels with co-evolutionary changes involving technological, social, institutional and economic systems (Kemp et al. 2007; Geels 2002; Geels and Schot 2007).

“Urban transition” can refer to human-oriented transition, area-based transition, urban ecology and transition in urban structures (Sustainable Urban Transitions Programme 2016). As mentioned before, transition is often referred to in conjunction with mitigation. “Mitigation” refers to environmental innovations in cities. The Wuppertal Institute for Climate, Environment and Energy defines urban transition as “new technological solutions, lifestyle and local identity [which] merge with new business models. Transition strategies for cities connect technological alternation-scenarios with social and economic visions for an enduring city development” (Wuppertal Institute 2015).

5.6.2 Urban regeneration and urban renewal

The Handbook of Urban Regeneration defines urban regeneration as a “comprehensive and integrated vision and action which leads to resolution of urban problems and which seeks to bring about a lasting improvement in the economic, physical, social and environmental condition of an area that has been subject to change” (Roberts 2000: 11).

Urban regeneration covers physical, social and environmental aspects of city life (Eurocities 2016). Appropriate approaches depend on the city’s history, which means that policies must be integrated and area-based. The process is primarily concerned with regenerating cities and inner city suburbs which face periods of decline due to compounding and intersecting pressures.

The term “regeneration” was coined in the 1990s. According to Roberts, the Scottish urbanist from Dundee university, the term reflected a move towards a more comprehensive and integrated form of policy and practice and a more combined approach (Roberts 2000: 14). A more western-oriented understanding is the term “reconstruction”, used in the 1950s where the major strategy and orientation was to reconstruct and extend older areas of cities based on a “master plan” which favoured suburban growth. In the 1960s, the term “revitalisation” was used to describe a continuation of the former

promotion of suburban and peripheral growth. The term “renewal” was introduced in the 1960s with a focus on local neighbourhood renewal programmes. In the 1980s the term “redevelopment” was used for new large flagship and out-of-town projects. *Fig. 28* summarises this evolution of the terms from the 1950s to the 1990s. The figure according to Roberts (2000: 14) shows that the dominant policy type of each period debated changed each decade. Whilst in the 1950s reconstruction was the dominant point of debate, it was revitalisation in the 1960s, renewal in the 1970s, redevelopment in the 1980s and regeneration in the 1990s.

Fig. 28: The evolution of urban regeneration

Period Policy type	1950s Recon- struction	1960s Revital- isolation	1970s Renewal	1980s Redevelop- ment	1990s Regener- ation
Major strategy and orientation	Reconstruction and extension of older areas of towns and cities often based on a “masterplan”; suburban growth.	Continuation of the 1950s theme; suburban and peripheral growth; some early attempts at rehabilitation.	Focus on <i>insitu</i> renewal and neighbourhood schemes; still development at periphery.	Many major schemes of development and redevelopment; flagship projects; out of town projects.	Move towards a more comprehensive form of policy and practice; emphasis on integrated treatments.
Key actors and stakeholders	National and local government; private sector developers and contractors.	Move towards a greater balance between public and private sectors.	Growing role of private sector and decentralisation in local government.	Emphasis on private sector and special agencies; growth of partnerships.	Partnership the dominant approach.

Source: Roberts 2000: 14.

The term “urban renewal” is defined in the British Dictionary (2017) as “the rehabilitation of city areas by renovating or replacing dilapidated buildings with new housing, public buildings, parks, roadways, industrial areas, often in accordance with comprehensive plans”. According to this definition, urban renewal refers to land redevelopment in urban areas. The term includes the rehabilitation of communities as well as relocations. The concept emerged in the United Kingdom as a reaction to

the fast-industrialising British cities in the 19th century. Urban renewal programmes were at that time the answer to better housing conditions, and were aimed at moral and economic reform (Meller 1995: 65).

Renewal is different from regeneration in that its nature is physical rather than economic or social, its design is exclusive and its “impact on addressing existing needs is limited” (Granger 2010: 9). Negative aspects of urban renewal programmes could be exclusive development, gentrification and mono-functionality of land use (Granger 2010: 10). In the western and European context, renewal, revitalisation and regeneration all stand for policies intended to tackle urban decline in European cities.

Some examples of cities which underwent urban renewal are Prague and Rio de Janeiro. In Prague, the Josefov neighbourhood, or Old Jewish Quarter, was rebuilt between 1890 and 1913. In Rio de Janeiro, the Porto Maravilha (a large-scale urban waterfront revitalisation project) was planned with the aim of redeveloping the harbour area to increase the city centre attractiveness, and to enhance the city’s competitive edge in the global economy. Other prominent examples in Europe include the Dundee Waterfront in Scotland, the renewal of the Guggenheim Museum and surrounding area in Bilbao in Spain, the renewal of the Medienhafen in Düsseldorf, and the so-called HafenCity in Hamburg.

The most recent comprehensive document on urban renewal in South Africa is the Township Renewal Sourcebook (SACN 2009), which gives a short overview of post-1994 urban regeneration and urban renewal policies and programmes. Urban renewal and regeneration here are defined as area-based concepts for land redevelopment in deprived urban areas. One of the largest urban renewal projects in South Africa is the Alexandra Renewal Project (ARP) in Johannesburg. Its success was often criticised by scholars such as Sinwell (2006) for its lack of social justice and citizen participation.

5.7 The example of Medellín, Colombia

The importance of a competent and accountable city government for urban transformation processes is also highlighted by Satterthwait and Mitlin in a comparative study in different Latin American cities. Their analysis shows that not only do infrastructure and service delivery situations need to be improved, but political acceptance of citizens must also be underpinned by fundamental political changes and more participatory and accountable city governments. According to Satterthwait and Mitlin (2011: 343), such interventions are key to social progress and democratic urban transformation.

The example of Medellín is one of these examples. Medellín is Colombia’s second biggest city with 2.5 million inhabitants. At the beginning of the 1990s, by a combination of drug dealers, gangs, urban decay, marginalised slum-dwellers and crumbling infrastructures (Brodzinsky 2014), Medellín was

the deadliest, most violent city worldwide. In the 1980s and 1990s, the city passed through a period of crisis that seemed to take it to the edge of chaos. But in the early 2000s, a series of interventions transformed urban public safety, triggering a massive drop in violence. By 2013, a succession of innovative mayors and engaged public groups had transformed the city. In 2013, the Urban Land Institute selected Medellín as the world's most innovative city, and Harvard University awarded the city its Veronica Rudge Urbanism Award (BBC 2013). In 2014, Medellín hosted the 7th World Urban Forum of the United Nations, and the city was awarded the Lee Kuan Yew World City Prize in 2016 (Brodzinsky 2016). The city had transformed itself from a failing, crime-ravaged city into a self-renewing, increasingly stable and prosperous one (Cerdá et al. 2011). This transformation was not without controversies, nor is Medellín without problems today. But in the city's journey of transformation, there are many insights for African cities such as Durban.

5.7.1 The systemic challenges

Medellín grew extremely rapidly in the second half of the 20th century, with the city's population tripling between 1905 and 1938, growing by a factor of more than 13 from 1939 to 2005 (World Population Review 2017). The growth of Medellín in the 20th century illustrates the reinforcing effect of push factors (negative conditions in rural areas that drive populations out of the countryside into cities) and pull factors (positive conditions that draw migrants in from both the countryside, other parts of Colombia and worldwide) in rural-to-urban migration. The combined effect of these two sets of factors generated a self-reinforcing flow of people migrating from rural to urban areas.

Conflict was always involved in the development in Colombia—unsurprisingly so, in a country that has seen endemic conflict (often reaching surprisingly high levels of violence) for almost the entire period since its independence from Spain in 1810. Despite the creation of a Medellín Master Plan (MMP) for urban development in 1950, which drove significant modernisation and infrastructure development in downtown areas of the city during the 1950s and 1960s, the massive influx of people moving to the city to flee violence in the countryside overstressed the urban fabric, invalidated urban planners' calculations, and overwhelmed city services (Brodzinsky 2014). This resulted in rapid unplanned growth on the outskirts of Medellín, which progressively filled in the open spaces between the existing city and neighbouring towns. The pace and scale of unplanned urban growth in the 1950s drove the construction of new, un-serviced informal settlements outside the planning authority of the MMP in the early 1960s. People living in these areas experienced high levels of urban poverty and unemployment, poor access to education and public health, political and social marginalisation, exclusion from the licit economy, and high levels of unemployment. This meant that, despite a formal urban planning mechanism and an urban master plan, in practice much of Medellín's development

took place in an ad hoc, bottom-up, emergent manner similar to what Edgar Pieterse describes (in the context of African social and special contexts) as “rogue urbanism” (Pieterse and Simone 2013).

5.7.2 The transformation

Medellín reached its low point in the 1990s, when the murder rate placed the metropolitan area high on the list of the world’s most dangerous cities (GUTTLAB 2017). In 1991 for example, the city experienced an astoundingly high murder rate of 381 per 100.000 people, the highest in its history, and a level of urban violence close to the worst ever recorded outside a war zone, and quite high even for cities at war. Other Latin American cities such as Cali in Colombia (1991: 74 per 100.000) or São Paulo in Brazil (1991: 49 per 100.000) were far behind Medellín (IPEA 2019; Vicepresidencia de la República de Colombia 2003: 10). Generally, at the beginning of the 1990s, Latin American cities were at the top of most murder statistics worldwide. In the same decade, murder rates also peaked in South Africa with around 74 per 100.000 in 1994 (Kriegler and Shaw 2016), but still ranked far behind the numbers of Medellín.³³ All this set the scene for a series of urban interventions in Medellín driven by its new mayor, Luis Perez, and his successor Sergio Fajardo, elected in 2003. Mayor Fajardo consistently referred to the “transformation process” when he spoke about Medellín (International Association of Educating Cities 2007: 4). When he talked about the process as it applied in Medellín, he highlighted the following: “We must close the gap between the public administration and the citizen, and share the processes of transformation step by step” (International Association of Educating Cities 2007: 2). For several years from 2003 onwards, the murder rate of Medellín went down to under 100 murders per 100.000 people, with a peak of 37 in the year 2005 (GUTTLAB 2017).

Mayor Luis Perez, elected in 2000, launched anti-corruption and performance improvement reforms across Medellín, and initiated the Metrocable system financed by a Medellín city investment fund, to which both the government and major businesses contributed. Metrocable is a system of cable cars designed to assist populations living in the poorest hillside slums to travel to and from the urban core, thereby improving economic and social connectedness for slum populations and improving access to employment while bringing consumer goods and other business products to hillside settlements. Construction began virtually as soon as Perez took office, and the first cable car became operational in 2004. The first gondola line cut to one hour what used to be a four-hour roundtrip commute for some residents of the slums, which are called “barrios” in Colombia (Parkinson 2013).

³³ It should be noted here that all crime statistics, including the above-mentioned ones, are subject to critique given the fact that official numbers cannot include unreported cases and therefore do not necessarily represent real numbers.

Over time, violence was significantly reduced—most notably by the use of innovative and people-centred urban architecture and design, which helped create a sense of belonging throughout the city. The municipal library park “Parque Biblioteca Espana” is an example of such architecture. A library was established in 2007 in the poor neighbourhood of Santo Domingo, together with its own gondola metrocable station. The gondola metrocable system connects low-income residents and communities with the city and public spaces. Sport facilities, education parks and libraries were built around the metrocable stations to promote social inclusion among young people, and these have been aiding in crime reduction ever since (Parkinson 2013; Blanco and Kobayashi 2009).

Fajardo and his team diagnosed the problems of Medellín as being related to four key issues: a systematic crisis of governability, high levels of poverty and growing inequality, obsolescence of the city’s economic and social structure, and insufficient integration between Medellín and the surrounding environment. Fajardo addressed these problems by close and systematic engagement with local populations, especially in the poorest neighbourhoods, and focussed on improving inclusion and dignity for marginalised populations by involving them—indeed, by letting them take the lead on all key decisions regarding the projects underway in their districts (Cerdá et al. 2012). This emphasis on local ownership and leadership proved critical, and—in combination with improved security and the expertise of urban planning experts—architects, transport engineers and specialists in essential services engaged by Fajardo as part of his team gave rise to a series of *Proyectos Urbanos Integral* (Integral Urban Projects, PUI). Fajardo’s objective was to transform the community’s behaviour by improving their physical, cultural and educational environments.

In accordance with this approach, the city-owned electricity company (Empresas Publicas de Medellín, EPM) was mandated to allocate 30 percent of its revenue to PUI projects, a key innovation which meant that PUI programmes became sustainable over the longterm by using local revenue, and were not dependent on donations from external sponsors or national-level programmes. Recognising the cyclic interaction between the physical environment and conflict, PUI programmes were designed to use improvements in the physical environment to trigger transformational shifts in the social and economic environment. Mayor Fajardo served a term between 2004 and 2007, and in accordance with Colombian law was not eligible for re-election. However, the integrated development plan he initiated was subsequently updated and continued by successive mayors up to the present. Although more recent city governments have been described as increasingly paternalistic and less consultative in their approach to local populations, Medellín has continued to improve—although these improvements have been unequal across different sectors of the city (Parkinson 2013).

Across most indicators—poverty, mobility, access to health and education, transportation, small and medium business development, infrastructure and political integration—Medellín has seen a startling improvement since its darkest days of the 1990s. The change is most evident in violence statistics, with a roughly 80 percent drop in homicides across the city from 1991 to 2012 (Cerdá et al. 2012: 5). According to Blanco and Kobayashi (2009), three components were key to the city's success. The first was institutional coordination, with the city government gradually involving the private sector, NGOs and universities, and conducting multidisciplinary focus groups and roundtable discussions to coordinate efforts across sectors and to avoid redundancy among programmes. The second was a social approach, in which the community was involved in identifying key areas for improvement, and in implementing changes through community workshops and providing local labour (all of which gave local citizens a stake in the programme's success). The third was a physical component, whereby in addition to Metrocable, the city government implemented massive upgrades to housing, public facilities and infrastructures, engaged in environmental clean-up programmes, and invested in public spaces and citizen mobility. Besides this, the city's decision to make long-term and significant financial commitments was critical in building trust with citizens. Cerdá et al. (2012) identified three similar components which were crucial to the successful transformation of Medellín: 1. building confidence in the government and the political system, 2. eliciting citizen participation to define needs and values, and 3. creating social identity within the city. Today Medellín is an innovative, inclusive and forward-looking city, made possible through its ability to overcome obstacles which the city has faced over the years (Rodin 2014). This process is well-described in the literature and often referred to as “The Medellín Miracle” (Faiola 2018).

5.8 Conclusion

This chapter introduced the concept of urban transformation as a paradigm of change in development theory, criticised current development paradigms and introduced the new concept of urban resilience. By interrogating the interdependencies between urban transformation and urban resilience, the chapter mainly contributed to finding answers to research question one. In contributing to this knowledge gap, the chapter also raised a fundamental development policy question: are transformation processes a more aspiring paradigm for urban development than the current practice of correcting deficiencies? The theoretical literature analysis in this chapter suggest they are. Even though many similarities to the concept of “integrated urban development” exist, the still-developing concept of urban transformation goes one step further and aims for a systemic change. Current progressive developments in the system modelling of urban energy and resource flows, trans-sectoral areas such as the Green Urban Economy or urban mobility as described in chapter 3 might lead to new infrastructures and

change human behaviour and modes of organisation in institutions and society—none of which have yet been properly researched (Pelling 2011; WBGU 2016). Here, the concept of urban transformation could help to analyse these processes without having to define an absolute end goal.

The chapter described urban transformation as systemic changes in political, economic and societal regimes, and showed why the concept is still emerging. The concept concentrates on change processes and cannot be planned from start to finish, but can be influenced through focussed policy interventions such as transformative or resilient projects. Transformation processes are complex and difficult, and the result has been described as a change in the built environment and in mindsets.

The chapter further showed that managing urban transformation processes requires visionary city government and change agents as key players. The example of Medellín, Colombia was cited, where a competent and accountable city government turned around a city that was formerly divided, fractured and unsafe. Public sector innovations, private investments and civil and neighbourhood activism led to individual civic engagement and improved access to the city, as well as integrated social, environmental and cultural systems and improved mobility and transport. Besides these innovative and creative infrastructural projects, the process incorporated cultural transformation which brought citizens together. The experience of Medellín suggests that three key factors need to be considered: local ownership and leadership, with communities having a decisive say in all programmes which affect them; involving the public in key planning decisions from the outset; bringing in external expertise from impartial technocratic specialists who offer local leaders educated options and informed choices about the impacts of their decisions; and ensuring a secure foundation where communities, police and security forces work together to generate an atmosphere of public safety in which communities can peacefully address their problems, and technical experts can safely work in key districts. The experience of Medellín can also be used for a comparison with Durban and its 100 Resilient Cities project, which will be highlighted in the next chapter.

Chapter 5 also discussed the preconditions for urban transformations, and referred to the work of the German Advisory Council for Global Change (WBGU) which shows that political and institutional path dependencies and blockades need to be overcome. A precondition for successful urban transformation was therefore given, namely to identify blockade mechanisms or veto players and identify agents of change. To be successful, transformative projects need to develop political and institutional approaches that tackle blockades (WBGU 2011: 9). Of course it is much more difficult to overcome old routines and principles than it is to develop new concepts and strategies.

Resilience was introduced as a concept which addresses the question of how we best prepare our economies, cities and companies for the negative impacts which humanity and nature create. It was

shown that resilience is understood very differently across a variety of disciplines, but all the existing definitions are in the end linked to the ability of a system, entity, community or person to withstand shocks while maintaining essential functions. At the urban scale, resilience depends on the ability to maintain essential assets, and to ensure access to services and functions which support the wellbeing of citizens. The history of resilience as a term which emerged from an ecological background was discussed, and it was shown that the term is applicable to cities because they are “complex systems that are constantly adapting to changing circumstances” (ARUP 2014: 3).

It is very important to adopt a holistic view of resilience. Not only are cities themselves complex but human wellbeing in cities also relies on a complex web of interconnected institutions, infrastructure and information, and on relations and exchange between citizens. As Allan and Bryant (2011: 43) put it, “resilience is based on the shifting relationship between scales, and between autonomy on the one hand and connectivity on the other”. There is no tick-box to follow for urban transformation—it is an approach based on complex adaptive systems, and resilience will allow urban planners and decision-makers to learn and adapt to the evitable failures of urban management actions (Resilience Alliance 2007: 21).

Resilience therefore, according to chapter 5, seems to provide a clear lens for addressing the problems of cities, suggesting a fairly inclusive standard of measurement. The concept has also expanded in recent years to include aspects beyond disaster preparedness. A current problem is that the term is still too broadly used today, and whether cities can be as transformative as their citizens is a question that needs more clarification and further research. A strength of the resilience lens is indeed that it can address multiple challenges in multiple cities of the world. This could however also be a weakness, as the needs of individual cities are not only varied but may be contradictory. Interrogating resilience across different cultures and hundreds of cities around the world, and diversifying ideas about the purpose of cities and the individuals who reside in them, could become a potential problem. Most importantly, transformation cannot happen without resilience. At the very least transformation processes will be fragile and incomplete if cities are not resilient. Urban resilience is therefore a precondition for transformation in cities, which this chapter has shown in detail.

Chapter 6: Urban resilience as a step towards urban transformation in Durban? The Rockefeller Foundation's 100 Resilient Cities campaign

6.1 Introduction

Picture 1: Durban's Resilience Challenge



“Although it is the poorest metropolitan area in South Africa, Durban has become a global leader in climate change adaptation. But informal neighbourhoods and poverty undermine resilience and social cohesion. In this environment, Durban is actively exploring ways to adapt institutions, systems, and processes in order to facilitate integrated, innovative, and flexible planning. This approach can help build the foundation for a more resilient economy, government, and society.”

(Rockefeller Foundation 2015)

As shown in previous sections of this thesis, there needs to be a common understanding of what constitutes urban resilience and urban transformation, as well as how it can be achieved. This chapter highlights the Rockefeller Foundation's framework of urban resilience as a tool for linking academic discourse and action on the ground. It furthermore provides an accessible, evidence-based articulation of urban resilience with a clear focus on practical implementation at the local government level. This analytical chapter thus provides a detailed background to the process of Durban's 100 Resilient Cities

project, and also into the whole framing process of this as a practical project on the ground which recognises the transformative potential of urbanisation processes.

The US-based philanthropic Rockefeller Foundation has been working on urban development projects for decades and has identified a number of trends that cities will experience during the course of the next hundred years. Among these trends are rapid urbanisation and an increase in exposure to acute shocks and chronic stresses. Based on these projections, the Rockefeller Foundation launched the 100 Resilient Cities (100RC) campaign to improve urban resilience in cities around the world. The campaign is dedicated to helping these cities become more resilient to the “physical, social and economic challenges that are a growing part of the 21st century” (Rockefeller Foundation 2017). This chapter looks at the Rockefeller Foundation’s holistic definition of urban resilience, their “measuring tool” for urban resilience—the City Resilience Framework (CRF)—and their “implementation network”, namely the “platform of partners”.

Durban’s 100 Resilient Cities project, as part of the Rockefeller framework, is described and analysed. From the scoping and research phase, the stakeholder consultation process to the preliminary resilience assessment, the whole project life cycle is chronologically described and analysed in this thesis. The theoretical discourse and debate concerning systemic challenges and a “systems analysis” leads to the final localisation of “levers of change” and to two “Resilience Building Options” (RBOs). The special correlation between urban transformation and urban resilience in Durban is interrogated and explained. Finally, the chapter focusses on the different perspectives and objectives in the local planning and implementation phase, with attention on the questioned flexibility of the theoretical model of 100RC and its “localisation” in Durban. Different focal points such as participation are discussed in detail, as well as how the 100RC project in Durban is seated in the global context.

6.2 The Rockefeller Foundation’s 100 Resilient Cities campaign

6.2.1 The beginnings

The Rockefeller Foundation started its campaign in 2013 with a call for potential contender cities to apply to become partner cities. Two more calls were made in 2014 and in 2015. More than 1000 cities worldwide applied for inclusion into the campaign. The cities were selected according to innovative approaches at a certain policy level, a history of building partnerships and other criteria not precisely mentioned by the Rockefeller Foundation. The foundation subsequently began partnering with the first cohort of 33 cities at the end of 2013. In 2014, the second cohort of 33 cities was selected. The third call closed at the end of 2015 with the announcement of the final cities in May 2016. The city of Durban was one of the first selected due to its “forward thinking and transformative approach to

environmental and social justice issues” and its “engaged leadership” (Rockefeller Foundation 2017). It was also envisioned that Durban was likely to experience a set of diverse stressors and unique conditions which the 100RC project wanted to explore. Cape Town was later selected in round three in 2015. Other selected African cities were Accra, Addis Ababa, Dakar, Kigali, Paynesville/Monrovia, Lagos and Nairobi, all at different and mostly later stages than Durban. An overview of this process, including all 100RC member cities proclaimed during the three stages, can be seen below.

Fig. 29: The member cities of the 100RC campaign



Source: Rockefeller Foundation 2017

All cities in the 100RC network were provided with the resources necessary to develop a resilience roadmap along the following four main pathways (Rockefeller Foundation 2017):

A. Funding to hire a Chief Resilience Officer (CRO)

This included financial and logistical support to establish an “innovative new position” in city government, namely a Chief Resilience Officer to lead the city’s resilience efforts. The CRO responsibilities included working across the “silos” within the city structures, advising senior leadership, promoting resilience thinking, coordinating resilience efforts from other sectors outside the city structure, and liaising with other CROs and services within the network. A CRO Network Exchange Programme for a best-practice exchange was part of this.

B. Expert support to develop a robust City Resilience Strategy

Developing a resilience strategy involves multiple steps, which include stakeholder engagement to identify the city's shocks and stressors, identifying the city's resilience focus areas through a resilience diagnostic tool, conducting a status quo analysis of existing plans and strategies, developing a gap analysis, prioritising the areas of focus, and finally implementing a strategy. To fulfil these tasks, expert support (in the form of consultants and online networks) was provided.

C. Membership in the 100RC network

Membership in the 100RC network was offered to all member cities. This provided cities with opportunities to learn from and to help each other, and included the sharing of learning among city mayors.

D. A platform of services to support the implementation of the strategy

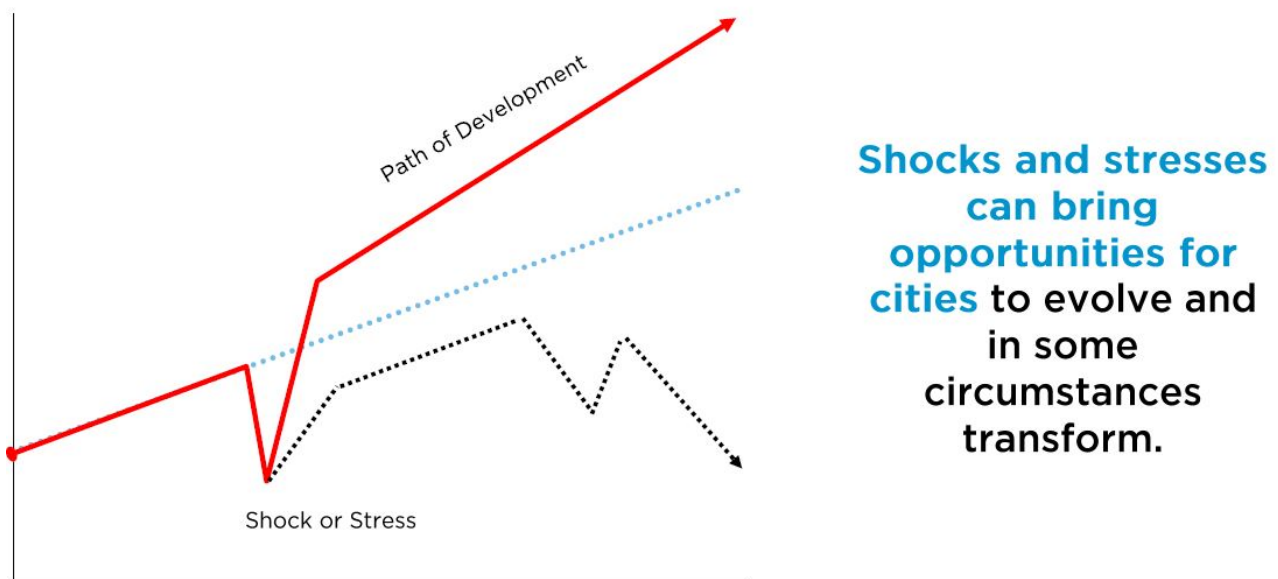
This platform of tools and services included fiscal services, management services and data integration. It granted cities access to solutions, service providers, and partners from the private, public and NGO sectors who offered help to develop and implement resilience strategies.

The campaign aimed to support each city in its own resilience building, and in creating a worldwide “resilience platform” for governments, civil-society, businesses and other partners. Until now, 81 Chief Resilience Officers have been hired worldwide, one of them in Durban, and trained during the campaign. A total of 33 city resilience strategies were initiated and 13.000 member organisations for the community of practice were active to help and support the member cities.

6.2.2 The Rockefeller Foundations' definition of urban resilience

The 100RC campaign is officially dedicated to helping cities around the world become more resilient to the “physical, social and economic challenges that are a growing part of the 21st century” (Rockefeller Foundation 2017). The campaign supports the view that resilience includes not only the shocks but also the stresses which weaken a city on a daily or recurring basis, but can also bring opportunities for cities to evolve and in some circumstances transform (*see fig. 30*).

Fig. 30: The Rockefeller's path to transformation in a city



Source: Rockefeller Foundation 2017

Examples of stresses are high unemployment, an overtaxed or inefficient public transportation system, endemic violence, and chronic food and water shortages. Acute shocks are defined as sudden, sharp events that threaten a city. Examples are earthquakes, floods, disease outbreaks and terrorist attacks. By addressing both shocks and stresses, a city can become better at responding to unexpected events, overall enabling and better-equipping itself to deliver basic functions to all populations be it good times or bad. According to the Rockefeller Foundation (2017), the world's future depends on how cities manage these challenges over the next several decades, so that "cities can evolve and in some circumstances transform".

"Resilience is about surviving and thriving, regardless of the challenge."

(Rockefeller Foundation 2017)

The foundation defines urban resilience as the "capacity of individuals, communities, institutions, businesses, and systems within a city to survive, adapt, and grow no matter what kinds of chronic stresses and acute shocks they experience". Resilience enables people "to bounce back stronger after

tough times and to gain control over urban challenges” (Rockefeller Foundation 2017). According to the foundation (Rockefeller Foundation 2017), resilient cities should be:

1. **reflective:** use past experiences to inform future decisions,
2. **resourceful:** use resources well informed,
3. **robust:** use robust infrastructure, materials and strategies,
4. **redundant:** focus on redundancy to accommodate disruptions,
5. **flexible:** use alternative strategies when there is the need,
6. **inclusive:** integrate participatory and consultative models for better ownership and
7. **integrated:** use a coordinated approach to tackle different challenges.

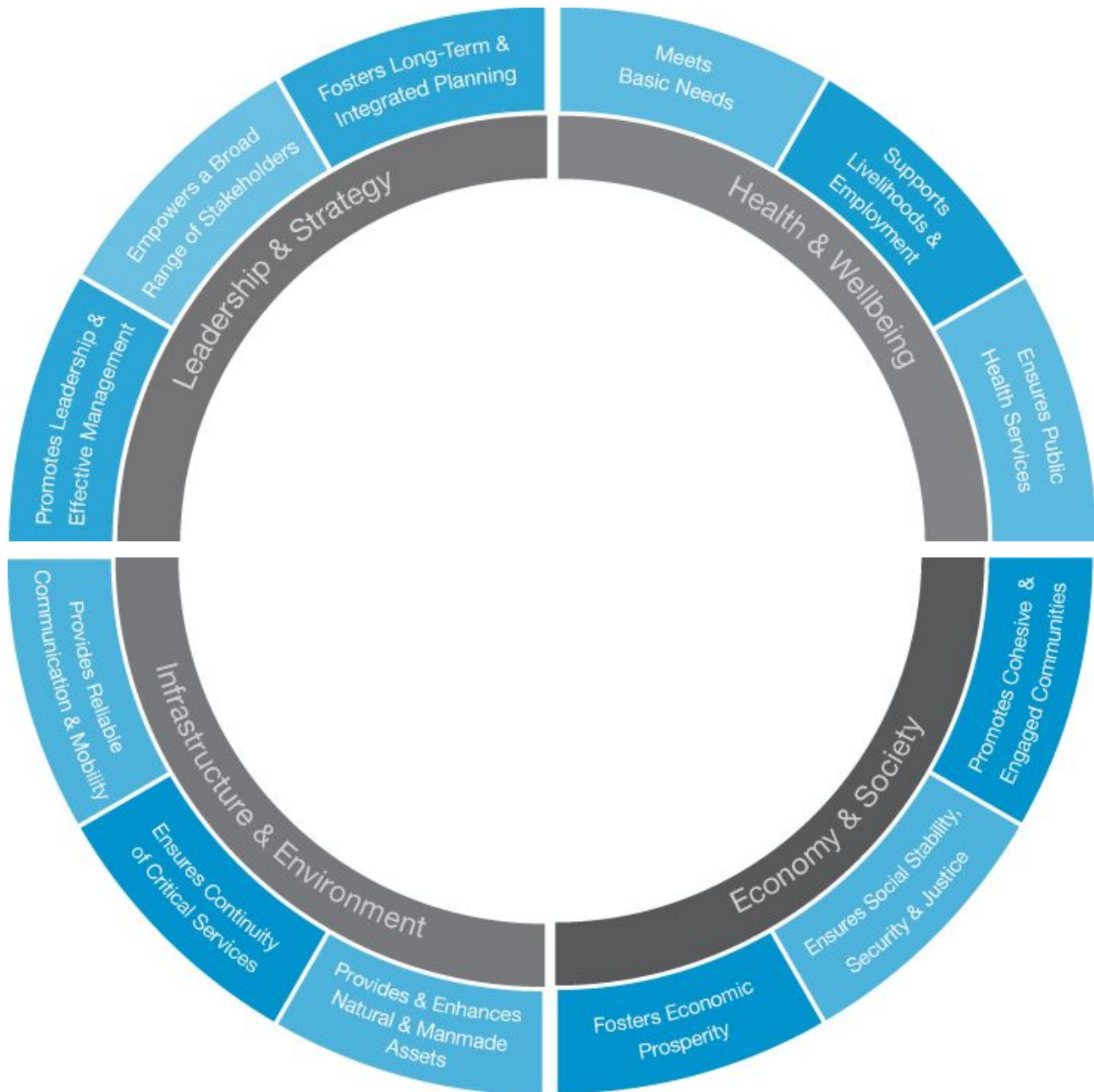
The last two factors especially relate to good governance and effective leadership, ensuring appropriate investments and actions, addressing the needs of the most vulnerable and collectively creating a resilient city.

6.2.3 The City Resilience Framework (CRF)

The City Resilience Framework (CRF) was developed together with a global urban consulting firm called Arup during the three-year project phase. The CRF aims to help politicians and policy-makers see city challenges in a holistic way. Based on years of experience, the foundation has found that common global factors and policies to tackle urban challenges do exist. The CRF helps to understand this complexity, and aims to develop appropriate resilience strategies for the cities in the 100RC campaign.

The CRF (*see fig. 31*) describes the essential systems of a city in terms of four dimensions: health and wellbeing (covering all the relevant topics around health, social services, employment and access to basic resources); economy and society (covering all needs under social cohesion, safety and security, and a stable business environment); infrastructure and environment (covering the natural and built environment, sustaining the flow of goods and people and securing natural resources); and leadership and strategy (covering integrated and inclusive governance processes based on transparency and accountability). Each dimension consists of three “drivers” which reflect the actions cities can take to improve their resilience. These four dimensions and twelve drivers are shown in *fig. 31*.

Fig. 31: The “City Resilience Framework”



Source: Rockefeller Foundation 2017

6.2.4 The 100RC platform of partners

According to Rockefeller Foundation (2017), the 100RC platform of partners provides a worldwide network of support for the 100RC cities. The platform partners help cities in the use of established

resilience-tools and also provide consulting services. The platform partners consist of a range of international consulting firms, urban experts, development agencies and think-tanks. It is a “market place” for the member cities to look around and find suitable approaches and tools which they may otherwise not be aware of. The tools are intended to be of advantage to the cities before, during and after their resilience building strategy phases. Examples are big data assessment tools, construction firms, consultancy and political risk analyses.

The platform works as follows: during the envisaged one-year long resilience strategy development process, each city articulates its needs and the 100RC platform of partners tries to match these needs in accordance with the know-how of the platform partners. With this service, a best-practice exchange should take place and tools which worked well in similar contexts made available for comparable challenges. By introducing these global parties to the 100RC, the team of the Rockefeller Foundation intends to connect the global north with the global south and also enhance a south-south knowledge transfer. After learning from each other, new tools might be built or old ones improved; ultimately gathering tools that may be available to all cities.

6.3 Durban’s 100 Resilient Cities journey

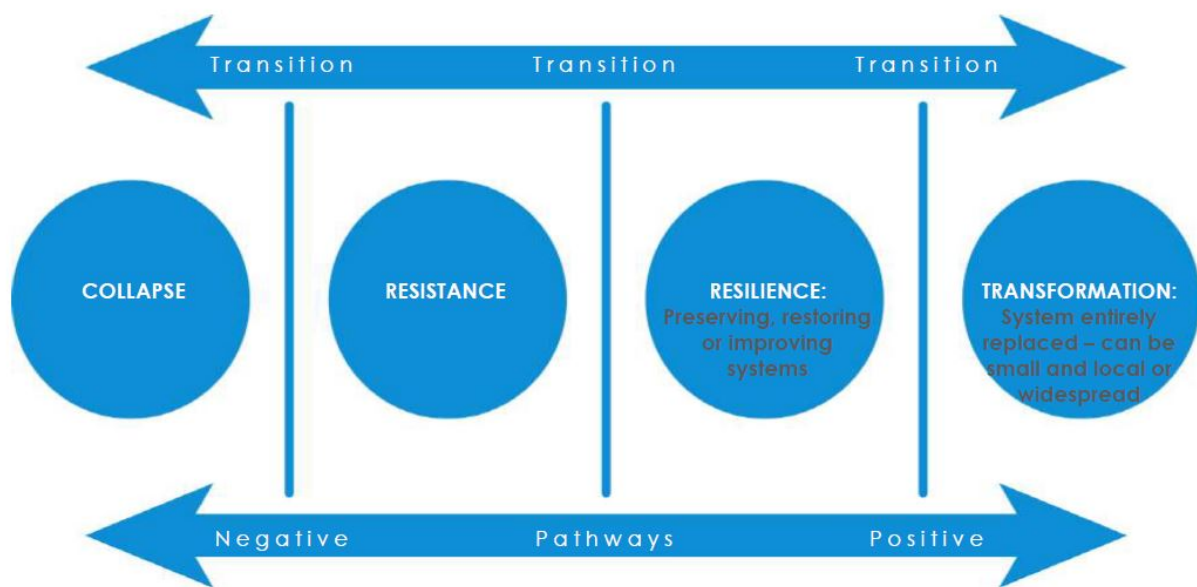
6.3.1 Overview

Following the selection of Durban as a partner city of the 100 Resilient Cities campaign, the municipality was provided with extensive financial resources and vast logistical guidance between 2014 and 2017 to develop and implement what was called a “transformative resilience strategy” (Rockefeller Foundation 2015). The city’s self-proclaimed goal was to use this project to activate a process of urban transformation in Durban. A key output of the 100 Resilient Cities project was the development of a “resilience strategy” for Durban.

Rather than bringing in an external consultant for the campaign management, Durban elected to appoint an internal expert, Debra Roberts, Deputy Head of the Environmental and Climate Protection Department (EPCPD), as Chief Resilience Officer (CRO). The project kicked off in 2014 with a scoping exercise and the collection of community perspectives from a total of 230 representatives from different civil society groups, residents, shop owners and others. At the end of 2014, a first stakeholder meeting took place, in which the author took part (see chapter 2.6) and the first results of the scoping study plus a draft “master plan” for the next three years were presented by Debra Roberts and her team from the EPCPD department. She presented, as shown in the *fig. 32*, several pathways for “transitions” based on the results of the various consultative processes. Transitions, so it was stated, could lead to negative pathways such as collapse or resistance, or to positive pathways such

as resilience and transformation. The proposed way of reaching the end goal of urban transformation where the “system is entirely replaced” in a positive way, is to place resilience at the centre of the transformative processes, allowing the urban system to be “preserved, restored or improved”. This aim of the project was thus presented at the outset of the project. This was the public start of the project.

Fig. 32: Resilience as part of a broader journey towards urban transformation in Durban



Source: Solecki, Dorsch and Pelling (in press)

Source: Presentation by Dr Debra Roberts at the first Rockefeller Foundation’s Resilient Cities Campaign Stakeholder Workshop at Durban Botanical Gardens, 4th September 2014 after Solecki et al. (2017)

What this connection between “resilience” and “transformation” really means, and how a resilient policy might trigger urban transformation at all, is the focus of this chapter. How a South African metro city like Durban plans and implements such a project on the ground is also highlighted in detail in the following subchapters. *Fig. 33* gives an overview of the timetable for Durban’s 100 Resilient Cities journey, from phase one (preliminary resilience assessment), to phase two (systems analysis) and phase three (Durban’s resilience strategy) including relevant timelines and dates of engagement. The first public appearance and introduction of the 100RC project to relevant stakeholders in Durban and the broad public was on the 9th of March 2014 at the casually-named “agenda setting workshop”. This workshop was the starting point for a ten-month long scoping phase within phase one, followed by another 6-month stakeholder consultation process with public meetings. At the end of this very participatory first phase, the preliminary resilience assessment (PRA) was officially presented on 24th

August 2015. After some internal restructuring and reflections within the 100RC project team, phase two commenced. The first five months of the year 2016 were used to conduct a “systems analysis”. Here, with support and suggestions by the Rockefeller Foundation, an international consulting firm called Dalberg Consultancy was hired to conduct the analysis. Dalberg Consultancy is a global partner of the Rockefeller Foundation and its mission is to “promote sustainable and inclusive growth worldwide”. Dalberg also works with the other African partner cities³⁴ of the campaign to support their resilience strategies. Two major public engagements by Dalberg Consultancy, together with the 100RC project team, took place: a public presentation and introduction right at the beginning of the year in January, and a “feedback workshop” in March 2016. At the end of the final phase (phase three), Durban’s resilience strategy was finalised. In June 2016, Durban's Resilience Building Options (RBOs) were presented during a public presentation. In January and in March 2017, a feedback workshop and a public meeting were conducted to integrate some final public comments and critiques before the eThekweni Municipal Council officially adopted Durban’s resilience strategy in late August 2017.

An overview of this process is seen in *fig. 33*. From the time of the beginning of the project with phase one in 2014 until the end of phase two in March 2016, the author had the chance to witness all four public stakeholder meetings to document the process in detail. As described in chapter 2.6, the author did not actively participate in these events and remained a neutral observer. Additionally, the literature and resource material made publicly available was included into the documentation of the project. Most of the sources for the descriptive chapters herein originate from the personal notes and documentation taken at the 100RC workshop meetings in Durban during the years 2014-2016.

The ways in which the three phases were conducted and implemented, and which internal restructurings and problems occurred during the process, will be presented and analysed in this chapter.

³⁴ i.e. Dakar, Accra, Enugu, Kigali and Arusha.

Fig. 33: Timetable of Durban's 100 Resilient Cities journey

March 2014
- Dec. 2015

PHASE 1: PRELIMINARY RESILIENCE ASSESSMENT (PRA)

- March 2014 - January 2015: SCOPING PHASE with agenda setting workshop (09.04.2014)
- March - August 2015: STAKEHOLDER CONSULTATION PROCESS with public meeting and announcement of PRA (24.08.2015)

January -
May 2016

PHASE 2: SYSTEMS ANALYSIS

- 20.01.2016: Public presentation and introduction by Dalberg Consultancy
- 09.03.2016: Feedback workshop by Dalberg Consultancy

June 2016 -
March 2017

PHASE 3: DURBANS RESILIENCE STRATEGY

- 08.06.2016: Public presentation of Durbans Resilience Building Options (RBO's)
- 26.01.2017: Feedback workshop on draft RBO's
- 30.03.2017: Public meeting on final RBO's
- August 2017: Adoption of Resilience Strategy by eThekweni Municipal Council

Source: own compilation according to announcements at the 100RC workshops

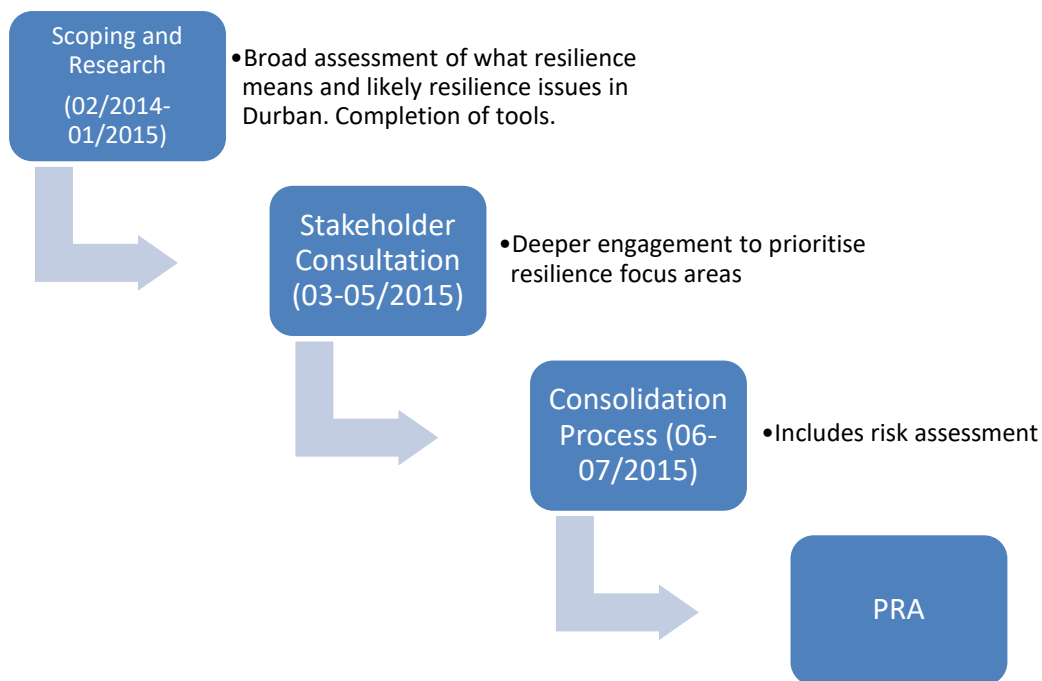
6.3.2 Phase 1: The way to the Preliminary Resilience Assessment (PRA)

6.3.2.1 Overview

The overview in *fig. 34* shows the three main steps on the way to Durban's PRA. It started with a scoping and research phase from February 2014 to January 2015, where a broad assessment of what

resilience means and of likely resilience issues was conducted. This was followed by stakeholder consultations from March until May 2015 where a deeper engagement to prioritise resilience focus areas took place. Finally, a consolidation process was carried out from June to July 2015, which included a risk assessment and lead to the Preliminary Resilience Assessment (PRA).

Fig. 34: Phase 1: The way to the Preliminary Resilience Assessment (PRA)



Source: Own compilation according to announcements at the 100RC workshops.

6.3.2.2 The scoping and research phase

Following the announcement of Durban as one of the 100 Resilient Cities in December 2013, the city's resilience journey began with a scoping phase. Early on in the process, the 100RC project team from the EPCPD identified that Durban's resilience strategy would need to be informed by the perspectives and insights of different stakeholders. For the project team it was very important to build on existing activities in the city, and not to start from scratch.³⁵

³⁵ All unreferenced information given in the text is based on the author's own documentation of the public meetings as passive observer as well as from the minutes of these meetings.

A key component of the work in the scoping phase was consultative engagement with key stakeholders (which included members of the public, technical experts, municipal departments, city leadership and a group of “critical thinkers”) to form a locally-relevant understanding of resilience. They were presented at the beginning with the word “change”, as developed by the 100RC project team. The wise decision to use this word rather than “resilience” was made to better engage with the residents, as the latter term is often found to be negative and difficult to understand. The word “change” was used with the intention of allowing everyone to enter into the dialogue “amongst equals” and embrace both the good and bad elements of change in the city. In the end, it was used to allocate existing and new drivers of change in the city which could influence new and unpredictable outcomes of actions.

The feedback and key ideas which emerged from these various consultative processes were consolidated and presented at the Resilience Agenda Setting Workshop held in Durban in September 2014. This was the first time a diverse range of both international and local stakeholders met around the 100RC project. The workshop provided a platform to present input and to develop a strong positioning statement around Durban’s perspectives on resilience. The key ideas which emerged from the workshop included the need to develop a stakeholder engagement process and to involve relevant individuals and groups in the process of developing a resilience strategy. After a keynote presentation by Professor Richard Wilkinson³⁶ on social inequality and its negative consequences for societies, Debra Roberts and her team gave an overview of the recent scoping phase of the 100 Resilient Cities project. This is summarised in the following paragraphs. In general, the atmosphere during this first public engagement was characterised by a high level of excitement and interest shown by almost all public participants to hear more of this new Durban project.

A number of issues affecting individuals were identified by Durban stakeholders as playing a critical role in either enhancing or undermining resilience (e.g. the need for basic service provision and livelihood opportunities), communities and society (e.g. the importance of social cohesion and addressing inequality) and systems (e.g. loss of the natural environment and the need for different forms of governance).

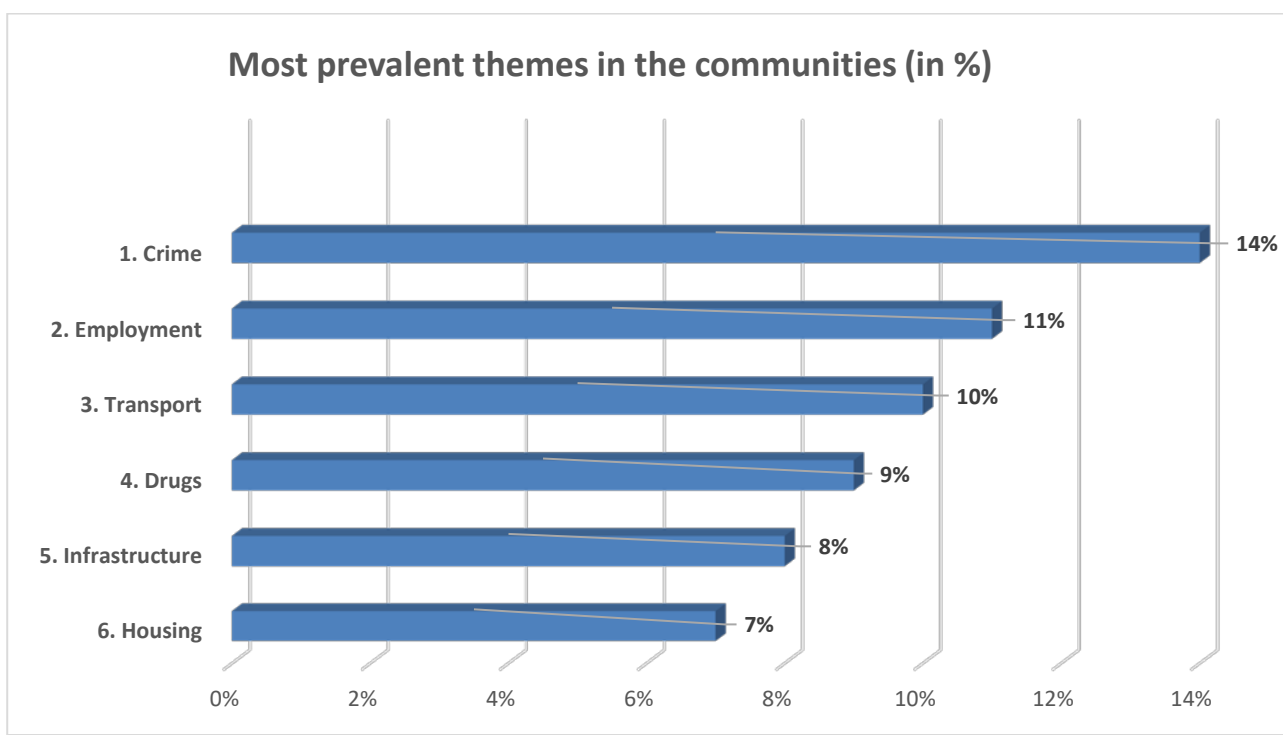
The most prevalent themes and challenges identified by the citizens of Durban were (see *fig. 35*):

1. Increasing levels of crime and their impact on human wellbeing and social cohesion;
2. issues around employment;

³⁶ Richard Wilkinson is an emeritus professor at Nottingham University, UK. He co-authored the book “The Spirit Level” in 2009, which analyses the importance of equality in world societies.

3. the absence of an integrated transport system, which limits access to economic opportunities, reduces disposable income, and contributes to the widening inequality gap in Durban;
4. rising drug use, particularly amongst the youth;
5. issues around infrastructure in the communities;
6. inadequate housing provision and lack of home ownership.

Fig. 35: The most prevalent themes from the community perspective snapshot



Source: own compilation after Roberts (2014: 9)

On the positive side, many respondents commented on the way visible infrastructure developments (e.g. provision of services such as water and electricity, the beachfront development and roads provision) have improved quality of life and built civic pride. Roberts indicated that these issues were not new but that they exist in an unpredictable space due to their uncertain future. Most of the changes reported on were negative, and a large number of stakeholders felt that mind-sets needed to change and that things needed to be done differently for positive reforms to occur. The environment, interestingly, was not really highlighted by this specific set of stakeholders.

Some of the challenges identified by people involved in the “operations”³⁷ of the city were:

- Service provision associated with the rapid level of urbanisation in Durban in a context where new and efficient technologies (e.g. water re-use) do not receive sufficient support.
- City politics and governance issues, and an increasing “disconnect” between communities and the Municipality.
- Political gatekeepers who control access to resources and build dependence on government.
- The need for higher relevance given to infrastructure as a critical foundational element.
- The need for higher relevance to create champions to lead the resilience process.

A number of interventions were emphasised as being important in building Durban’s ability to respond positively to these changes:

- Establishing improved partnerships and collaboration, particularly between communities and government in order to build and enhance community resourcefulness, creativity and innovation, and to strengthen the involvement of communities.
- Looking carefully at existing political arrangements (which in some cases appear to build dependence on government for solutions).
- Ensuring a functional natural environment that can continue to provide basic services such as water provision and flood attenuation.
- Cultivating strong and visionary leadership in navigating an uncertain and challenging future.

How these first broad challenges were taken into consideration will be shown in the next chapters. Some participants, especially academics, pointed to the fact that Durban is a “city on the edge” or a “city in crisis”. Critical areas mentioned were: the housing backlog, the growing financial challenges, as well as livelihood perspectives (Durban has the highest percentage of people living in poverty amongst major metros in South Africa, and has been the least successful in retaining skilled personnel). Representatives from the Municipality raised the concern that the continued provision of free basic services at the existing scale is not financially sustainable. This raises questions as to how the Municipality could grow its revenue to support social programmes, while at the same time reducing

³⁷ Those involved in the “operations” of the city were defined as municipal employees, members of business, NGOs, and civil society organisations.

dependency on this support. City officials also indicated that a smaller share of adults in Durban have post-secondary or tertiary education qualifications compared to other major metropolitan areas, and that Durban would generally be less successful in retaining or attracting adults with higher levels of education. This has important implications for the future development of the city, given the need for ongoing innovation to tackle the challenges of the 21st century.

Apart from ecological infrastructures, another critical contributor to improving Durban's resilience is the transport system. A final key issue raised by Durban's stakeholders was that of leadership. It was mentioned that the nature of current and future challenges would require bold and ethical leaders who are able to listen to and engage with a broad range of issues and perspectives, and make difficult (and sometimes unpopular) decisions. This would require a move away from short-term single-issue decision making to a prioritisation of issues such as sustainability and intergenerational equity. Some participants in the workshop were of the opinion that there are no building blocks in place to deal with the challenges Durban will face in the future. This group felt that there is a need for brave leadership willing to take risks. They also identified possible strategic opportunities in growing leadership capacity.

The concept of resilience and change was also very broadly discussed. Issues of informality and spatial inequality were raised. Durban's high levels of inequality were underscored, in recognition of the need to better understand how differences in the city can be managed and how resources should be shared. It was also highlighted that the final resilience strategy must have a "unifying agenda" to avoid polarisation. It would be crucial that the resilience strategy aligns with the political agenda, as it needs to resonate with the political leadership.

A key starting point for Durban's resilience strategy is, according to Roberts, "strong leadership". She further explained that resilience is part of a spectrum of change leading to transformation which may be positive or negative. Developing a resilience strategy can help Durban on the pathway to transformation.

6.3.2.3 The stakeholder consultation process: 18 resilience issues for Durban

These very first identified resilience challenges from the scoping phase were interrogated and prioritised in a stakeholder engagement process during the year 2015. In total, 17 "focussed workshops" with stakeholders were organised by the 100 Resilient Cities project team, accompanied by an online public survey. The stakeholders included local businesses, academics, city and political leadership, women's groups, traditional leadership, municipal officials, civic organisations, NGOs and CBOs,

artists, environmental groups and religious groups (see Appendix C). For the purposes of these meetings, a presentation was developed using the outputs of the scoping and research phases which included ten infographics (Appendix D) depicting Durban's emerging resilience issues.

All stakeholders were asked where they saw gaps or priorities in the identified resilience challenges. The project team also gave insights on what was already being done that could be strengthened, and what needed to fundamentally change. The broad and diverse feedback from all the stakeholder meetings was analysed and consolidated with the help of a discourse analysis done by the 100 Resilient Cities project team.

The discourse analysis, completed by the 100RC team with support of the consultancy firm, was based on Hajers' argumentative discourse analysis approach which provided the methodology to review the stakeholders' discourse (as expressed in the stakeholder meetings) and to determine the dominant views and perspectives which could then be used to shape the strategy development process going forward. Hajers' approach is based on the assumption that policy-making involves a wide range of actors with diverse and often competing viewpoints or arguments (discourses), some of which may be more widely supported or more powerful than others. The discourse analysis involved a review of the minutes of the stakeholder meetings to identify three key elements or "terms of policy discourse", namely epistemic notions, policy vocabularies and storylines (Hajer 1995). Epistemic notions are dominant ideas or concepts that influence policy formation without being specifically formulated for this purpose. In contrast, policy vocabularies are concepts that have been deliberately crafted in specific disciplines or policy fields to provide the conceptual basis of a policy. Storylines are arguably the most powerful term in policy discourse. These are short narratives that "help people to fit their bit of knowledge, experience or expertise into the larger jigsaw of a policy debate" (Hajer 1993: 104).

For the purpose of the 100RC analysis of stakeholder meetings, storylines were defined more narrowly as short arguments or points of view on an issue. Some of these storylines are shared by a range of stakeholders, while others may only represent the view of a small set of stakeholders. Following a training session by the consultant on discourse analysis methodology, the project management team worked on the initial stage of the discourse analysis. This involved working through each of the minutes of the stakeholder meetings to identify epistemic notions, policy vocabularies and storylines. Ultimately, these were consolidated across all stakeholder groups and refined into thematic areas in one master spreadsheet. These in turn were translated into the key resilience issues for the resilience strategy. After this process, a total of 18 key resilience issues for Durban emerged and are briefly outlined below:

➤ **Resilience Issue 1: Leadership**

Bold and ethical leadership is required to engage with the wide range of issues and perspectives affecting Durban, and to make the best possible decisions in the interest of the city and its citizens. Leadership issues were raised by stakeholders from the government, civil society, academia, business, and public and city leadership groups. The main views expressed by the stakeholders concerning leadership in Durban were the following:

- Leaders need to be bold, visionary, strategic, responsive, value-based and informed
- The capacity of leaders needs to be enhanced
- Champions need to be identified to drive the resilience message in Durban
- The youth must be capacitated to become future leaders

➤ **Resilience Issue 2: Stakeholder engagement**

Stakeholder engagement in city processes and decision-making was raised as an important part of democracy. Citizens require accessible and equitable platforms to be able to interact with the state that they may advocate for their needs to be addressed, and that they may contribute to developing a more resilient society. The need for such engagement was raised by stakeholders from academia, government, civil society, business, and public and city leadership groups, as a key resilience issue. The main highlights from the stakeholders regarding engagement in Durban were the following:

- The value of engagement in informing city decision-making and developing creative responses
- The importance of representative engagement platforms in promoting dialogue and problem solving
- The contribution community engagement can make towards empowering citizens
- The poor state of communication between the local government and its citizens
- The insufficient and ineffective existing engagement processes and platforms
- The need to capacitate communities to engage effectively with local government, for example in planning and budgeting processes

➤ **Resilience Issue 3: Governing systems**

The critical role that governance systems play in supporting or undermining city resilience was identified by many stakeholders. Stakeholders from government, civil society, academia, business, and public and city leadership groups all raised governance systems as an issue. The main views expressed by the stakeholders relating to governing systems in Durban were the following:

- The importance of aligning city policy and legislation with national and international policy and legislation
- The challenges linked to current institutional structures, including the dual governance system (i.e. formal and traditional)
- The challenges linked to the institutional systems of eThekweni Municipality perceived as inaccessible to stakeholders
- The recognition of an internal disconnect between local government departments and between local government officials and councillors which has impacted on city management
- The poor enforcement of legislation and city-bylaws
- The need for improved and sustainable financial systems
- The disconnect between eThekweni Municipality officials and leadership and various city stakeholders, which has resulted in growing mistrust between government and citizens
- The high levels of citizen protest relating to the city's inability to respond to the needs of its citizens
- The city governance systems which have made citizens dependent on the state and undermined human creativity and resourcefulness
- The value of developing partnerships in order to develop an integrated response to resilience
- The role of citizens in decision-making and in active urban management

➤ **Resilience Issue 4: Innovation**

The city needs to be proactive in promoting innovation and in encouraging the development of alternative approaches to addressing current and future challenges and opportunities. The issue of innovation was raised by many representatives. The main views expressed by stakeholders regarding innovation in Durban related to:

- The need to adopt an innovative approach to a changing city
- The need to look proactively for ways to facilitate innovation in Durban
- The need to recognise that individuals in Durban are innovative and have already demonstrated their ability to respond to change in creative and innovative ways

➤ **Resilience Issue 5: Information and knowledge**

The value of information and knowledge in building and understanding resilience and directing appropriate action was raised as an issue by stakeholders from civil society, business, the public, government and city leadership groups. The main views expressed by stakeholders regarding information and knowledge were:

- The importance of providing equal access to information for all citizens
- The importance of knowledge and information sharing between different sectors and groups

➤ **Resilience Issue 6: Education and capacity building**

The importance of education and capacity building as a foundational element in developing a more resilient Durban was highlighted by a number of stakeholders. The main views expressed by stakeholders regarding education and capacity building in Durban were:

- The need to provide training for political leaders
- The importance of capacitating municipal officials to make better decisions
- The need to capacitate communities as a means to support self-sufficiency
- The importance of raising community awareness around the consequences of their decisions

- The need to focus on the youth as a key group to educate and capacitate
- The importance of highlighting the loss of skilled people from Durban to other cities nationally and abroad as a key threat to resilience

➤ **Resilience Issue 7: African urbanism**

There was a clear call from stakeholders for a distinct “African urbanism”, and for Durban, as an African city, to respond to its challenges in ways that are context-specific and not modelled only on the experiences of the developed world. African urbanism was raised as an issue by stakeholders from civil society, academia, business, and public groups. The main views expressed by stakeholders regarding African urbanism in Durban related to:

- Addressing inequality in the post-apartheid era
- Implementing context-relevant development
- Acknowledging informality as a valid form of development in Durban
- Valuing Durban as a space of opportunity and creativity
- Valuing tradition and culture

➤ **Resilience Issue 8: Services and infrastructure**

The issue of Durban’s large, long-standing infrastructure backlog was raised, noting that a significant portion of the population still do not have access to quality housing, water, electricity and transportation services. The issue of services and infrastructure was raised by stakeholders from government, civil society, academia, city leadership, and public groups. The main views expressed by these stakeholders regarding services and infrastructure were:

- The need for the provision of basic services to all residents
- The need for the provision of housing, transport, and water services
- The need for the development of sustainable infrastructure and services

➤ **Resilience Issue 9: Spatial planning**

Spatial planning was raised as an issue by stakeholders from government, civil society, business, public, and city leadership groups. The main views relating to spatial planning processes as raised by these stakeholders were:

- The impact of rural-urban processes related to development and rising urbanisation
- The need to address inequality in the ways in which areas of the city are developed
- The need to focus on integrated community development to promote social integration
- The opportunity for public spaces to contribute towards societal interaction, safety and social cohesion to be realised

➤ **Resilience Issue 10: Arts and culture**

Arts and culture should play an important role in building social cohesion and identity in a city, and this issue was raised by civil society groups. The main views expressed by stakeholders regarding arts and culture related to:

- The lack of prioritisation of arts and culture in Durban
- The exclusion of the creative sector in decision-making
- The need to acknowledge the city as a space of opportunity and creativity

➤ **Resilience Issue 11: Health**

This resilience issue was only added after the public consultation process.

➤ **Resilience Issue 12: Environment**

It was mentioned that more than 54 percent of Durban's municipal areas are developed and that the remaining natural ecosystem continues to be impacted and to decrease in spatial coverage. This threatens the sustainable supply of important ecosystem services such as flood attenuation and water supply. The environment was raised as an issue by stakeholders from government, civil society, public, business, and city leadership groups. The main views expressed by stakeholders were:

- The need to recognise the importance of the environment as a foundational element of a resilient city
- The need to incorporate the environment and sustainability into city policy and legislation
- The need to acknowledge the threat of climate change to Durban's future resilience
- The need to secure water resources and ensure good water quality
- The need to facilitate recycling and good waste management practices
- The need to use opportunities for environmental education to improve the understanding of Durban residents on this issue

➤ **Resilience Issue 13: Economy**

Although the latest Census 2011 statistics suggest that unemployment rates in Durban have decreased, it was mentioned that the city still has a higher unemployment rate than other metropolitan municipalities in South Africa, and faces ongoing challenges in the creation of jobs. The economy was raised as an issue by stakeholders from government, civil society, academia, business, and city leadership groups. The main views expressed by stakeholders regarding the economy were:

- The importance of the economy in creating livelihood and employment opportunities
- The need for the development of an alternative economic model that benefits all residents
- The need for a focus on green business opportunities
- The importance of valuing the role of the informal economy in providing employment opportunities
- The need to focus on both big and small business development
- The need to promote local economic growth
- The need to use opportunities to facilitate access to resources, including land, to improve wellbeing
- The need to provide support to women and vulnerable groups in accessing economic opportunities

➤ **Resilience Issue 14: Social cohesion**

Durban's history of segregation and racism was raised as an issue, as high levels of inequality can continue to divide society. Further work is required to promote social cohesion. Social cohesion was raised as an issue by stakeholders from the government, civil society, business, and public and city leadership groups. The main views expressed by these stakeholders regarding social cohesion were:

- The need to recognise that social cohesion is a foundational element for a resilient Durban
- The need to develop a better understanding about different barriers to social cohesion, including socio-economic status, xenophobia and racism
- The need to facilitate social cohesion in order to build city resilience

➤ **Resilience Issue 15: Inequality**

It was indicated that there is a correlation between inequality and a variety of social ills currently evident in cities. Inequality poses significant threats to Durban's economic development, governance and political stability. It affects personal fulfilment, and undermines social cohesion. The main views expressed by stakeholders regarding inequality related to:

- The importance of societal inequality in the resilience debate
- The ongoing existence of institutional inequality, particularly in relation to gender representation

➤ **Resilience Issue 16: Gender**

It was mentioned that despite significant progress in achieving gender equality (e.g. through legislative means), women are still marginalised and victimised in Durban, and are not able to access the same resources and facilities as their male counterparts. Gender was raised as an issue by civil society groups. The main views expressed by stakeholders regarding gender were:

- The critical role women play in society and the need to include gender issues in Durban's resilience strategy
- The importance of implementing progressive policy and legislation

- The ongoing marginalisation of women in society
- The ongoing victimisation of women in society
- The importance of mainstreaming gender concerns into city policies and plans
- The need to empower women to take responsibility for their actions and rights

➤ **Resilience Issue 17: Societal values**

Durban's stakeholders emphasised the importance of improved societal values in building a resilient Durban, and noted the value of instilling morals and values in citizens from an early age. This issue was raised by stakeholders from the government, civil society, academia, business, and public and city leadership groups. The main views expressed by stakeholders regarding societal values were:

- The need to acknowledge that there is a decline in values and morals in Durban
- The need to educate the city's citizens regarding morals and values
- The need to rebuild societal values through different role players such as religious and traditional groups







➤ **Resilience Issue 18: Crime and safety**

As well as resilience issue 11 (health), this resilience issue was only added after the public consultation process without any further explanation about this inclusion.

6.3.2.4 Durban's PRA: From 18 resilience issues to six resilient focus areas

Durban's PRA marks the completion of phase one of the 100RC project in Durban. The previous chapter described 18 resilience issues which were taken forward into phase two due to their importance and interconnectedness. This was done through the identification of "clusters of issues" based on linkages that exist between the 18 resilience issues.

Fig. 36: From 18 Resilience Issues to 6 Resilience Focus Areas

18 Resilience Issues		6 Resilience Focus Areas
Leadership		<i>Bold and Participatory Governance</i>
Stakeholder Engagement		
Governing Systems		
Innovation		<i>Knowledge-Centered City</i>
Information & Knowledge		
Education & Capacity Building		
African Urbanism		<i>Innovative Place-Making</i>
Services & Infrastructure		
Spatial Planning		
Arts & Culture		
Health		
Environment		<i>Sustainable & Ecological City</i>
Economy		<i>Catalytic & Transformative City</i>
Social Cohesion		<i>Equitable & Inclusive Society</i>
Inequality		
Gender		
Societal Values		
Crime & Safety		

Source: own compilation

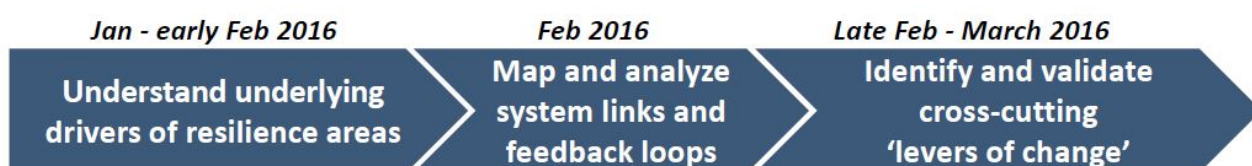
The outcomes of the stakeholder consultation process confirmed the observation made during the scoping process that, in an evolving socio-institutional context such as Durban, resilience addresses chronic stresses and deep systemic challenges that affect the basic functioning of society, rather than stochastic shocks and discrete sectoral issues. On this basis, six “Resilience Focus Areas” were identified for Durban, namely: bold and participatory governance, becoming a knowledge-centred city, innovative place-making, becoming a sustainable and ecological city, catalytic and transformative economy, and fostering an equitable and inclusive society. These areas and issues form the basis for a resilience strategy development process going forward into phase two of the 100RC project in Durban. Durban’s PRA contains a comprehensive summary of the key areas of work that have been completed during phase one from September 2014 until August 2015, and documents the key learnings relating to this process plus the tools that were used. A summary of the PRA is shown in *fig. 36*.

6.3.3 Phase 2: The “Systems Analysis” and the “Levers for Change”

6.3.3.1 The Systems Analysis by Dalberg Consultancy

The proposed way forward for phase two of 100RC was to conduct a systems analysis to identify possible areas for intervention which could generate multiple co-beneficial opportunities across the allocated resilience themes in phase one. Given the broad range of issues inherent in each of these allocated eighteen resilience focus areas and the interconnectedness of many of these, a key challenge for Durban’s 100RC project management team at the outset of phase two was to find the most strategic points for intervention that could affect broad change. Given the breadth and interconnectedness of these focus areas, a “systems analysis” process was undertaken by an external consultancy from Denmark, Dalberg Consultants, between January and June 2016 with the intention of identifying cross-cutting “levers for change” and potential intervention points that could have catalytic impacts across multiple focus areas. Again, a series of stakeholder engagement meetings were convened at various points during this process to inform the outcomes. The outset of the process as planned by Dalberg can be seen in *fig. 37*. The three stages are: 1.) January-February 2016: Understand underlying drivers of resilience areas; 2.) February 2016: Map and analyse system links and feedback loops, 3.) February-March 2016: Identify and validate cross-cutting levers of change.

Fig. 37: The Systems Analysis process



Source: Dalberg 2016

To carry out this systems analysis, Dalberg undertook a mix of quantitative and qualitative research methods and analyses across the six resilience focus areas. The research process included data analyses, individual and small group discussions and focus groups, as well as participatory workshops with Durban stakeholders (consisting of municipal staff, the business sector, community leaders, individual residents and youth leaders).

The systems analysis was accompanied by three public workshops and stakeholder engagements where Dalberg presented their company's methodology and draft outcomes. To identify specific interventions, a participatory mapping was also included in some of the workshops. Besides the three workshops, 24 interviews and small group discussions were held between January and March 2016 with NGOs and individual citizens in Durban, as well as conversations with staff from municipal departments including the Economic Development and Investment Promotion Unit, the Environmental Planning and Climate Protection Department, the City Planning Commission, the Performance Management Unit, the Skills Development Unit and the Information and Research Unit. Dalberg used a mix of KZN province level data and eThekweni Municipal Area level data for their analysis. Key reports reviewed by Dalberg were: IDP (2015), the long-term development framework, eThekweni densification strategy, treasury reports, Spatial Development Framework (2014/15), Green Services and Industry Analysis, South Durban basin multi-point plan, district health barometer (2013/14) and the Durban Climate Change Strategy (2014). The major data sources Dalberg tapped into was: the 2011 Census, the Municipal Barometer, the IHS Global Insight, the Municipal Services and Living Conditions Survey (2015), the Edge Labour Market Research Paper (2013) and the Constraints to Growth and Employment in South Africa/eThekweni (2015).

6.3.3.2 Systemic challenges and the levers for change

At the workshop meeting on 9 March 2016, Dalberg presented seven underlying systemic challenges as its preliminary findings of the process. These were identified as the root of multiple barriers which potentially undermine Durban's resilience:

1. Ineffective and unsustainable economic model: the city's development strategy favours large projects and infrastructures, but struggles to produce sufficient ladders of opportunity to address high levels of poverty and inequality.
2. Skills gap and mismatch: Deficient systems for education and skills-building fail to position the city for success in an increasingly competitive global marketplace.
3. Fractured communities: Families and communities are strained with limited support structures or safety nets.
4. Constrained municipality: An overburdened and under-resourced municipality struggles to meet increasing and complex city needs.

5. Undervalued natural ecosystems: An inadequate urban growth model systematically under-values environmental sustainability as a critical component of human wellbeing.
6. Insufficient leadership: A fractious and volatile political climate results in uninspired and ineffective leadership.
7. Unequal spatial planning: An enduring legacy of separation continues to constrain economic and social integration.

Because these systemic challenges reinforce each other in multiple ways, it was important to identify cross-cutting intervention opportunities with the “Levers for Change”. These were presented as follows:

- **Lever 1: Strengthen local communities and build social cohesion**

Support local communities through investments that reduce the high levels of stress and strain currently experienced, thereby contributing to building a stronger and more cohesive city.

- **Lever 2: Improve effectiveness of education and skills development**

Complement plans and investments for education by the Province to bridge the skills gap among youth and graduates, and to better match workers to the needs of the private and public sectors.

- **Lever 3: Promote economic growth in line with 21st century trends and opportunities**

Orient Durban’s economic strategy and growth model to take advantage of emerging opportunities and create a better model that leverages global trends while promoting equity and sustainability.

- **Lever 4: Manage environmental assets more effectively**

Manage Durban’s natural capital assets more effectively to preserve the city’s rich biodiversity and the valuable services that the ecosystems provide to citizens.

- **Lever 5: Create a more inclusive and integrated spatial plan**

Create an inclusive and integrated spatial plan designed to overcome the legacies of apartheid and to provide greater access to opportunities to all citizens across the city.

- **Lever 6: Improve municipal effectiveness**

Improve the overall effectiveness of the municipality, including planning and decision-making, as well as execution and evaluation, to serve all of Durban's citizens.

6.3.4 Phase 3: Presentation of Durban's Resilience Strategy

According to the 100RC project team, the key challenge with these levers was that they unfortunately remained too broad for the purposes of practical implementation, and therefore a further stakeholder engagement process was undertaken at the end of April 2016 to identify more specific Resilience Building Options. In this phase the intention was to consolidate feedback from the stakeholder engagement and risk assessment phases to arrive at clearly-articulated resilience focus areas for implementation in Durban. The key principle used to guide the selection of these resilience building options was the need to find practical interventions which could address multiple levers simultaneously and maintain the potential to be transformative in their impact. Through this process, two resilience options were identified: (1) facilitating integrated informal settlements planning, and (2) addressing current governance challenges in Ingonyama Trust areas to secure environmental protection.

On the 8th of June 2016, a workshop was held where the proposed resilience building options were presented to the stakeholders. Here working groups comprising municipal officials and non-municipal representatives were convened to explore the options more closely and thereby understand their associated challenges, the work already underway, and to try and address the key barriers still needed to be overcome in order to move forward. The outcomes from these conversations formed the basis for Durban's resilience strategy, which was finalised at the beginning of 2017 and formally adopted by the eThekweni Municipality Council in August 2017.

To better grasp these RBOs, the 100RC project management team convened a series of conversations with different stakeholders who could provide input on the key actors and issues for each RBO. The first of these conversations was convened on the 24th of June 2016. The outputs provided the team with initial guidance on additional interviews, research and meetings that were required to form a more comprehensive picture. The team has since developed an actor map for each of the RBOs, highlighting the key actors operating in these spaces and the relationships between them. A second conversation was held with stakeholders on the 8th of September to confirm the feedback that had been obtained and to begin the process of identifying potential areas for intervention. The outcomes from both meetings were consolidated by the team and this feedback was used to refine the proposed interventions and actions across the RBOs.

Working groups for each RBO were then installed by the Municipality. After a six-month process, feedback from both groups was presented at a public meeting on the 26th of January 2017. During this meeting, Debra Roberts indicated that through the stakeholder discussions, a key idea around the topic of better relations between formal and informal systems within Durban had emerged as a key aspect of the city's resilience, and therefore the two RBOs were created. Besides these two RBOs, the final resilience strategy also acknowledges that resilience challenges will occur in the future and need to be tackled within this strategy.

6.3.4.1 RBO 1 “Collaborative informal settlement action”

RBO 1 was presented in the workshop as an “opportunity to shape informal settlement upgrades in a way that addresses some of the resilience levers for change”, as identified in the above described systems analysis process.

“A proactive, innovative and involved approach is adopted by political and administrative leadership to guide, inform and influence the co-management of informality (with an initial focus on informal settlements) from a social, economic and infrastructural perspective, in a way that is responsive to emerging local and global trends, including climate change.”

(Overarching Objective to RBO 1)

Durban's legacy of segregated spatial planning has resulted in households located in the urban periphery often being far away from job opportunities and transport corridors. This, combined with urbanisation, natural population increase, poverty, the high costs of housing near job centres and high transport costs, has led to significant growth in informal settlements within the eThekweni Municipal Area. These settlements face service delivery challenges, poor living conditions and high levels of vulnerability. They also contribute to, and are impacted by, a range of environmental and health challenges around lack of services and the impacts of wastewater and pollution runoff into adjacent rivers.

An important opportunity lies in how these interventions are undertaken and in their potential to begin to address some of the resilient “levers for change” identified through the systems analysis process. Initial thoughts proposed by stakeholders during the consultation process regarding resilience levers

that could be addressed through a more integrated approach to informal settlement planning, were the following:

- **Improve effectiveness of education and skills development:**

Artisanal skills have been identified as a key gap in the Municipality and the Skills Unit is in the process of finalising an Artisan Development Programme to help address this. Given the vulnerability of informal settlements, their generally high levels of unemployment, and the related difficulties of breaking out of the cycle of poverty, these areas could provide an important location in which to focus this aspect of skills development.

- **Manage environmental assets more effectively:**

Given the significant environmental impacts associated with poorly-located and under-resourced informal settlements, planning more effectively for informality could help to reduce some of these impacts. Opportunities to explore more innovative approaches to the design of these settlements in order to promote better stormwater and wastewater management and to maximise the green economy opportunities, should be provided.

- **Improve municipal effectiveness:**

How the Municipality engages with partners and communities to facilitate project implementation, how internal municipal departments connect with each other to ensure that implementation takes place in an integrated and resource-efficient way, and how innovation is facilitated and encouraged, are important factors. Focussing on informal settlements as a resilience building option has the potential to draw together a range of work areas across multiple departments in the Municipality in specific geographic areas, to collaborate and find solutions to existing challenges. To enable this, partnerships with existing NGOs and CBOs already active in these spaces need to be strengthened. The exploratory nature of this work will contribute to testing the rigid performance management structures in the Municipality and could serve as an important conversation starter for exploring how such systems could better support innovative work.

- **Strengthen local communities and build social cohesion:**

The improvement of living conditions in informal settlements and help in facilitating community-based initiatives already mobilised to strengthen local communities and build social cohesion, was acknowledged as a contribution. The work that the city has piloted here to provide

creative urban design could inspire a range of housing typologies, public facilities, urban open spaces and income-earning opportunities in informal settlements.

- **Promote economic growth in line with 21st century trends and opportunities:**

Specific focus on informal settlements would allow economic dynamics to be better understood at this scale, and can provide insights into opportunities for alternative economies.

The following assumptions regarding RBO 1 were made at the stakeholder workshops:

- Interventions to address service delivery and socio-economic challenges in informal settlements are not being effectively coordinated
- The involvement of communities in the planning process to improve informal settlements is generally poor
- High levels of mistrust exist between many informal settlement communities and eThekweni Municipality
- No two communities are the same, therefore responses might differ
- Progressive and integrated human settlement policies can be undermined by a focus on housing targets
- Long-term funding is a challenge
- Alternative models for human settlement delivery need to be explored; provision of housing or provision of liveable communities?
- New perspectives on informality are required
- A new set of professional skills is required
- Better and more accessible knowledge of informal settlements is required

After the consultation process in 2016, the 100RC project team presented eight specific targeted outcomes within RBO 1 at a public meeting on the 17th of January 2017. A dedicated reference group was established to facilitate the following implementation options:

- **Outcome 1:** eThekweni Municipality has a committed team of champions that are supported by co-ordinating institutional structures to ensure collaborative informal settlement action.
 - Timeframe: Short-term (0-3 years); Responsibility: Local government
- **Outcome 2:** Consolidated quantitative and qualitative community and municipal collected data, information, and knowledge on all informal settlements in Durban is accessible to all and regularly updated.
 - Short-term (0-3 years), Local government/NGO/CBO/Research sector
- **Outcome 3:** eThekweni Municipality facilitates the establishment of proactive, innovative and municipal-wide partnerships to develop and execute collaborative, climate-smart and sustainable informal settlement upgrading.
 - Medium-term (3-7 years), Local government/NGO/CBO/Research sector
- **Outcome 4:** eThekweni Municipality secures the human and financial resources required to undertake collaborative, municipal-wide informal settlement upgrading.
 - Medium-term (3-7 years), Local government/NGO/CBO/Research sector
- **Outcome 5:** eThekweni Municipality installs integrated administrative systems that facilitate the implementation of municipal-wide, collaborative informal settlement upgrading.
 - Short-term (0-3 years), Local government/NGO/CBO/Research sector
- **Outcome 6:** Collaborative monitoring and evaluation of informal settlement upgrading interventions are institutionalised in eThekweni Municipality.
 - Ongoing, Local government/NGO/CBO/Research sector
- **Outcome 7:** The use of land for informal settlements is proactively managed in Durban.
 - Short-term (0-3 years), Local government/NGO/CBO/Research sector.
- **Outcome 8:** All informal settlements in Durban exhibit improved social, economic and environmental well-being, which in turn enhances Durban's resilience.
 - Long-term (more than 7 years), Local government/NGO/CBO/Research sector

6.3.4.2 RBO 2 “Addressing integrated and innovative planning at the interface between municipal and traditional governance systems”

In the project’s public workshops, RBO 2 was presented as an opportunity “to explore mechanisms to formalise the decision-making that happens in land governed by the Ingonyama Trust Board (ITB) to secure key environmental assets that provide valuable services to the broader eThekweni Municipal Area (EMA)”. These workshops were aimed at formalising relationship opportunities for the creative use of tools such as “payment for ecosystem services” and “environmental offsets” to incentivise and unlock the protection and management of key environmental assets in these rural areas. The background to this is that substantial parts of rural areas within the eThekweni Municipal Area (EMA) are under the control of the traditional authorities (TAs) through the administration of the Ingonyama Trust Board (ITB). The *amakhosi* and *izinduna*, with the consent of Traditional Councils and the ITB, have the authority to issue tenure rights and to lease trust land, and as such play a major role in land allocation in the EMA. It was found that there is very little coordination between the eThekweni Municipality, the ITB and the TAs around land use planning and management, leading to a dual governance system. Most areas under the management of the ITB and TAs are of high biodiversity value, and deliver key ecosystem services that support human wellbeing and development in the EMA.

It was observed that the relative absence of formal governance relationships between the two systems has the potential to undermine planning processes, environmental protection and effective service delivery. Although significant progress has been made in this regard through relationship building, it was reported that there were still no mechanisms in place to formalise partnerships that protect key environmental assets.

The following initial thoughts were proposed by stakeholders during the consultation process regarding resilience levers that could be addressed concerning dual governance challenges in ITB areas:

- **Manage environmental assets more effectively:**

Finding mechanisms to formalise environmental protection in ITB areas would help to secure key environmental assets in the upper catchment areas within much of the EMA, with related ecosystem service benefits.

- **Improve municipal effectiveness:**

Since much of the EMA is under traditional governance systems, finding ways to work more effectively across these systems would be critical.

- **Promote economic growth in line with 21st century trends and opportunities:**

A number of tools are available that could help to incentivise environmental protection and management in the ITB areas, and the application of these tools could provide financial and other benefits to communities, and also provide space to explore new forms of economic opportunity.

- **Create a more inclusive and integrated spatial plan:**

Although the initial focus of the work would be from an environmental perspective, the intention would be to use the work as a basis for exploring similar governance relationships in the area of town planning.

The following observations regarding RBO 2 were made:

- There is a lack of understanding between traditional and municipal governance systems
- No two traditional authority areas are the same
- Better and more accessible knowledge of traditional authority areas is required
- Indigenous knowledge needs to be incorporated into governance processes
- The eThekwin Municipality lacks understanding around its legislated planning powers in traditional authority areas
- There are significant challenges in implementing the roll-out of town planning schemes in traditional authority areas
- A key challenge is lack of clarity around a number of “boundary issues”
- There is a lack of coordination within the Municipality regarding the delivery of infrastructures and services to traditional authority areas
- The quality of engagement between eThekwin Municipality and traditional authorities will be key in facilitating integrated planning and governance
- This will not be the first time that efforts have been made to integrate formal and traditional governance systems
- Identification and prioritisation of “hot spots” is required

After the consultation process in 2016, the 100RC project team presented only one specific, targeted RBO 2 outcome at the public meeting on the 17th of January 2017. This was due to the fact that the issues and challenges presented by RBO 2 were very different from RBO 1. RBO 2 is concerned with complicated governance issues rather than technical solutions. Progress in RBO 2 would take much longer than in RBO 1.

- **Outcome for RBO 2:** Secure institutional support for the process of integrating planning between municipal and traditional governance systems.

➤ Timeframe: Short-term (0-3 years); Responsibility: Local Government

6.4 Conclusion

Picture 2: Logo presented at a stakeholder workshop



Source: Rockefeller Foundation 2015.

This chapter described in detail how the development of a participatory, flexible and inclusive learning process resulted in knowledge co-production as the basic architecture for resilience development in Durban. From the very detailed description of the 100RC process, here especially focussed on phases one and two, it can be derived that the project outline was indeed very much participatory and inclusive. Right from the beginning, the 100RC project focussed on exploring the local Durban view of resilience by including multiple stakeholders and not simply taking over the Rockefeller Cities Resilience Framework (CRF) without consideration of local context. The local project team took more time for this participatory process at the beginning of the project than envisaged by the Rockefeller Foundation's financial framework and original project outline. One can conclude that this "local adaptation" of the project outline came indeed partly as a surprise to the Rockefeller Foundation—which also shows the incoherence of their project outline in taking into account the different needs for project implementation in countries such as South Africa, as compared with countries such as the US. Ultimately, the international consultancy Dalberg (see 6.3.3.1) had to shorten their work in phase two in order to avoid compromising the 3-year project timeframe, which ultimately led to some discrepancies between the international steering team from New York and the local project team.

From the documentation process of the stakeholder workshops, it was apparent that documents introduced by the global 100 Resilient Cities campaign (such as the CRF discussed in chapter 6.2.3) needed a structured debate amongst the participants to translate the concepts therein to their local situation. Here, much more time than anticipated was used to discuss in detail and in length the meaning of the concepts of urban resilience as understood by the Rockefeller Foundation on the one side, and as applied by the local stakeholders on the other. These processes were well-presented by the local 100 Resilient Cities project team, which introduced them by offering structured presentations at the beginning of each workshop and allowing enough time for discussions. The project made use, or had to make use, of the Rockefeller Foundation's City Resilience Framework (CRF) before starting off Durban's own definition and adaptation out of the CRF. The CRF was originally designed as a universal framework which provides a lens (using so called "drivers of change") to guide the development of resilience in the 100RC project cities, enabling them to build their own strategies, and to compare and share knowledge. The CRF contains four critical dimensions of urban resilience: health and wellbeing, economy and society, infrastructure and environment, and leadership and strategy, with each dimension underpinned by three drivers which all stood at the base of Durban's resilience strategy. The atmosphere throughout remained positive and engaging, but was at the same time critical in terms of necessary impartial scrutiny. It is interesting to note that, during the workshops, "health and wellbeing" did not emerge strongly as a concern. Such a non-emergence might be related

to weak participation by stakeholders with health or medical backgrounds (as could be seen by analysing the participants list of the meetings), even though some individual stakeholders addressed the issue by noting that the topic did need to be given more attention in the outline presented. In the end, and only afterwards, was health added as another issue under the Resilience Focus Area “Innovative Place-Making”, as well as crime and safety under the Resilience Focus Area “Equitable & Inclusive Society”. This shows that at least the model was adaptable when needed. The CRF furthermore identifies seven qualities of resilience as critical to achieving greater resilience in cities across the world (see chapter 6.2.3). While politics and power are implied in a few of the drivers, they are not explicitly recognised and addressed—which is a problem due to the given arguments in chapter 5.4 that politics in the form of local government is key to all implementation of transformative projects. The CRF can therefore be seen as more systems-based than political and participatory. It does not focus on politics in the construction of resilience, but rather adopts a technical and systems-based approach to resilience which does not relate well to the concept of urban transformation as described in chapter 5.

When placed under analysis, the concept of resilience itself was made subject to significant and often valid criticism—this especially from Durban citizens during the scoping phase (most people did not identify with the concept of “resilience”, as it had negative associations and a focus on “surviving” rather than transforming current practices to “do things better”). Durban’s participation in the 100RC project can therefore be seen as an important opportunity to initiate some of the difficult debates that are necessary to better understanding the sectoral and systemic challenges which in turn are important to full comprehension of the term “resilience”. Throughout these conversations, the key objective was obviously to cultivate a stronger grasp of the economic, social and environmental changes and challenges that are likely to confront Durban in the future.

These conversations concerning the meaning of resilience included community focus groups, commuters at taxi ranks, and people in their homes and places of work. Experts from a range of fields provided insights into specific challenges and opportunities, and people came together in various workshops to hear each other’s ideas and engage with each other on these question. In a considerable effort, the 100RC project team compared the consolidated feedback from these conversations to the existing local data and emerging global trends, in order to provide added value and understanding of increased resilience in Durban.

What came out of this process? It is clear that Durban faces a wide range of resilience challenges, from challenges that affect citizens at individual levels (e.g. basic services and livelihood opportunities) to community level challenges (e.g. addressing social cohesion) and to systemic challenges (e.g. transport, ecological viability, governance and leadership). Many of these problems can be defined

as chronic stresses that have the potential to undermine the city's resilience and to increase the impact of acute shocks. Resilience priorities differed between stakeholder groups, with community members focussing primarily on issues such as basic service delivery, social cohesion and crime, and experts and local government officials placing greater emphasis on issues such as the need to strengthen integrated planning, governance and leadership. The absence of an integrated transport system was, for example, highlighted by both—as this limits access to economic opportunities and reduces the disposable income of people who travel long distances. This in turn contributes to the widening inequality gap in Durban, as does inadequate housing provision and lack of home ownership for many citizens.

The outcomes of the stakeholder consultation process confirmed the observation made during the scoping process presented in chapter 6.3.2.1 above, namely that in an evolving socio-institutional context such as Durban, resilience is regarded as the ability to deal with chronic stresses and deep systemic challenges that affect the basic functioning of society, rather than addressing stochastic shocks and discrete sectoral issues. On this basis, six “Resilience Focus Areas” were accordingly identified for Durban: bold and participatory governance, knowledge-centred city, innovative place-making, sustainable and ecological city, catalytic and transformative economy, equitable and inclusive society. These focus areas were identified through a long 18-month process that involved stakeholder engagement, risk assessment and research. At stage one it was already obvious that these systemic problems would require systemic interventions across a range of levels.

The detailed description of phase one in this chapter showed that there are multiple ways in which “resilience” can be understood. Most of them, such as in systemic and inclusive aspects, confirmed the theoretical findings from chapter 5 in the sense that resilience shouldn't be seen any more as a genuine environmental concept of “bouncing back” only, as has been widely published in academic literature over the last few years. Key ideas which came out of the detailed project descriptions above, is that urban resilience is concerned with the ways in which cities prepare for current and future changes, and that preparing for change requires the integration of agendas such as climate change adaptation and mitigation, disaster risk reduction, biodiversity, equity, sustainable development and poverty reduction. Issues of politics and governance are also central to the resilience narrative. Given the chronic developmental and governance challenges, cities such as Durban which face this evolving understanding of resilience, suggest that resilience needs to be seen not as an end point but as a step in a broader journey towards transformation, and in this way also confirms the findings in chapter 5.

Given the breadth and interconnectedness of the focus areas identified in phase one, phase two began with a “systems analysis” process which identified the cross-cutting “levers for change” that could

have a catalytic impact across multiple focus areas. While the outcomes from the systems analysis were useful in reinforcing the findings from Durban's PRA, the levers for change did not significantly refine and prioritise the findings of the PRA. Additional stakeholder engagements were held to find practical interventions that could address multiple levers simultaneously, and that had the potential to be transformative in their impact. From these engagements, two resilience-building options were identified in the end, relating to "collaborative informal settlements action" and "integrated and innovative planning at the interface between municipal and traditional governance systems".

Through another consultative stakeholder engagement process with various groups (including a municipal working group, a multi-stakeholder working group, a public group and the 100RC reference group), a series of outcomes and interventions were developed as resilience-building options. These formed the foundational elements of Durban's Resilience Strategy, which was finally adopted by the eThekweni City Council. Considering that several key ideas, as discussed above, now concern the inter-relationship of the formal municipal governance system and the traditional governance system, in the author's view there is a specific need for high-level political champions who can drive action forward in this area, most especially in respect to leading RBO 2. High-level political support from city leadership is also critical to ensuring that the city moves forward with RBO 2 in a way that engages with traditional leadership, moving beyond the binary nature of two separate power systems and towards shared and integrated governance. If Durban is successful in promoting an integrated partnership approach between the two systems, the city could offer useful lessons to similar African cities on enhancing resilience towards transformation rather than applying misguided attempts to enforce conventional planning. Particularly where challenges such as dealing with, or incorporating, a second governance system (such as the traditional governance system in Durban) are concerned, western concepts are not useful and could also gain much from these findings.

Given the complexity of the RBOs, interventions on the ground are likely to take time to be implemented in the next few years. The key messages within the two RBOs is that Durban's resilience challenges are mainly developmental, and that they are often not taken care of by formal local government. Informal settlements, as chosen in RBO 1, reveal the multiple socio-ecological and political relations and risks that constitute the city, providing a highly-relevant and important space within which to understand, enhance and build resilience. If resilience can be enhanced in informal settlements in the city—with their multiple connections to other parts of the city—then it can also be built in other areas which face resilience challenges. There is great transformative potential in focussing on informal settlements as places for intervention, but one has to respect the integrity of townships as places of social capital with their own resilient solutions which need to be incorporated into municipal plans and strategies.

The chapter showed that Durban's resilience journey was a very iterative and interactive one which continually drew on new and different perspectives, adding depth and insight into areas that are now part of the city's resilience strategy. Clearly, in the Durban context, the provision of basic services, building social cohesion and trustworthy leadership, securing multiple revenue streams for the municipality and developing human resourcefulness, are all seen as foundational components. The transformative potential of the RBOs can be regarded as critical since the RBOs represent an abrupt shift in focus from the broad range of systemic issues raised in the 100RC process to a focus which appears to act almost like superficial harvesting of low-hanging fruits that do not address the underlying challenges. A useful starting point for transformative change might lie in "focussing in" on specific areas or issues where challenges manifest most clearly and immediately. With the two RBOs, a more focussed approach to resilience building might ultimately have a catalytic impact across the broader local government system.

In general, the very participatory processes of the project provided an indication that Durban's resilience priorities would focus on a range of chronic socio-economic and environmental stresses rather than extreme events or disasters. The original submission by the 100RC project team focussed predominantly on the need to explore the water-biodiversity-climate nexus as a key part of Durban's resilience strategy. It soon became evident, after many stakeholder meetings, that the scope of Durban's resilience work would need to be significantly broader, which has required a modification of the programme's direction. This flexibility has been critical in ensuring that the resilience strategy is properly reflective of the broad systemic resilience challenges in Durban.

Similar to other case studies, the findings of this study are limited to a specific case, namely the city of Durban. Some findings and critical areas identified by this case study might serve as a good starting point for identifying areas or solutions for similar challenges in other cities, but the findings cannot be taken as a direct blueprint for other cities. However, the lessons certainly can.

The documents in this chapter show how the theoretical findings of the research from the previous chapters were supported by deeper analysis, especially with regard to the value of a participatory approach and the strong correlation between the concepts of resilience and transformation. The chapter firstly clarified the practical meaning of the two concepts on the ground, and secondly showed how to make use of conceptualisation to initiate transformative processes in a city. With the help of the Rockefeller Foundation's 100 Resilient Cities project, this chapter interrogated the impact and effectiveness of existing interpretations and implementations of urban transformation and urban re-

silience concepts in the city of Durban. This chapter therefore assisted in answering research questions two and three of this thesis. The expert interviews in the following chapter will add vigour to this, and further solidify the findings from this chapter.

Chapter 7: Data analysis and findings: “Walking the talk” – what do experts tell us about the local interpretation of resilience and transformation?

7.1 Introduction

The previous chapter presented Durban’s 100 Resilient Cities journey in detail. The deliberations during the stakeholder meetings mentioned above were primarily practice-oriented, particularly in naming concrete fields of “resilient and transformative action”. The expert answers given to the author during their interviews and detailed in this chapter will scrutinise and challenge the analysis and its findings as detailed in the previous chapters, with the aim to contribute knowledge and answer the research questions of this thesis.

The interviews were conducted face-to-face with a semi-structured interview schedule, and where this was not feasible phone or Skype interviews were conducted. A semi-structured interview guideline was used for the expert interviews and is attached to this thesis. As confidentiality was offered and granted to all interviewees, aliases have been used in place of full names. The data has been obtained and recorded in such a way that the information is not immediately identified with the research participant who supplied it. The interviews were clustered in two categories: namely representatives from eThekweni Municipality, and other urban experts such as academics and representatives from think-tanks and civil-society (see chapter 2.3).

The expert interviews were conducted during the period of 2015-2018. The opinions and views of these experts are shared and analysed in regard to their general thoughts on how the concept of urban transformation is understood globally and what the interdependencies within the concept of resilience are (research question one), what resilience means in the local context of the 100 Resilient Cities project in Durban (research question two), and what a conceptualisation of resilience in the global south could look like (research question three). Their answers provide insights into how the experts

see and experience resilience in their daily work environments. They also highlight some of the “hidden constraints” in the municipality and the critique around the 100 Resilient Cities project in Durban. Finally, they give substance to the findings and recommendations conducted in the final chapter.

According to Ropeik (2010), understanding local context is a critical element in any city’s resilience journey. His concern about context, plus his acknowledgement of the political nature of resilience and the need for state change, informs the evolving understanding of resilience and risk. This learning is also reflected and interrogated in some of the interview findings. This chapter locates the 100RC within the expertise of those who “walk” the city of Durban, and have knowledge of its context and politics. Their expertise is used to unpack the implementation of resilience planning and the possibilities for urban transformation. The experts are either professionals working in the municipality, or academics from the fields of urban management or urban development.

This chapter demonstrates, through the eyes of experts, that getting a transformative process started on the local level is very difficult, even with direction and available resources. The experts provide reasons for why this is the case, and share some reflections on the local process and on concepts from the perspectives of people who work in the broader field of urban development.

7.2 How is the concept of urban transformation understood globally and what are the interdependencies with the concept of urban resilience?

Chapter 5 cited several scholars who have commented on the lack of research and basic literature on the interconnections between urban transformation and urban resilience (e.g. Pelling 2011; WBGU 2016; GIZ 2012). In the case of urban resilience, many scholars argue that the concept is not only about “bouncing back”, but also concerns adaptation and transformation, enabling future systems to “bounce forward” to a new and more resilient transformative state (Shaw 2012; Pisano 2012; Meerow and Newell 2016). With the help of the experts, this subchapter attempts to generate more answers and analysis around the concept of urban transformation and urban resilience. The subchapters following thereafter focus on the 100 Resilient Cities campaign and local interpretations of resilience in Durban.

The interviewees’ interpretations of transformation and resilience are mainly centred around how and where the two terms overlap. Resilience is for some not only part, but often the start of transformation processes. A scientist from the Human Sciences and Research Council named here under the alias “H.”, for example, confirms that there are various definitions and interpretations for urban transfor-

mation and urban resilience. To her view, resilience is an important element of transformation because “transformation processes are more durable, long-lasting”. Further, she states that resilience is more about “system durability and sustainability through incremental adaptation”, whereas transformation emphasises far-reaching change and progression. For her, there is undoubtedly an overlap between the two concepts, with transformation standing as the long-term goal or vision. This comes very close to the analysis of van den Berg et al. (2011) who submits that transformation stresses the multidimensional nature of the change processes over different sectors, fields of action, groups of actors and modalities. In general, this confirms but adds nothing new to what was presented in chapter 5 of this thesis.

“K.”, an urban consultant and former civil servant in the municipality, is more critical of the role resilience plays. For her, resilience is a short-term action (plucking the “lowest hanging fruit”), which does not confront the overall way in which a city is driven and governed. According to her transformation requires structural change, and this entails radically changing city patterns of work and distorted spatial infrastructures. She adds that such a deep level of change is not intended in the concept of resilience, but since environmentalists are nowadays mostly in charge of resilience processes, this must be the final outcome. Transformation on the other hand, for her is a more future-oriented action simultaneously dealing with ecological, environmental and social challenges. K. also sees resilience as part of the transformation process in each city. According to her, transformation of economic and spatial patterns is necessary if resilience is to lead to transformation. In the end, K. concludes that the focal area of resilience is not about the transformation of economic or spatial patterns, but has to do with the long background of resilience as an environmental topic. These remarks are in line with what was previously presented in the thesis. Of greater importance here is that K. places more emphasis than others on the history—and especially the “historical baggage”—of “resilience” as an environmental term. This needs to be more respected, since capturing a concept like resilience in a new, more holistic frame is always easier done with new terminologies than it is by “reframing” old terms already established in other sectors.

“D.”, a representative from the Development Planning, Environment and Planning Unit, also argues for resilience to be part of transformation since “with a resilience lens on many fronts—such as economic, social, spatial, environmental—this is the transformation that is sought”. However, for him and his team, resilience also tends to be system-wide on the one hand, and on the other hand suggests a micro and small-scale action. It would therefore present its own tensions in terms of scale. For “F.” from DUT, the concept of urban transformation still corresponds to the spatial legacy of cities, especially in South Africa—which means it is important to draw on local knowledge and solutions when dealing with broad concepts like transformation and resilience. Furthermore, a progressive agenda is

needed and one must place power dynamics and new, innovative ways in the centre of the concept since the entire current trajectory of the concept is shifting. For him, resilience is only part of transformation, and not as radical as transformation. His reference to the specific context of the spatial legacy in the cities of South Africa is important, since as already mentioned in chapter 5.6, the terms have different nuances in different contexts. The South African Cities Network (SACN 2013) mentioned that “urban transformation in South Africa, for example, is said to aim to redress the spatial legacy of apartheid and to affect equitable distribution of resources, access to urban amenities and opportunities, and so forth”. F. seems to support these findings with his remarks.

The understanding of resilience as a “bouncing back” capability was introduced by disaster resilience theorists such as Davoudi (2012) who confirmed that the term was first applied in physics and engineering to describe a material’s resistance to shocks. This definition is shared by “G.”, with the important add-on, “to bounce back and be stronger than before”. Resilience thinking is not new; according to Walker and Salt (2006: XI), “many traditional societies give high priority to the need to manage their environment to reduce risks and buffer themselves from droughts or other surprises”. This is shared by “G.”, an urban planner and consultant of the city of Durban, who sees transformation more as “bouncing forward”. This interpretation of the concept, she points out, was present during all the project discussions in Durban. According to her, talking about resilience is a good point at which to begin transformation. She highlights the fact that during her professional career she often found that the term resilience was too complex for many target groups to understand. In these cases, she often used the term “transformation” to explain what resilience is about and to convey the idea that in the end, resilience is only a step towards transformation. The important add-on to the traditional concept of resilience, as given by G., is important since it takes the term and concept away from its original conservative and stagnant, fixed condition to a state where it can truly transform.

For “J.”, a Durban-based urbanist and consultant, the concept of transformation speaks more to “transforming certain aspects of society to make it more functional”. According to him, transformation processes require large changes in the economy and other parts besides the environmental sector. Access to the economy, access to education and access to land would be the necessary formula.

Finally, Durban’s Chief Resilience Officer Debra Roberts connects the term “urban transformation” with new ways of organising people and arranging economies. Resilience is seen as part of an urban developmental process and, more importantly, as a necessary step to a broader transformative situation where one has “true sustainability on the environmental level, social justice and political equity and stability”. Roberts stresses that resilience is not the “end game”—but that transformation would be. According to Roberts, the aim of resilience is “to create the momentum and to shift the mind-set

of the people to reach urban transformation processes”. For her, resilience is a “necessary evil” but at the same time a necessary driving force for all urban transformation processes.

This understanding of the correlation between resilience and transformation is in line with what was presented in chapter 5.5.7 by Solecki et al. (2017). The scholars here define resilience as “an adaptation to change incrementally within existing systems or paradigms”. Resilience could lead to “transformation” which is a “change in people, institutions, world views” with lower thresholds between regimes. This is also Roberts’ view, but since she was the person in charge of the project, introducing transformation comes as no surprise.

7.3 What does urban resilience mean in the local context of the 100 Resilient Cities project in Durban?

Chapter 6 presented Durban’s 100RC journey in detail, where stakeholders in the workshop meetings discussed local interpretations of resilience. These deliberations were very practice-oriented, and named concrete fields of “resilience action” (for Durban this was: crime as a number one priority, unemployment as number two and transport as number three; see chapter 6.3.2.1). A theory-driven and conceptual discussion did not really take place. Therefore, the answers from the experts in this subchapter will add an important part to answering the research question: “What does resilience mean in the local context of Durban”?

Chandler (2013: 276) argues that a change in behaviour needs to come from within and that “resilience cannot be ‘given’ or ‘produced’ by outside actors, only facilitated or inculcated through understanding the mechanisms through which problematic social practices are reproduced” (see chapter 5). Other researchers such as Joseph (2013) also argue that resilience needs to be based on local ownership. Given these statements around the importance of local context in the resilience debate, this subchapter digs deeper into the experts’ views concerning the implementation of the 100RC project in Durban. Experts circled their answers around the topic of the 100RC project, which began a necessary thinking process and a round of deep conversations regarding the future of the city.

In the South African context of extensive poverty, inequality and unemployment, H. adds that resilience should not just be about environmental sustainability, adapting to climate change or about urban systems bouncing back in answer to shocks and stresses. She acknowledges that there are multiple meanings, but a key issue is “development”, i.e. “broad-based economic progress or rising prosperity

through more and better jobs and livelihoods”.³⁸ Progression and change is very important. Unfortunately, in her opinion, the eThekweni Municipality does not respond adequately to well-defined challenges and stresses. According to H., there are many institutional weaknesses in the eThekweni Municipality, including a predominantly short-term perspective; strong silos rather than integrated, strategic action; and weak political leadership. During her long professional career, J. consulted the city of Durban on various urban projects and followed the city’s trajectory in the last decades very closely. Her criticisms of institutional weaknesses in the city are therefore based on deep insights, and are worrying.

D’s very detailed and academic definition of local resilience is the following: “resilience is how individuals, households, communities, business and the city redefine, adapt, survive or reconstruct systems, techniques, economics, actions, thinking or knowledge to survive several shocks that society, cities and people face; such as climate change, unemployment, political strife, illness, poor services, lack of service provision, lack of accountable government etc. to survive, adapt and grow under such conditions”. To be more concrete, he stresses that the local government has a particular role to change to support resilience trajectories, and that both the concept of urban transformation and the concept of urban resilience are bottom-up approaches that can easily be accepted or, on the other hand seen as criminal, advocative or agitational. D, a long-standing city official, highlights that resilience in particular is a structural approach (often following or lagging behind what many stakeholders and agencies have done for themselves) where government, policy, practice and professions are more responsive. Only in the environmental and infrastructure sectors does the concept become a bit more proactive. In his view, Durban is a resilient city from an agency perspective only. People would often work without political or city support, but the municipality could definitely do a lot more to develop resilience in its widest sense (in “policy and practice”). In the end, in his view, for most people in Durban “resilience” is a new, strange and even difficult word to understand.

For K., the term resilience has become “another of these fancy terms”—a consultant term only. When people are not happy with conceptualising an idea, they invent a new term “to describe old concepts”. K. predicts that resilience is not going to be a sustainable term and could be “out” in a few years. During the last 20 years, she added, there were different terms used in the city; it was only after the CDS (City Development Strategy) and the COP climate change processes that the term “resilience” emerged in the Durban context and became very prominent over the last five or six years. Today, according to her, the term is used amongst environmentalists, engineers and economists and nobody really drives the concept further since it is not as interdisciplinary as many people may think. She

³⁸ See also Seeliger and Turok 2013; Turok 2014.

further mentions that Durban in the last decades has already been focussing on transformative projects (“structural projects”) or conjunctural projects (“resilient projects”). At the time of the interview, according to K., the following three main challenges needed to be considered for urban transformation: 1. spatial injustices and infrastructural changes, 2. spatial sustainability (settlement patterns, e.g. one water system for all citizens instead of two at the moment for rich and poor respectively), and 3. Injustice. Here, K. comes close to the negative perception of resilience introduced in chapter 5 by Tanner et al. (2015: 8) where resilience “can become less meaningful and yet another buzzword” or by MacAskilla and Guthries (2014: 670) who writes that resilience can create acceptance for “various definitions”.

According to J., “a city should be able to withstand different shocks and stresses and should be able to still function”. In the context of more resilience this would “provide a better living environment for its citizens”. Durban, he adds, is very different from other cities since it does not provide a good living environment for many of its citizens; the biggest challenge is the large number of people living in informal settlements, the high unemployment rate, health challenges and exposure to climate events. For him, who also did some consultation work for the 100RC project team, the term resilience is used much more broadly nowadays and has moved from the environment area into the social area. This would in general be a good development, but the broadness of the term could create more confusion. He stresses that because of this development, the use of the term is so broad that this makes projects and discussions much more difficult than before. Asked about his experience with similar projects in Durban, he answers that Durban did a lot in the last ten years, but if one looks at the statistics it would seem no transformation has really occurred.

For “I.”, a lecturer at University of KwaZulu-Natal (UKZN) and participant at several 100RC workshops, a resilient city still focusses more on climate change and adaptation. He mentions that in his settlement, Quarry Road West, the community has established a WhatsApp group to exchange updates regarding possible flooding of the Palmiet River. This is an example of how his community has adapted to climate change. For him, the biggest resilience issues in Durban are the provision of houses for all people who move into the Durban area; the disappearance of natural resources such as forests, wetlands and rivers because of the increase in numbers of people; the pollution of rivers and water dams, and the shortage of water in the city since people who are living in peri-urban areas adopt the unsustainable lifestyles of urban citizens. According to I., the municipality does respond well to most urban challenges, but people are always complaining. The municipality provides good quality services such as electricity and connections to water and flush toilets even in townships where the municipality isn’t obliged to provide services. It is interesting to see I.’s much more practical and local

community-based answers regarding resilience in comparison to the answers of other experts and academics.

“A.”, a long-standing employee of the city currently working with the Inner City Thekwini Regeneration and Urban Management Programme (iTrump), defines resilience as “being prepared” and mentions the recent ESKOM problems and power cuts as an example of a “non-resilient institution”. To strengthen resilience, a city must act proactively rather than reactively. When it comes to the problems of resilience in Durban, she highlights that there are several challenges, and cited diversity of cultures and local economic development. Furthermore, she sees the crucial issue of social development (especially the care for vulnerable groups such as youth and the elderly) as one inappropriately tackled by eThekweni’s municipal structures, since no single department suitably deals with these challenges and there is no existing strategy for this at work in the municipality.

For “C.”, manager in the Economic Development and Investment Branch in Durban, only transformation and social development brings resilience, and “to be resilient we need to become more normal”. All resilience approaches in Durban would need a holistic approach where the built, natural and social environments are treated as belonging together. She adds: “in my work, this approach works, but the city’s structures don’t make this easy. City structures are often competing with each other and images are more important to staff members than sustainability (‘silo philosophy groups’ in the hierarchy of the city)”.

Debra Roberts sees a clear absence of a well-defined understanding of what resilience exactly means in Africa, and especially in Durban. In the African context, much more focus than ever is being put on the social development arena and not on a genuine understanding of resilience in the environmental sector. In the local context, resilience should not be seen as an end goal, but more as a “response to a severe and challenging set of circumstances in the present”. According to Roberts, a resilient strategy is a strategy which addresses specific challenges and stresses and also, where it may be necessary, changes how cities operate.

For “B.”, an expert on urban development planning and knowledge exchange working with the city’s Municipal Institute of Learning (MILE), resilience is not a home-grown term which came out of Durban, but an external discourse which nevertheless offers huge benefits as it brings people together to think. The biggest lesson and challenge for her is that a resilient city must maintain a participatory process where everyone plays a role, and ordinary citizens are included to find out what resilience really means. According to her, this was not the case in earlier projects in Durban, such as was seen in the IDP process. She adds that a resilient city is a people-centred “learning and exchanging city”. Risk-taking, plus challenging and exposing leaders, are important preconditions in these processes.

The biggest challenge for Durban, according to B., is that economic growth must come together with job creation, especially for the youth. As an entry point for resilience in Durban, she sees a change of mindset from delivering outputs (for example in the housing sector) to delivering outcomes (for example, viable people-centred settlements as an integrated approach in the housing sector). One must start by thinking first. In regard to the structures of the municipality and how they hinder innovative resilient projects, she states that stand-alone departments were created in Durban, each with their own strategies, but after the IDP process a restructuring towards outcomes has started which is very positive, although much still needs to be done. The “Imagine Durban” project for her was an example of how Durban was responding to social, economic and environmental challenges. The project was newly created in 2001 when the eThekweni Municipality started to think about a long-term plan and vision, and realised that local government alone cannot implement this process. Inspired by other cities in the world (e.g. Imagine Chicago with similar challenges), an organic process developed where different multi-ethnic citizens of Durban began to talk about how they see their city. In 2007, the local government launched the “Imagine Durban” process with the main aim being to invite ordinary people from society (business, academia, NGOs, schools) to imagine what the city could be like with different action plans in place, including both long- and short-term goals. Creative formats were used, such as sending postcards all over the city, conducting workshops etc. This imaginary and progressive project, according to B., was not tapped into enough by the city until now, and had much more potential than is unfolding. B. hopes that the experiences with the “Imagine Durban” project will be used in the 100 Resilient Cities and other municipal projects in the future.

Most of the comments given here highlight the need for a more practical-oriented definition of resilience. In chapter 5, resilience, according to Holling (1973: 14), is defined as “a measure of the persistence of systems and of their ability to absorb change and disturbance and still maintain the same relationships between populations or state variables”. The experts interviewed mainly confirm this broad theoretical definition but emphasise that the local adaptation of the term is important. Furthermore, the theoretical concept of resilience itself is seen quite negatively by most of the interviewees as a term which maintains the undesirable status quo rather than improving on it.

7.4 How does a conceptualisation of resilience in Durban could look like?

This subchapter reports on the experts’ responses when confronted with the concrete 100RC project in Durban and how the project concept speaks to a conceptualisation of resilience in the global south. The answers add more substance to the findings of chapter 5 and 6 in which, amongst others, Stockmeyer (2011: 6) stated that in contrast to “development” (which is often seen as change without prior

conditions), transformation “puts the emphasis on the change process”. The experts will give their opinions on whether a change process can be connected with the 100 Resilient Cities project in Durban or not.

When asked about the outline and impact of the 100 Resilient Cities project in Durban, D. raises the point that the project is useful, topical and financially well-supported, wisely resourced and has an internal and a local edge to it. The concept, he believes, is not new but has allowed the city to be critical and reflective and to recognise participatory approaches in research and policy making as important. According to D., the project will assist in underpinning other levels of planning in the city. However, he raises a critical point: namely the amount of attention required on each round of participation after another, which means that there might be a deficit in commitment to proper project planning. This in turn would compromise resilience as a strong and direct supporter of transformation. He warns that the 100 Resilient Cities project could also run the risk of being a lone piece of work that may not be fully approached in other forms of city planning and governance, except by making reference to it. In general, he expects that most of the actions will be uneven, with some changes in some areas or no changes in other areas, though at the same time he recognises all the chances of it being a very implementation-driven project accompanied by a shift in thinking and with active steps taken as a result and located in different urban areas.

Regarding the 100 Resilient Cities project and the role of transformation, D. believes that the project can be transformative but not to the extent that the official campaign suggests. He adds that for securing transformation, a paradigm shift is needed and the city and the support systems around the city will not allow such a shift to happen easily. To some extent, resilience and transformation steps are “a process and a fight filled with tension and conflict”. He highlights the fact that a transition to transformation, however it may look, will be an uneven process. That transformation processes are uneven was already highlighted in detail in chapter 5.3. Unfortunately, no answer on how to make these processes smoother was provided by him in the interview—but an answer certainly lies around issues of political leadership and what in chapter 5 was described as a theory of the “state as an anchor”. Considering that several key ideas, as discussed in chapter 6.4 under final Resilience Building Options (RBO), concern the interrelationship of the formal municipal governance system and traditional governance systems, there is a specific need for high-level political champions who can drive action forward in this area, especially in leading the implementation of RBO 2. Here, in the case of RBO 2, it is critical to ensure that the city engages with traditional leadership in a new way that moves beyond the existing binary state of these two power systems as opposites and toward a shared and integrated governance.

G. adds to this that the most positive outcome of the project would be for it to instigate a thinking process and inspire active conversations in Durban. The Rockefeller Foundation's framework was a helpful framework which helped people to think about resilience. In her view, the objective of the project was to start a conversation and that in respect to Durban, the 100RC project was successful. When the objective of the project was to create implementation on resilience projects, it was not successful for her. For D., the Rockefeller Foundation's aim was clearly to initiate implementation steps in Durban which one could see, for example, through the establishment of the "implementing partners" platform which Durban however did not make use of. The problem with the platform was, according to G., that the Rockefeller Foundation only provided funding for matching the platform partners, and after an introductory phone call or personal meeting between the partners and the cities, the city did not have the capacity to ensure an implementation phase. For F., following this model is great for cities to make connections and to make two institutions aware of the other's capabilities, but at some point somebody needs to pay for services or the projects will die. A better, more sustainable way would have been to help the cities find financial capital to move the implementation forward. In general, she asked herself what the next steps for the global 100 Resilient Cities campaign for the Rockefeller Foundation could be and what the Rockefeller Foundation cities could do to facilitate implementation, since the campaign—which runs globally in 100 countries—is coming to an end, and there has been no announcement yet about what is next and what the general outcome is. G. hopes that this point is still on the outstanding agenda of the 100 Resilient Cities campaign team.

G. explains the historical background of the 100 Resilient Cities project as a western model as follows: the concept was originally rooted in finding answers to future preventions of natural disasters such as Hurricane Sandy in the US in 2012. It was laid out for high-income western cities to respond to very tangible threats; in other words, it was created around concrete action. In contrast, according to her, most of the 100 Resilient Cities member cities are not very sophisticated and are located in developing or emerging market countries with much more systemic challenges such as wide-scale under-education, issues around employment, inequality, democracy and corruption which cannot be solved through a single project. The education standards in Durban would be extremely low, there is a huge disconnect between citizens and civil servants, and according to G, even the translation of "resilience" into the Zulu language was problematic because there was no equivalent word in isiZulu and it was often necessary to paraphrase.

G. also asked herself how applicable the Resilient Cities framework really is to an emerging market city such as Durban. An initial conversation between the Rockefeller Foundation and the Durban project team would have helped to see if the framework was fitting for the Durban context; that this

didn't happen was clearly a missed opportunity, according to G. She adds that as the process continued, the project team in Durban responded to their stakeholders, assessed the project and made progress talking about systemic issues, while the Rockefeller Foundation became frustrated waiting for action and implementation. G. names this a "fundamental mismatch at the very first beginning" in terms of what the Rockefeller Foundation regarded as success and what Durban needed and wanted to do in terms of success. From the Durban side it might have been naïve not to take the funding money, but the project was a failure, according to G., since the city's objectives were not in line with that of the funder's. In general, G. mentions that the big mistake of the global 100 Resilient Cities campaign in general was the assumption that a single message could fit all the member cities around the world. Regarding the role of transformation, G. highlights that it is important for international experts to understand the political rhetoric in South Africa. The term "transformation" has a very specific meaning in the local context and is a very important concept in South Africa, but comes with a lot of additional baggage because of the bad reputation the word had during apartheid. According to G., this understanding was not intended to be part of the conversations and stakeholder meetings, but it was there. Asked about whether a success story could be expected in the end, she was doubtful.

Another interviewee, K., names that the 100 Resilient Cities project could be just another "talking project" where the content is mainly about processes while it is in fact only through action that people start to do things differently, and this was missing in the outline of the project. In a project like this, membership only for the sake of participation would amount to nothing. K. further criticises the fact that the findings were not communicated and that international projects were always an investment in personnel and city staff, while attention should be given that projects like these are not used to raise personal political profiles, but rather to get action implemented on the ground. Important resilience areas for the project in Durban for K. are the taxi and public transport sector and the informal trading sector. Regarding political leadership, she adds that the language of leadership is not resilient and she does not see the language of the leaders mirroring a resilient or environmental agenda. Given the background of the former involvement of K. with the city of Durban, this analysis might interfere in some parts with her own agenda and position which needs to be considered.

A. points out that Durban is quite conservative when it comes to progressive "risk-taking" approaches, and that she clearly sees this in externally-funded projects such as the 100 Resilient Cities project which could in theory be of great benefit. Social rather than environmental issues should be focussed on in Durban's resilience strategy, and when it comes to economic resilience areas for the project, she suggests opening a municipal job opportunity centre with a corresponding database in place. Such a project would be sustainable after the funding of the Rockefeller Foundation has run out. According to A., ownership often leaves when external funding leaves. Having an internal person

like Debra Roberts as CRO, who has dealt with the resilience strategy before, could contribute to the sustainability of the project.

Importantly, for F., the main focus areas of the project are unemployment and poverty, but the 100 Resilient Cities project team is staffed with environmentalists who “don’t have the political and technical skillsets to implement this project”. According to F., this could become a critical point and could well be the reason why implementation is lagging behind, and the outcomes of the project should not be measured according to physical outcomes. The project shifted substantially, and straightforward environmental issues could have been implemented easier by the team, however through the participatory process other challenges evolved. In the end, for him, not many things were missed out due to the very complex participatory nature of the local project. F. mentions that there had not been many similar participatory projects in Durban during the last ten years. He also warns that many of the outcomes of the projects are beyond the sphere of influence of the city government, for example RBO 1 and the housing processes, where regional interventions are also needed to deal with issues around gender, migrants and other social processes.

C. sees other local projects, for example the Durban Green Corridor, as much better-suited resilient focus projects for Durban because they would create jobs for local residents by using the environment for tourism. Such jobs would be based on environmental protection, and social, environmental and economical agendas support each other directly, which she does not see in the current 100 Resilient Cities project. Furthermore, when asked about implementation processes in Durban, C. sees a “misfit” in the municipality between city managers and the implementing staff because of political agendas on the side of the managers. The municipality would have high profile experts such as Debra Roberts, but implementation is usually problematic. In the past, world-class projects in Durban were likewise unsustainable due to a lack of maintenance, and projects such as the city partnership between Durban and Bremen for example would be too focussed on climate change, thereby lacking holistic sustainability and resilience. For C., the resilience framework of the 100 Resilient Cities campaign is in general too broad; it may suit the many different facets, but Durban does not fit perfectly into the scheme since the city has more of a developmental approach than other member cities in the campaign.

Debra Roberts adds an interesting comparison between Durban and Dakar, where the term “transformation” was approached in a very different way than in Durban. Dakar was the only other African city to join the 100 Resilient Cities network in the first round of 33 cities in 2015, and went through a totally different process. In Dakar, the Resilient Cities Officer (CRO) stands almost alone and almost all the work was done by external consultancies proposed by the Rockefeller Foundation, such

as Dalberg Consultancy from Denmark. The outcome was that the 100RC project in Dakar was much more mainstreamed to the CRF model of the Rockefeller Foundation, and also took less time than the Durban journey. Roberts interestingly adds that Dalberg Consultancy worked with Durban in the beginning (as shown in chapter 5), but after the first collaboration the Durban team realised that Dalberg did not have the understanding to help the city because they lack understanding of the political and social environment of the city. The collaboration with Dalberg was subsequently halted, and a local consultancy was hired. Here, the end of this collaboration shows that having an international consultancy on board all the way through does not necessarily build capacity and therefore does not build transformative ability.

According to the comments by H., the 100 Resilient Cities project has been well run and did produce some excellent reports and initiatives early on, but seems “to have run into the sand since then”. She is not sure why, but she heard very little about the project during the year 2017 which she finds very surprising. Key for H. is a serious buy-in from political leadership and from key departments in the city, but a buy-in from the private sector and civil society is also important for any project to become transformative. A possible gap, he sees, is the missing action in the field of economic development to create more and better jobs and livelihoods for Durban’s citizens.

It is interesting to see how the experts’ answers differed, especially in the way that they did not refer to the concept of change as it was expressed in the scoping and research phase of the 100RC project (see chapter 6.3). During the scoping and research phase, described in chapter 6.3.2.1, the concept of “change” rather than “resilience” was used to engage residents, but for the 100RC project team the term “resilience” was too negative and difficult to understand. The concept of change allowed everyone to access the dialogue as equals and embraced both the good and basic elements of change in the city (Roberts 2014: 7). This was however not followed by the experts, who mainly tried to stay within the concept of resilience.

On the other hand, the concept of resilience itself had been a subject of significant and often valid criticism especially from Durban citizens during the scoping phase of the 100RC project. Most people did not identify with the concept since it had negative associations and a focus on “surviving” rather than transforming current practices to “do things better”. Besides the somewhat pessimistic analysis by K., this was not the case with most of the other expert interviews. They generally supported the reframing of the term resilience and made use of the concept to allocate Durban’s challenges and to position them better regarding a possible transformative pathway. Regarding the challenges, the experts’ opinions didn’t differ much from the views of the stakeholders in the 100RC project. Both

highlighted the fact that it is mostly chronic stresses which have the potential to undermine Durban's resilience and increase the impact of acute shocks.

7.5 Conclusion

In general, most of the interviews supported the analyses and findings from the previous chapters, but added valuable additional background information and new definitions, especially around the 100 Resilient Cities project in Durban and the local adaptation of the concepts of urban transformation and urban resilience. Most of the interviewees agree in their analyses, but do also have different opinions, especially regarding direct and indirect critique of the 100 Resilient Cities project or the municipality. All the interviewees see the 100 Resilient Cities project as one of the most participatory projects in the whole history of Durban. On the other hand, sustainability and ownership concerns were raised.

When analysing the statements about the interviewees' own understanding of the concepts of resilience and transformation, what first comes to mind is that the interviewees see a clear correlation but also an overlapping of the two terms, especially in the local context of Durban. Resilience is indeed for some not only part of, but often the start of transformation processes. In this sense they confirm the analysis made in chapter 5.5 in this thesis. One interviewee stated that transformation is about "bouncing forward" and resilience about "bouncing back to be stronger than before". This summarises the current understanding as prescribed in chapter 5 quite well but others were more critical, especially about the term resilience, referring to it as "another buzzword" and "a new term used to describe old concepts". Debra Roberts characterises resilience in the local context of Durban as a "bad word" since it could mean retaining Durban's undesirable status quo, as seen today but as also seen decades ago. Roberts prefers to use the term "transformation" for her work around the 100RC project. Here, the interviews show a clear difference from the original research arguments raised in chapter 5 when it comes to the positive or negative notion of the term resilience. In chapter 5, the analysis of international literature was definitely leant to a more positive framed term of resilience. It is interesting but understandable that the Durban experts' view of a concept such as resilience is more negative due to the unique circumstances extant in a "city of the south" with large inequalities and a troubled past.

Overall, the experts very positively acknowledged the fact that the resilience concept has been broadening over the last few years, now becoming more inclusive of social and economic areas, and in general becoming interdisciplinary. Very importantly, the local context is often mentioned as crucial for any resilience project. Amongst the most pressing local resilience issues for Durban, economical

and spatial challenges are mentioned first, followed by housing challenges. Often mentioned was also the fact that resilience is hard to understand for the majority of the citizens due not only to problems with the translation but also systemic understanding. This comes quite close to what was derived from the stakeholder workshops and the challenges mentioned during the three phases of the 100 Resilient Cities project mentioned in chapter 6. Chapter 5 showed that the term “resilience” has deep roots in the ecology sector and is still most dominantly used in environmental sciences (Xu and Marinova 2013: 911). This is not the case with the 100RC in Durban, as seen with chapter 6. Environmental challenges are not at the top of the agenda, neither for the experts nor in the outline of the project. Some experts therefore see it as problematic that the 100 Resilient Cities project team originates from the Environmental Planning and Climate Protection Department (EPCPD) of the eThekweni Municipality and that the deputy head of this department, Dr Debra Roberts, took over the position as Chief Resilience Officer. If one looks back to the four pathways of the “roadmap to resilience” which were introduced in chapter 6.2.1, the responsibilities of the CRO include “working across the silos within the city structures; advising senior leadership; (...) and coordinating resilience efforts from other sectors outside of the City structure” (Rockefeller Foundation 2017). Taking into consideration the job description, the decision to hire a long-standing city official with an excellent track record in working with different stakeholders who is also an academic with a worldwide network, is a clear asset in contrast to hiring an external person. Especially regarding the notion of “working across the silos of the city” and “advising senior leadership”, an internal person who understands the political dynamics of the city is especially useful. Here, the criticism from the interviewees was rather about the fact that the EPCPD departmental team is not perfectly suited to guide a holistic resilience strategy where social issues rather than environmental agendas are to be followed and implemented. This is a valuable argument indeed, but most stakeholders were not aware that the EPCPD department already deals with many systemic forward-looking topics. Since the department has the identity of dealing with one-dimensional environmental issues only, the team had to overcome the initial limitations of how they were viewed by a few of the stakeholders. At the same time, all the experts agreed that Debra Roberts was a very suitable choice with a sound academic and professional background, with credibility and relationships in the municipality and that, most importantly, an internal person such as Debra Roberts as the Chief Resilience Officer is likely to get the needed political backing. In contrast, in many other member cities of the 100RC campaign, external Chief Resilience Officers were hired. Interestingly, the debate around this topic was most frequently raised by the interviewees. Nevertheless, a “critical transfer” from ecological systems-thinking to the social sphere and disaster context is crucial, as is being aware of additional factors such as power relations (Cannon and Muller-Mahn 2010: 623; Hudson 2010: 13; Tanner et al. 2015: 23), as well as sociocultural, historical, political and economic factors (Lewis 2008: 2). In this regard, the troublesome collaboration with the

international consultancy firm showed that having an external consultancy firm on board all the way through does not necessarily build capacity and therefore does not build transformative ability.

If one relates this discussion back to chapter 6.2.3 and the City Resilience Framework (CRF) where the Rockefeller Foundation holds the following view of good city leadership: “to promote leadership and effective management, to empower a broad range of stakeholders and to foster long-term and integrated planning”, it seems that the Durban 100RC project team is doing quite well. It can be analysed that the understanding of leadership by the 100RC project team and by the CRF is similar; leadership is not seen as taking decisions first and communicating them afterwards to the stakeholders, but rather as a management tool to facilitate decision-making processes which include strong participation and inclusivity and which, in the end, aim to achieve the desired long-term and integrated outcomes. From this point of view, the 100RC project team acted very much in line with the introduced theory in chapter 6.2.3. One can conclude that the 100 Resilient Cities project was in the end a remarkably participatory and timely project, given the increasing criticisms in this chapter of isolated and non-participatory municipality-driven projects.

Regarding the local implementation of the 100 Resilient Cities campaign, all experts agreed that the project inspired a thinking process in Durban and a round of deep conversations concerning the future of the city. This participatory process was seen by all experts as the most beneficial aspect right from the start. Criticism was expressed by some experts regarding the origin of the 100 Resilient Cities framework as being a “western model”. Even though the concept was introduced by the Rockefeller Foundation from the United States, the analysis in chapter 6.3 highlights the fact that straight from the beginning the project was focussed on exploring the local view of resilience by including multiple stakeholders and not simply taking over the Rockefeller and therefore the 100 Resilient Cities framework without consideration of the local context. The importance of local context as already mentioned above—especially in developing or emerging-market countries—is furthermore of great importance, but was often criticised because the 100 Resilient Cities Framework is not really applicable to cities such as Durban. Therefore, the 100RC project team’s biggest specific challenge was how to deal with an abstract project-based methodology and use it to tackle widespread systemic challenges such as inequality, informality and poor housing and education as they occur in Durban.

Furthermore, the general sustainability aspect of the project was questioned by some of the experts who referred to the fact that the final implementation steps of externally funded projects often die as soon as funding for the project comes to an end. This could indeed also be the case with the 100RC project in Durban, but here follow-up research is advised. It is not clear yet if these specific critical voices will prove correct in the end. Indeed, a cause for concern is that since the project has officially

ended, no information about the upcoming concrete implementation stage has been communicated to the stakeholders and the question of where funding for the implementation will come from remains open.

The Durban way of initiating widespread discussions with a long participatory process involving all stakeholders, and spending time and resources on this part, was surely a suitable and necessary approach given the sociopolitical context and history of Durban. Unfortunately for the Rockefeller Foundation, this “participatory overflow” was not foreseen in their project outline and financial framework, and therefore time for the project was too short to achieve transformative and resilient action over the course of its lifespan. However, as mentioned, the action on the ground cannot be part of this research given the more theoretical approach of the thesis. Regarding the general sustainability aspect of the project, it might have been naïve of the Rockefeller Foundation to expect Durban to come to grips with what resilience means and at the same time build a resilience plan around it and secure funding for it. Here, Durban was in a way exceptional in that it spent much more time on community workshops around the theoretical interrogation of what resilience and transformation means in the local context than what was originally envisaged by the Rockefeller Foundation. This meant that in the end, the project ran out of time for the implementation phase.

In general, many experts warned that it might be problematic to implement and start a transformative project without first focussing more on political “buy-in” from the leadership of the municipality. Some experts see Durban as a very conservative city with regard to “risk-tasking” approaches and that a “silo-thinking mentality” would operate in the municipality. A pro-active municipality which incorporates institutional resilience would be important to fostering urban transformation processes and the ability to share resources across typically-fragmented mandates for the upcoming implementation of the two resilience building options for the 100 Resilient Cities project in Durban.

It is important to note here that the analysis by the experts is, in almost all cases, fundamentally based on their area of expertise and their own position in their personal or professional environments. In general, however, the interviews fulfilled their role as a tool to help determine if the research was on the right track. On most occasions the experts confirmed the critique and analysis regarding the local adaptation of the terms of urban transformation and resilience as concepts, which rather than originating from the global north need to be adapted to the local sphere. In the end, most of the interviews confirmed the main findings from chapter 5: namely that starting a transformative process is very difficult, even with direction, support and available resources. The most important step is to have clarity about the structure of an inclusive and participatory process in aid of what the city really wants

to achieve. These two preconditions for initiating a transformative process are now more or less in place in Durban with the help of the 100 Resilient Cities journey.

Chapter 8: Conclusion and findings

8.1 Introduction

This last chapter expands on chapter 7, summarises the findings and provides conclusions. The chapter is analytical and returns to the theory in order to make considered policy recommendations. Here, a more normative narrative is followed to make recommendations that result from both the global new urban agenda debates and the analysis of the local case of the 100 Resilient Cities project in Durban.vvv

At the beginning, the chapter highlights four important aspects which emerged from the more theoretical parts of the thesis: urban resilience as an underlying concept of urban transformation, the aspect of global urbanisation, the emerging political power of cities and the aspects around urban development in South Africa. Included in these aspects are the key findings with regard to urbanisation challenges and global urban agendas. It is shown how urban development policies in South Africa can be a platform for wide-ranging local action. The chapter also comments on the emerging political power of global cities, linked to the concept of transformation and resilience. In a second part, it thus pulls together the theoretical debates to make sense of the 100 Resilient Cities project in Durban. It does so by situating the project from a global to a local level and analysing all its path dependencies and trajectories. The chapter ends with policy recommendations linked to the identified key aspects.

The main elements of the three methodological parts of the study were the following:

- The theoretical document analysis (chapters 3-5) contained intensive literature reviews. It started with an interrogation of the conceptual framework of the thesis and with a document analysis of current approaches and new concepts in the urban development debate. After this, literature around the concepts of urban transformation and urban resilience was introduced and analysed with the aim of contributing to more conceptual clarity and knowledge in the field.
- The 100 Resilient Cities project description (chapter 6) contained the documentation and analysis of the implementation of the project and of the stakeholder workshops in Durban.
- The interviews (chapter 7) were conducted with experts from the municipality or academia to add more qualitative analysis and to cross-check the findings from the preceding chapters. The interview questions originated from an analysis of the literature around the 100 Resilient Cities project in Durban and its underlying theoretical conceptualisation.

8.2 Critical aspects from the literature

8.2.1 Resilience as an underlying concept of urban transformation

The term “resilience” is highly contested and in this thesis it was shown that there are many critical debates around the concept and its trajectories. Chapter 5 showed that different resilience approaches exist, but that they often focus on the individual level only and not enough on a systemic macro-level such as city governance. Urban governance structures are not really incorporated in these approaches. A comprehensive, holistic framework that combines the physical aspects of cities with the less tangible aspects associated with human behaviour is still missing in these approaches of resilience.

The thesis showed that the term “resilience” has its original roots in the environmental sector and has been used in areas such as pedagogics or in therapy for burn-out syndrome. The concept can and should be understood differently in different cultural contexts. One could question here indeed if the term is set too broadly and is just another “sustainability marketing” term. This would delimit the proper use of the concept to a “one-catch-all” term which is not measurable and, in general, its use within broader contexts such as urban development and with this urban transformation could be minimised. The concept of resilience in urban and political contexts may not move cities progressively forward because resilience thinking in social and political spheres—where it does not imply value-based criteria—might lack normative value. In consequence, cities may end up being non-progressive “conservative bubbles” which merely bounce back to the often undesired former status quo. Chapter 5.5.4 introduced resilience as a liberal concept. In general, there is a real danger that the term “resilience” will soon be outdated and no longer in vogue. This thesis therefore made a clear case for the use of the concept of urban resilience only as part of a more generic, superior paradigm of a broader urban transformation, albeit as a very crucial part.

At the same time, despite its shortcomings, the concept has high practical relevance exactly because of its criticised broadness. Crises and challenges in today’s cities are complex and diverse, which requires robust holistic systems. The concept is furthermore not ideologically applied in the same way that the concept of sustainability is, and can therefore guide interdisciplinary research and strategy development processes relatively well. Resilience refers to being flexible and innovative, recognising that in a highly unequal and steadily changing world there will be occasions when maintaining systemic strength is a benefit. For instance, where the resilience limits of existing systems have been met and where there is a need for a complete state change, transformation provides the more useful concept. Resilience is therefore not an end goal, but much more a boundary state between resistance (the ability of a system to prevent adjustment and change) and transformation (an alteration in the fundamental attributes of a system), as shown in chapters 5 and 6 of the thesis. In the end, it is still

not yet exactly clear how to move from resilience to transformation in practice, but the literature shows that it may come with time and cannot be foreseen and planned at the initial stage. Building partnerships and trust and opening up space for more conversation and thinking, as happened in Durban's 100 Resilient Cities project, has a much more transformative potential than single resilient successes or outcomes.

8.2.2 The urbanisation challenge

As shown in the first chapters (chapters 1, 3 and 4), Africa's future is urban and young: by 2050, the urban population in Africa will have tripled, the number of African megacities will have quintupled, and the majority of urban residents will be young people (UN DESA 2018; ISS 2016: 10). These are the most important challenges surrounding development in Africa. Chapter 4 described how the focus of debates around population growth and urbanisation and their implications for the governance sector has been shifting. This is the case because the predicted rates of population growth for Africa will outnumber the Asian rates by far. The biggest population growth will now take place in low- and middle-income cities, especially in sub-Saharan Africa (UN DESA 2018). This urbanisation process has the potential to transform economic and social systems of countries, but the scarcity of fully-functioning governance structures in most countries also raises questions about what mechanisms are available to drive systemic change in unorthodox urban conditions in the future. This aspect of population growth in cities is of relevance for the thesis because more transformative and resilient urban planning is needed given the huge challenges of urbanisation, such as the issues described in chapter 4.3 (social, ecological and economical challenges as well as issues around migrants/refugees and infrastructure).

African urbanisation is regarded by Turok (2010) and others as “non-conforming”, since it is often not accompanied by economic growth as is the case in “developed” countries. According to Pieterse (2011), African cities are very distinctive from cities in the north in terms of culture, education, industrialisation, informality, post-colonialism, violence and inequality. Thus, an understanding of the challenges and opportunities presented by African urbanisation must become a focus area for academic research on transformation of cities and urban resilience. Urbanisation in Africa definitely needs its own interpretation and conceptual development. This thesis delivers a theoretical rapprochement of African perspectives of urban transformation and urban resilience.

The global policy debate is shifting from seeing the ills of urbanisation to harnessing the benefits of urban transformations. As shown in chapter 3, the question of sustainable urban development is at the top of global development agendas such as the UN Sustainable Development Goals (SDGs), the

African Union's Agenda 2063 and the UN-Habitat's African Urban Agenda. For the first time ever in the history of Habitat conferences, the contributions by sub-national stakeholders such as local governments and civil society were officially acknowledged with the same importance as nation states (Engagement Global 2016). The implementation of SDG 11 remains path-dependent and is based on methods such as indicators and key concepts, integrated planning, and models for local-national government cooperation which need much further and more detailed work in the future (Trundle et al. 2016). Debra Roberts, Susan Parnell and other international urbanists also call for better integration of urban scholars in the policy platforms which are emerging in the New Urban Agenda and the multilateral arena (McPherson et al. 2016: 166). The newly established goal no. 11 of the SDGs ("making cities inclusive, safe, resilient and sustainable") shows that urban development is now perceived as a topic in its own right as opposed to a cross-sectional one. This promises new impetus for much-needed future urban investments and policies which are vital, especially in Africa.

The New Urban Agenda and Habitat III, together with the SDG process, as described in chapter 3.3 and 3.4, will also be guiding instruments for the prioritisation, funding and implementation of all urban politics and projects in the future. With all these new agendas and political prioritisations, more national and international investments will be channelled into urban development projects. The 100 Resilient Cities campaign from the Rockefeller Foundation is one such large investment project. Of particular relevance to Durban's resilience strategy is the fact that the New Urban Agenda recognises, for example, that informality needs to be acknowledged. This is especially relevant in Durban, since Resilience Building Option 1 "collaborative informal settlement action" focusses on local townships with large informal economies. With this new impetus on local governance and informal settlements, it might be easier for Durban to attract funding for the outstanding implementation of activities resulting from Resilience Building Option 1 in the future.

These challenges around urbanisation are setting the scene for urban transformation and resilience projects on the ground. The topic of urbanisation and the role of urban transformation and resilience gained political attraction worldwide as seen by the described urban agendas. It will further be crucial that the preparation and especially the underlying scientific conceptualisation of the projects gain more traction. In general, urbanisation will cause huge challenges for the future, and calls for urgent and anticipatory urban development policies and projects to be created and put into play.

8.2.3 The emerging political power of cities

The newly-established Institute for Global City Policing at University College London states that due to the emerging political power held by city governments, cities should be seen as "political change

drivers of the future” (UCL 2018). Throughout history, cities have been central in the enhancement of civilisations and have shaped the structure of international relations. Today, some megacities already have more political power than nation states (Curtis 2014). They already bring political capital and bargaining power to the table in high-ranking political forums which were formerly reserved for national states only. Now mayors and city governments are included as new players in processes such as the Sustainable Development Goals (SDG), the UN Conference of the Parties (COP) and the Intergovernmental Panel on Climate Change (IPCC). In light of this, local governments will become more important role players in national and global political contexts.

In antiquity, the Greek “polis”, a type of a “city-state”, enabled the first democracy in humankind and was the forerunner of modern democratic states. Trading cities especially became global hot spots with immense political and economic power (Mack 2015). In the last decades, cities took a bit more of a backseat as emerging nation states worked to assert their power and jurisdiction. According to Curtis (2014), cities are once again re-emerging as powerful political actors. After the 1990s, the term “global cities” appeared as cities steadily became hubs of the global economy, and established themselves as the financial powerhouses which seat global corporations (Sassen 1991). Tokyo’s GDP, for example, rose so much that it is now similar to that of countries such as Canada or Australia (Zeller 2018: 68). After the Rio Earth Summit and the adoption of Agenda 21 in 1992, cities increasingly created city networks and alliances with either regional or global agendas.

A study by Lusk and Gunkel showed that city networks mainly work on two fronts: on the one hand, they are used for city-to-city cooperation and establishing learning networks for the sharing of best-practice examples; the 100 Resilient Cities project in Durban is such an established learning network (Lusk and Gunkel 2018). On the other hand, they work as powerful lobbying groups to push their agendas against nation states or multilateral institutions. During the last 15 years the total number of global city networks tripled to around 160 (Zeller 2018: 70).³⁹ Together with all these important global city networks, the Rockefeller Foundation’s 100 Resilient Cities campaign is very often mentioned as another equivalent in this important worldwide city network campaign. In the surge of these

³⁹ One of the first city networks, namely ICLEI (Local Governments for Sustainability), was already founded in 1990 and has around 1.000 member cities which work together primarily in the field of sustainable development. UCLG (United Cities and Local Governments), for example, very strongly promotes the subsidiarity principle for local governance, whilst C40 was founded in 2005 with the aim of bringing together 40 of the world’s largest cities to reduce greenhouse gases in cities, and is today one of the most important city networks involved in the implementation of the Paris Agreement and the Nationally Determined Contributions (NDCs). Currently 94 cities are members of the C40 network, amongst them Johannesburg, Cape Town and Durban from South Africa and Berlin from Germany. Durban is part of the C40 steering committee.

global city networks, a new global community has emerged with considerable political influence on all global and national political processes.

On a political note, when it comes to local government and its cooperation with the national government, it is important to mention that there are now a number of big African or capital cities where the ruling parties are in opposition to the longstanding national ruling party (e.g. Johannesburg, Cape Town, Pretoria, Harare, Bulawayo, Dar Es Salaam, Addis Ababa), and they often follow different ideological approaches with regard to urban resilience and transformation processes than the national government. Such non-compliance to urban national policies and strategies could indeed hamper urban development, but in some scenarios this may also lead to more independent and stronger cities. With regards to political aspects, it could also lead to stronger politicisation of urban spaces including more political awareness and participation. In light of this, local governments will become more important role players in national and global political contexts, and therefore must prepare themselves with more know-how and expertise concerning the conceptualisation of urban development projects. This can be done either in cooperation with international city networks such as the 100 Resilient Cities network, or by expanding the internal know-how by affiliating with local think-tank, universities and academia or establishing municipal learning centres (such as Durban's Municipal Institute of Learning (MILE) which was mentioned in chapter 7). Such new collaborations have the potential power to foster transformative and resilience thinking in urban development projects.

8.2.4 Urban development policies in South Africa

The South African City Network study from August 2014 (SACN 2014: 3) found that many African countries do not have integrated urban policies. According to this study, in sub-Saharan Africa only Ghana and Nigeria have integrated urban policies, with Kenya and South Africa in the process of developing theirs. However, if we look at South Africa, the significance of urbanisation combined with growing service delivery protests—as highlighted in chapter 4—have prompted the South African government to rework the Integrated Urban Development Framework which was officially announced by former President Jacob Zuma during his 2013 State of the Nation address (SONA). Meanwhile, the National Treasury also launched a City Support Programme to work with the country's eight major metro municipalities, amongst them Durban, in support of institutional capacity to promote spatial transformation, climate resilience and good governance. On the provincial and local levels there are partly more progressive and forward-looking plans, namely the Provincial Growth

and Development Plan and the Integrated Development Plan (IDP)) respectively. The IDP is a participatory planning tool created through several community consultations, but is at the same time a very broad document.

In Durban—according to some of the expert interviews in chapter 7—participatory management and planning is still partly deficient, though the Environmental Planning Unit of the city of Durban takes on an active leadership role when it comes to participatory urban resilience planning. The unit has further managed to allocate significant internal funding and additional international funding for their projects, which means that more staff members can work on different projects and have more time available for engagements with stakeholders or citizens. The successful application for funding from the Rockefeller Foundation is only one example; others include established city-to-city partnerships such as the one between Durban and Bremen in Germany in the field of climate change and environment. It very much seems that the staff in the department is continually working on the issue of participation and actively attempts to engage deeply with local communities and other stakeholders (see chapter 7).

8.3 Situating the 100 Resilient Cities campaign from a global to a local context: an analysis

8.3.1 The Cities Resilience Framework (CRF) and the local context

The 100 Resilient Cities Resilience Framework (CRF), as part of the 100 Resilient Cities campaign, was designed by consultants of the Rockefeller Foundation as a universal framework, enabling participating cities to build their own strategies and to compare and share knowledge. The CRF contains four critical dimensions of urban resilience: health and wellbeing, economy and society, infrastructure and environment and leadership and strategy. Each dimension is underpinned by three drivers. It furthermore identifies another seven qualities of resilience as critical to achieving greater resilience as shown in chapter 6.2.3.

A first issue with the CRF is that political institutions are not really recognised and addressed. The CRF is more systems-based than political and participatory, and takes a rather a technical and systems-based approach to resilience. This is not very helpful in the transformational approach of the local 100 Resilient Cities project in Durban. Another criticism of the CRF framework could be that informal economy and citizen participation are not mentioned in the overall framework. Here, one can assume the development of the model as a western-originated one. The main difference between the general concept of CRF and Durban's adaptation of it is that the CRF views resilience as the end goal whilst Durban's 100 Resilient Cities project sees transformation as the true aim. Since the CRF

was the framework presented right at the outset of the project by the Rockefeller Foundation, much time was spent deciding how to use the CRF in a way that speaks to Durban's realities. These were subsequently articulated in the stakeholder workshops (see chapter 6.3).

To see resilience as an end goal is probably more appropriate in cities with stable and well-established systems which are endangered, for example, by environmental risk and disasters. In such contexts, resilience provides an opportunity to recover and improve within the present state. In cities where systems are still in flux, and where there are opportunities to create alternative development pathways to enhance human wellbeing and sustainable development, participatory processes that explore political and governance relations are crucial to determining the nature of the desired city system. In such contexts, resilience provides an opportunity to transform from the present state into a "new normal" (see chapter 8.3.1). Here, the principals of Durban's approach are very participatory, have a strong grounding in local context, and put the co-creation of knowledge in the centre of the process by adopting a bottom-up approach. This resulted in the prioritisation of the six "levers for change", providing the framework for developing Durban's resilience strategy (see chapter 6.3.3.2).

In general, the CRF framework may be suitable for certain cities, but it does not adequately address the particular socio-economic and political contexts within which resilience is embedded in more complex and diverse cities such as Durban where, as the 100 Resilient Cities journey presented in chapter 6 showed, the end goal is transformation. This thesis showed that Durban needs a transformative approach rather than a resilience-only approach. In cities such as Durban, resilience frameworks should be constructed from the bottom up and adopt participatory approaches, rather than be imposed as a framework from above. In this way, resilience should be defined by multiple actors in relation to each city's particular geographical and historical context. This is what happened during the Durban 100 Resilient Cities project and during the expert interviews in the thesis (see chapters 6 and 7). Moench supports this approach, as he argues that resilience should be built through decentralised, multi-actor governance regimes which recognise local system characteristics (Moench 2014). Durban's 100 Resilient Cities journey tries to follow this trajectory. This shows the complications with models originating from the global north when being adapted in cities of the south.

8.3.2 The participation of stakeholder

The 100 Resilient Cities project in Durban was a remarkably participatory and timely project given the increasing criticisms in Durban as raised by some interview partners in respect to many other isolated and non-participatory municipality-driven projects in Durban. Right from the outset, the 100

Resilient Cities project focussed on exploring the local Durban view of resilience by including multiple stakeholders and not simply taking over the presented CRF framework without consideration of local needs and views.

When the local 100 Resilience Cities team entered the stakeholder participation phase they had no real sense of what resilience meant—at least, this was what they presented to the stakeholders in the very first workshop beginning of 2015, given the absence of a well-defined understanding of what resilience means in Africa in general and in Durban in particular. The team therefore approached the Durban stakeholders with the aim to be guided both by stakeholders' views and the CRF framework. Firstly, it was broadly considered that besides strengthening the technical infrastructure (after floods and other natural disasters) of Durban, socio-economic development issues such as informality, corruption and political stability were the most prominent resilience arenas resulting from the stakeholders' consultation processes. The notion and argument of resilience in these meetings shifted, according to input from stakeholders representing the environmental sphere, quite quickly to focussing more on the socio-political sphere. Given the background of the team (all of them environmentalists) the whole process seemed to be a learning-by-doing journey for them, also.

Most of the experts interviewed did not identify themselves with the concept of resilience, as the concept would imply rather negative associations and a focus on “surviving” rather than transforming current practices to do things better. Instead, the provision of basic services, building social cohesion and trustworthy leadership, and securing multiple revenue streams for the municipality in the face of a future where government will find it increasingly difficult to provide services, are all seen as foundational components in thinking about resilience. This was a clear outcome of the interviews conducted in chapter 7.

Resilient planning was defined in the stakeholder workshops as something similar to setting up a series of conversations and processes that allow all stakeholders included in the process to think and do things differently. Hopefully resilience can then be seen as a catalyst to provide the momentum needed to cater for a transformed future. In Durban, this trajectory could be followed very clearly by following the debates on the stakeholder processes around the topic of informality. Formerly, informality in settlements was seen as areas that have to be removed from the urban landscape. During the stakeholder meetings (according to some interviewees) for the first time ever in Durban in the framework of such a participatory process, a serious conversation took place regarding what an urban future should look like and what role informality plays in this future.

It is clear that informality should indeed be seen as a new brand of urbanisation in Africa, not by romanticising the term but as a term where resilient approaches are practised on an individual level

in case the government is not able. This outcome of the stakeholder meetings is one of the most important ones in guiding the future process of project implementation in Durban. During the stakeholder conversations, the discourse and debates were quite radical in the sense that ten years ago the political debate in South Africa was mainly around township eradication or renewal programmes. Now, informality was seen as an essential and vital part of African urbanism which must be appraised.

In general, the 100 Resilient Cities project in Durban spent much more time than anticipated in the project outline on these participatory stakeholder meetings. As a result, the Durban project differed quite a lot from the envisaged timeframe of the Rockefeller Foundation, which planned and suggested only six months for the stakeholder conversations. Most importantly, the funding from the foundation was based on this timeline. The Durban team decided instead to spend almost two years on these participatory conversations. At this stage, frustration started to emerge from the representatives of the Rockefeller Foundation as they realised that the process and the timeframe would not work for Durban. Right at the outset of the project, the managers in New York should have taken into consideration the fact that such an inclusive and participatory process needs to be more intensive and broad in a South African city such as Durban, as compared to a city like New York, Athens or those of other western countries. This was one of the first shortcomings of the project planning in Durban, realised by the teams on both sides. The profound participation process of the 100 Resilient Cities project in Durban should in any case add to the sustainability of the project.

8.3.3 Resilience in Durban

The 100 Resilient Cities project in Durban answered the calls for a much deeper and more critical engagement with resilience in the global south, with a focus on African cities. Ziervogel, for example, proposes that resilience for transformation takes into account “endogenous, locally-situated processes, knowledge’s and norms” (Ziervogel et al. 2017), which was adopted in the South African and Durban context by the 100 Resilient Cities project.

Rather than building a strategy through the direct transfer of the dimensions and drivers of the CRF into Durban’s Resilience Strategy, Durban’s process followed a guideline to construct its resilience strategy from within, reflecting the socio-ecological and power relations in the city, as shown in chapter 6. Durban’s approach argued for a form of resilience which is open, flexible and transformative. As resilience is cross-cutting in nature and not neutral or apolitical, recognition of the multiple social constructions of resilience, its political nature, the importance of the local context and the need for transformation shaped Durban’s resilience journey from the outset. In the Durban context, the word

“resilience” mostly refers to the capacity of a city to respond to current and future changes, whether social, political, economic or environmental, by initiating and strengthening areas that enhance the ability to respond to change and to transform systems. Developmental issues are a key part of the resilience journey. In complex socio-institutional contexts, addressing development deficits in cities is key to building resilience.

Durban’s view of resilience was as a step to a broader transformative situation where true sustainability on environmental levels, justice on social levels and equity and stability on political levels could be achieved (see chapter 6.4). The fundamental difference between the Rockefeller Foundation and their developed CRF framework in light of the Durban project is that the Rockefeller Foundation sees resilience as the end goal and not a means to transformation. In the Durban understanding, resilience is more a necessary evil to create momentum and to shift the mind-sets of people towards urban transformation processes. This contradiction finally led (close to the end of the three-year programme cycle) to the withdrawal of Durban from the official 100 Resilient Cities campaign. After the detailed analysis of the project in chapters 6 and 7, this withdrawal does not come as a surprise. Besides conceptual differences, the “Durban journey” also shed light on “dark” urbanisation areas such as informality or housing. As the Rockefeller Foundation did not want to focus on them, Durban went its own way—away from the Rockefeller Foundation, which was ultimately not accommodating enough to accept a resilient strategy which differed from their thinking and understanding of what resilience means. Durban on the other hand was not really prepared to change its participatory strategy, which was only a rightful decision. As a consequence, Durban withdrew from the official project before the official funding cycle ended. This also means that Durban ended up putting two or three times more of its own funds into the project than the Rockefeller Foundation had. In the end, Durban proclaimed its two own Resilience Building Options (RBOs) without the guidance of the Rockefeller Foundation. The withdrawal does not mean that Durban is no longer mentioned in official records or 100 Resilience Cities documents, and Durban is still listed in its latest publication of the 100 Resilient Cities campaign (Rockefeller Foundation 2019).

The two proclaimed Resilience Building Options framed the end of the three-year project. Given the focus of the RBOs (see chapter 6.3.4), Durban’s Resilience Strategy captures a complex mix of issues associated with social vulnerability, informality, ecological degradation, politics and governance. All of them have to be addressed as part of the city’s resilience building efforts, and point to the need for a new form of African urbanism characterised by new partnerships, transformative change and the ability to build on and enhance existing strengths in human and natural systems. Given the complexity of the still-theoretical Resilience Building Options on paper, interventions are likely to take time and

respective projects need stamina to be implemented in the next years. What makes it even more complicated, especially with Resilience Building Option 2 (“addressing integrated and innovative planning at the interface between municipal and traditional governance systems”), is that Durban’s most resilient challenges lie in a developmental context and are often not approachable with formal governance procedures. Therefore, a new collaborative system of formal governance and traditional governance structures is needed.

8.4 Conclusions

The following conclusions sum up what has been elaborated in this thesis up to this point:

- Multi-sectoral and interdisciplinary approaches are crucial for urban transformation (8.4.1)
- The local case is always connected to the global arena (8.4.2)
- City-to-city learning and networking is beneficial (8.4.3)
- Participation and citizen-centred cities are important (8.4.4)

8.4.1 Multi-sectoral and interdisciplinary approaches are crucial for urban transformation

Chapters 3 and 5 of the thesis highlighted the importance of urban transformation in reaching global development goals. Based—amongst others—on the analysis of the SDSN and their background paper to the Post-2015 Development Agenda called “The Urban Opportunity: enabling transformative and sustainable development” (SDSN 2013), this thesis made it clear that a multi-sectoral and resilient agenda in urban management, accompanied by a common political vision, is needed to trigger urban transformation processes in a city. These processes are complex and require integrated and collaborative thinking by forward-looking city governments, which do not necessarily think in short-term political or electoral timeframes.

Cities require new and improved modes of governance which comprise institutional innovation, flexible policies and interdisciplinary management. City managers and their teams, however described, will be largely responsible for developing and implementing urban transformation strategies. Now most governance structures are overwhelmed by a combination of inadequate, fragmented and uncoordinated frameworks. As has been described in chapter 6, the city of Durban rebuilt its own departmental structures to accommodate the 100 Resilient Cities project and its sustainable institutional

anchoring in the city. At the beginning, Chief Resilience Officer Debra Roberts was temporarily excused from her duties in the ECDP department of the municipality in order to lead the 100 Resilient Cities project team. After termination of the project, a new position in the municipality was created: the “Sustainable and Resilient City Initiatives Unit” which Debra Roberts has been heading since 2016. This new unit in the municipality has the chance to continue the outstanding work from the 100 Resilient Cities project and to implement the two outstanding Resilience Building Options. This aspect of institutional backing and incorporating the term “resilience” into a dedicated unit by the municipality could be a huge success for sustainability of the project.

For a coherent and inclusive governance framework, universities and think-tanks should be considered as important stakeholders in the process to enable necessary knowledge transfers between individual levels, society and government; something like “integrating motors” between different societal spheres. Here, when it comes to the academic landscape and its supporting role in urban transformation processes, two further areas need to be considered more carefully. First, a multidisciplinary approach is crucial right from the outset. Second, a practical research approach is also very important, since academic language needs to be translated for communities and for the government actors. A regular exchange between local government and academia should be institutionalised. The expert interviews shed some light on an exemplary case of such an institutionalised exchange in Durban, namely the Municipal Institute of Learning (MILE) whose progressive approaches were directly linked to the municipality and its actors. Platforms like this need to be fostered and strengthened because, according to most experts, true exchange platforms are still missing in Durban. As a crucial precondition for reaching transformation processes around the implementation phase of the 100 Resilient Cities project, such exchange platforms need to be set up and improved in Durban.

As a result of the multi-sectoral and transformative approaches described in this thesis, politicians should become less concerned with predictions and control in general and more focussed on adaptable and flexible urban management to be implemented, for example, by experimentation, learning-by-doing, and by taking calculated risks. In times of uncertain national politics and globalisation, experimentation could lead the way to easily identify much-needed transformative areas and advantages. New forms of institutional innovation could be an outcome of such tentative urban processes. Chapter 4 described, amongst others, the “City Without Walls” project in Durban which could be one such transformative risk-taking process in which the municipality, academia and citizens are working together to explore new solutions. Such existing projects should be integrated into the 100 Resilient Cities project and its implementation process. Much more work and exploration needs to be done

with regard to such experimental and risk-taking projects. The implementation phase of the 100 Resilient Cities project should also incorporate the best-practice examples which already exist in Durban.

As a warning, it should be mentioned that all multi-sectoral and interdisciplinary approaches will face blocking mechanisms in the future—not only as a result of technical path dependencies, but also from static, long-established constellations of stakeholders, and a lack of financial and institutional capacity. All stakeholders must take this fact into consideration at any time in a transformative process. As African cities are characterised by overlapping and even competing systems of power (Pieterse and Parnell 2014: 10), this is of special importance regarding the second Resilience Building Option in Durban around traditional governance systems. It will be important to identify where the real political power is located.

8.4.2 The local case is always connected to the global arena

Durban is a local case, but urban development is not just local. The scale and speed of urbanisation makes the development of cities a central field of action to achieve the goals of the global development agenda such as economic and sustainable use of energy and resources, the protection of the environment, and more sustainable and locally-adapted models of economic activity and social coexistence. All of these are issues for cities both in the south and the north, even if they start from very different positions.

The speed of urban transformation processes will be influenced strongly by political decisions. Here, a paradigm-shift away from decisions taken on the basis of existing power networks and short-term policies to political decisions taken on the basis of strategic long-term goals are fundamental. Resilience, how it was understood previously, was in a way short-termed. It mainly presumed the status quo and oriented itself according to the status quo. For long-term planning, one needs to consider future-oriented solutions which are not based on the status quo. One should not look to the future from today's perspective, which usually repeats the path already being followed. One should look back to the present from a desirable future perspective and ask which path should be followed and where the dead-ends are. Such different ways of thinking could lead to a crucial change in planning and open up new narratives to transformative futures.

The current global trends also speak strongly to the need to re-think the nature of existing systems, whether these are economic, financial or ecological models, or governance systems. Rethinking already takes place when we consider, for example, the “green economy” as an approach to decoupling

economic growth from consumption of resources or, for example, when we think about more active and engaged citizens, supported in a significant way in the future by technological tools and social media. Here, every individual city must seek its own way to a resilient and transformative future. This “Eigenart” (a German word meaning “character”) is important in creating identity between the citizen and the city itself, but also for tapping into each city’s specific potential for creativity and innovation. The WBGU (2016) has already mentioned “Eigenart” as part of any future transformation discussion worldwide.

Patterns of urban change in Africa begin to appear as a political topic in the north as inequality increases and migration continues, particularly across Europe. The informal sector is also growing in northern cities along with an emerging coping strategy for those who cannot access the formal system. Cities of the global north, even more than cities in the south, have well-established and entrenched development paths that will need to adapt to new challenges associated with informality and inequality. Durban has attempted to construct an African conceptualisation of resilience which is embedded in its particular socio-economic context, history and geography. Durban is an African city with a colonial infrastructure heritage and is therefore of relevance to other African cities, especially since the two Resilience Building Options on informal settlements and traditional governance are targeting challenges in the same fields as other African cities. African cities still have the opportunity and potential to choose alternative development paths that lead to transformation. As conditions in cities differ very much, it is impossible to develop blueprints that can be implemented in exactly the same way everywhere in the world. Democracy is always vital because only democratic leaders are able to devolve power to cities and their governments. It should always be kept in mind that local problems can only be solved by local solutions.

8.4.3 City-to-city learning and networking is beneficial

Many progressive local governments are members of city networks where best-practice and city-to-city learning are collaboratively shared. For example, the C40 network mentioned in chapter 8.2.3, ICLEI or the 100 Resilient Cities campaign are all relevant to the spread of new discourses and results. In general, transformation processes require such a dialogue, networking and learning, and even though global and regional city networks are gaining momentum and influence, it remains unclear how shared learnings, knowledge exchanges and collaboration in global city networks support new forms of city governance, for example around mainstreaming and adaptation of global urban development projects.

For the southern African context, Moodley (2019) highlights that understanding and interpreting the dynamics of associated complex learning processes needs to be more strongly considered in academic

debates also. With reference to a UCLG (United Cities and Local Governments network) sponsored “mentorship programme” in the cities of Durban, Otjiwarongo (Namibia) and Mzuzu (Malawi), Moodley points out that much resistance was offered regarding the terminology of “international” concepts (Moodley 2019: 37). He recommends that policy-makers should be much more sensitive around the definition of key concepts. Analyses like these show the rationale for more theoretical research where the concepts of urban resilience and urban transformation are structured, analysed and put into context.

According to Tim Campbell’s study “Beyond Smart Cities: How Cities Network, Learn and Innovate” (Campbell 2010) which sums up this idea, collective learning through networks (of individuals, organisations or think-tanks) leads to transformational change. His study is based on examples of several cities around the globe which have achieved important transformations and in which networks are already operating. Building better linkages and networks should also help to address local and global challenges by bringing people together in interdisciplinary and participatory ways that provide opportunities to integrate existing knowledge in innovative and ultimately transformative ways.

The case study of Medellín, presented in chapter 5.7, showed that a city which not long ago was seen as synonymous with anarchy, violence and crime can be transformed. A dedicated city government armed with comprehensive security concepts and economic and infrastructure plans was able to turn around a situation that many saw as hopeless. The critical ingredients were recognition of the severity of the situation and a leadership that took responsibility for both the problems and the solutions. The positive lesson for African leaders from the Medellín example is that change can happen in a short period of time.

8.4.4 Participation and citizen-centred cities are important

Cities are not a collection of houses, streets and public places. They are also the sum of their citizens. Citizens create social relations and build society. In theory, the ideal model of a citizen as someone who participates is generally too pre-set, since citizens are not always interested or able to participate in urban decision-making processes. Political polarisation is also a huge problem when it comes to political participation, and a different form of participation is required where citizens evolve from “inhabitants” to “politically active citizens”.

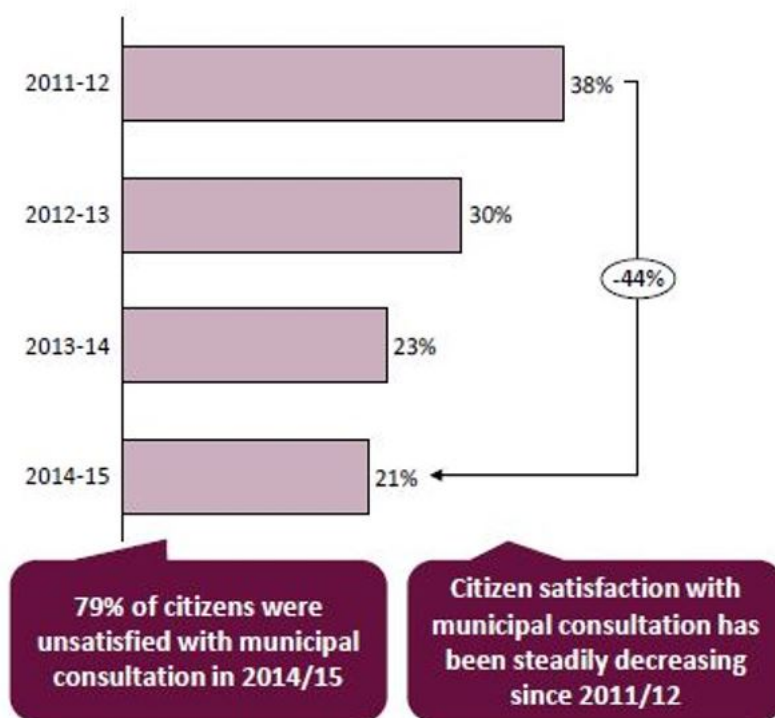
This was shown in the process of the 100 Resilient Cities project and stakeholder meetings (chapter 6). Participatory governance systems with participatory processes and integration of civil society were important. Input from civil society must always be connected with academic levels so that both are

connected, thereby having a stronger say in urban policies. In highly-regulated but fast-growing cities it is also important to establish spaces for testing out new forms of resilient living. Appropriate IT-solutions such as apps and mobile information must be developed to make the most of the possibilities offered by the digitalisation (see chapter 4). “Urban crowdsourcing” could be a new model of participation in cities. The city makes data accessible to its citizens, for example via apps, and the citizens participate and share the data and figures. The role of the local government is to share all the relevant information with its citizens so that in the end accountability is promoted.

What is still lacking on the city level is a full understanding of the extent to which innovation already exists in communities, in NGOs and in the private sector. Also, the opportunities to utilise this creativity and better coordinate it across stakeholder groups are not fully acknowledged. This applies especially to Durban, as expressed in expert interviews in chapter 7. The 100 Resilient Cities project was quite aware of this and tried to follow the suggestions as best it could.

A municipal survey from the year 2015 (see *fig. 38*) shows that in the year of the beginning of the project (2015), only 21 percent of Durban citizens were satisfied with municipal consultation. Four years earlier (2011/2012), the percentage was 38 percent and has been steadily decreasing since then. This shows that the chosen focus of the 100 Resilient Cities journey on participation was a needed, timely and correct approach for Durban to end this decrease in satisfaction.

Fig. 38: Citizen satisfaction with municipal consultation in Durban



Source: eThekweni Municipality (2015)

As a participant in the 2014 stakeholder's workshop pointed out: "The current political system does not promote participation and engagement with people. People feel disempowered by the ward committee system as their issues are not taken forward. People want to participate in processes and want to have a voice". In this context, it will be crucial to give more recognition to informal governance structures and to consider their residents' needs and rights due to the fact that, significantly, Resilience Building Option 2 addresses this interface between municipal and traditional governance systems. Here, it will be of importance to include citizen voices, even if this might have to be done in a different way according to language and traditional barriers.

8.4.5 Final results

As shown in chapter 1, the following hypotheses guided the argument of the thesis:

1. The 100 Resilient Cities campaign is not designed for cities of the global south.
2. Urban transformation can only be achieved with urban resilience as a starting point.
3. The concepts of urban transformation and urban resilience are only successful if adapted to the local context and with participation of local stakeholders and citizens.

Concerning hypothesis 1, it is shown in chapter 6 that the 100 Resilient Cities campaign was originally not designed for cities of the global south. The current framing of resilience was the result of a discussion by academics and experiences originating from the north (as seen in chapter 3 and 5). As the thesis has shown, a much deeper and more critical engagement with resilience is necessary, taking into consideration the special context of the global south. Resilience for transformation has to take into account local processes, indigenous knowledge and practices, and the local culture.

Hypothesis 1 is verified.

Concerning hypothesis 2, chapter 5 shows that urban transformation can only be achieved with urban resilience as a starting point. Durban's approach argued for a form of resilience which is open, flexible and transformative. Resilience is cross-cutting and has an important political aspect. The multiple social constructions of resilience and the importance of the local context (see hypothesis 1) show clearly that urban transformation can only be reached by a process starting with an interrogation of the concept of urban resilience. It has been shown that in the Durban context the word "resilience" mostly refers to the capacity of a city to respond to current and future socioeconomic, environmental or political changes by initiating and strengthening areas of work that enhance the ability to respond

to change and to transform systems. Resilience is a necessary response to local problems in the present and therefore a driving force for transformation, which should be considered as the real end goal.

Therefore, hypothesis 2 is also verified.

Concerning hypothesis 3, the thesis has shown in chapters 5 and 6 that in the context of Durban the concepts of urban transformation and urban resilience were successful as they had been adapted to the local context, and by emphasising complex local participation processes.

The general concept of urban transformation and urban resilience is per se suitable for certain cities, but it does not adequately address the particular socio-economic and political contexts within which resilience is embedded in more complex and diverse cities. This thesis confirmed that Durban needs a transformative approach rather than a resilience-only approach. Urban resilience should be defined by various actors in relation to particular social context. The concept of resilience is only successful if based on decentralised, multi-actor governance regimes. This again shows that only models or concepts adapted to cities of the south can work.

Hypothesis 3 is likewise verified.

8.5 Recommendations

As shown in this thesis, equality, safety and security, ecology, economy, infrastructure, transport, housing, education, health, job creation, migration and all the other governance challenges depend on each other and therefore influence each other. A solution linking these aspects might be the “silver bullet” to solve urban problems with transformation. Upcoming urban challenges demand multi-sectoral and multidisciplinary approaches rather than traditional reliance on “silos” of policy and practice. As Walker (2015: 12) submits, new models for effectively working in an integrated manner are required on local, regional and international scales.

African leaders face dramatic socio-economic and environmental challenges (stresses and shocks) in their cities as described in detail in chapter 4, which will require a sharp deviation from the status quo. Since urban transformation is also a process, theoretical and empirical research plays a crucial role in helping to determine outcomes. This is especially true for a combination of theoretical and empirical research methods, as tested in this thesis, resulting in a study which is based on theories of urban transformation and urban resilience, but including very special local components of the city of Durban.

Research can advance transformation processes both by triggering the innovations needed and by contributing to a better understanding of the processes of change. Collaborating in development projects such as the 100 Resilient Cities campaign plays an important role in supporting resilience or even better, in transformation. Such cooperation reduces the underlying social and economic drivers of vulnerability in cities, and mainstreams resilience into development planning and processes. Projects like the 100 Resilient Cities project in Durban also play an important role in assisting governments and civil society to meet the overall urban challenges of the 21st century. However, they should never be seen as redeemers for all problems, but rather as sparks that ignite transformative processes.

Cities of the south are beginning to redefine the future of cities (Oldfield and Parnell 2014; African Policy Circle 2019: 14). This means that new ways of understanding cities need to be developed, reflecting both southern and northern urbanism to embrace the complex ways in which cities across the world are changing. Durban's 100 Resilient Cities journey has started to do this by constructing a resilience strategy in its own context, rather than purely applying one to a framework developed from a northern, global perspective without adapting it to the local context.

Durban's 100 Resilient Cities journey tells its own story of an African city with huge challenges around informality, environmental constraints and social vulnerability, which need to be balanced by politics and local governance. Documenting Durban's Resilience Strategy represents an important contribution to this debate, and as the strategy continues to develop during the upcoming implementation process, it may extend far beyond the two current Resilience Building Options which could lead to real transformation in Durban. With the 100 Resilient Cities project, the necessary steps required to start a transformative process have been identified.

Durban's upcoming implementation of the two Resilience Building Options will however not ensure that transformation will occur automatically in Durban. Further Resilience Building Options need to be added and long-term commitment from all the stakeholders in the city is required. The 100 Resilient Cities journey in Durban has nevertheless definitely made a contribution to the global debate on resilience and transformation. The bottom-up approach in Durban has much greater potential for transformation than, for example, the SES approach introduced in chapter 5.5.2 which constituted the base for the Cities Resilience Framework (see chapter 8.3.1).

Durban's participation in the 100 Resilient Cities campaign provided an opportunity to gain new perspectives in a "politically neutral space" to reassess the city and to gain new insights in a context where the overwhelming nature of many of the challenges does not facilitate reflection. If the initiated deliberations will be led by political leaders with the intention to produce a transformative city for all, Durban may be able to cross the threshold into a new development path.

In a preliminary evaluation regarding progress of the institutionalisation of urban resilience in all the 100 Resilient Cities campaign member cities worldwide, it was shown that most of the cities have strong collaborations between different government departments, and have established inclusion of the private sector and civil society (Urban Institute 2018; Fastenrath et al. 2018). One can hope that this will also become reality in Durban.

All this could generate a more holistic model of governance which is, as highlighted in chapter 5, a precondition for urban transformation. It is furthermore critical that the participatory governance approach to resilience, which has been established with Durban's 100 Resilient Cities journey, is further developed and enhanced, and that the strategy will be implemented in the near future. The withdrawal by the city of Durban from the 100 Resilient Cities campaign came very close to the official end of the project. In the end, Durban just did not use the allocated full budget of the Rockefeller Foundation, but replaced it with its own funding. The project end thus did not come as a surprise, and one can only speculate about the meaning and interpretation of the withdrawal.

Finally, Durban's journey has revealed important insights about what resilience means in the context of an African city with colonial spatial legacy. From the outset, during the stakeholder meetings resilience was seen—quite negatively, by some Durban citizens—as a term which might bounce a city back to the “bad (apartheid) spatial system” and which needs to be replaced and overcome. The concept of resilience was not seen as a positive model for Durban, so the term transformation was deliberately and wisely substituted in by the 100 Resilient Cities project team. What emerged from this is the following: resilience should be understood as a framework of how cities prepare themselves to respond to current and future change. As an integrative rather than stand-alone concept, resilience can provide a framework to synergise different policies and solutions so that cities can “bounce forward” to an improved state. In the context of cities like Durban, resilience needs to be seen as part of a broader journey towards transformation, and that part of this journey must challenge inappropriate systems (e.g. poor governance structures and inequality) that threaten to undermine a resilience agenda rather than maintain them. In this regard, dealing with chronic deficient systemic and developmental issues is important for the resilience agenda of cities like Durban.

In general, the 100 Resilient Cities strategy needs to take into account the developmental context of South Africa, and there needs to be a balance between ecological protection and economic development. The process of developing a resilience strategy in Durban has also highlighted the spectrum of resilience action required in cities and emphasises the need for every city to be able to determine the course of its own resilience journey, so that the likelihood of the outcome is accepted and implemented by local stakeholders. In Durban, this process was driven by the 100 Resilient Cities project

team with a determination to reduce the complexity and broadness of the concept and to come up with concrete Resilience Building Options for Durban. Over the course of the three-year project, the 18 initial resilience issues from the first broad stakeholders' engagements were nailed down to six resilient focus areas (see chapter 6.3.2.4) and through making use of the "levers of change" concept finally led to two Resilience Building Options. This process was exemplary, but was nevertheless defined by the aim to come up with concrete proposals for implementation. Durban's "resilience journey" was definitely a very iterative and interactive one that continually drew on new and different perspectives to add depth and insight into the theoretical concepts of urban resilience and urban transformation. In general, Durban's 100 Resilient Cities journey was more a process than an outcome-oriented approach. One possible result of the 100 Resilient Cities project could have been that the project was "just another talk-shop" without any implementation, as one interviewee put it during the expert interviews. It is yet to be seen if the 100RC project will be called a missed opportunity in the future, or if it will at some point trigger practical transformative processes in Durban.

The theoretical understandings and conceptualisations during the stakeholder workshops were of great significance, not only for the sake of documentation like this, but also because it provided a platform for a much-needed space for deliberative thinking in Durban. Furthermore, it motivated local stakeholders to leave their comfort zones and to see where new spaces of thinking and acting can be opened and where room for manoeuvre might be. Whether these spaces really will open up, only time will show. Inevitably, structural change does not happen overnight. Fundamental changes in value systems and institutional structures are needed, and this precondition is now enabled and activated in the city.

Institutionalisation and implementation are keys to sustainability. Passing by-laws and ensuring a proper budget will be important next steps, but the real decisive struggle will be to ensure that actions will be implemented in the same participatory and visionary spirit in which they were conceived and developed during the 100 Resilient Cities project. Unfortunately, city administrations and their project teams very often find themselves easily falling back into old situations where silo thinking gets reinforced. The saying that those who do not start a new way of thinking or working make no mistakes should be changed into the opposite: Those who start new ways may make mistakes, but they should be encouraged to do so. This philosophy change must be embraced by municipal leadership.

A real practical cornerstone will be to get full political backing to implement some of the significant changes and strategies. This is especially tricky since different municipal leaders approved the outset of the project. After the 2016 local elections, not only did the mayor and the city manager change,

but the agenda of the new ANC provincial administration was not yet clear. The city council of Durban only adopted the final Resilience Strategy after the end of the project but, to the knowledge of the author, wasn't involved during the period of the project. One might question if the council should not have been involved at an earlier stage in the process to secure stronger political backing straight from the beginning, and with it political sustainability. The more parliaments, or in this case city councils, are involved in political projects such as the 100 Resilient Cities project, the better. Without the needed political support, the project in Durban could end early on without having had any practical transformative effect or, in the case of progressive, forward-looking local government, it could start in a similar way to the one in the city of Medellín years ago. Such an interrogation should be part of additional research in this field. As the Rockefeller Foundation (2019: 194) pointed out in their final report, it was the complexity which prompted Durban's 100 Resilient Cities project team to question the traditional model of African urbanism, which was largely based on western ideas and practices, and to drive toward building transformative new partnerships that shift the paradigm on informality in the African city.

The role of local governance and how visionary and participatory local governance can play a key role and be a change agent in any transformative process has been elaborated on in this thesis. The interviews conducted in the course of the dissertation played an important role as a marker, to prove whether the research is on the right track. In most occasions, they confirmed the theoretical critique and analysis regarding the local adaptation of the terms of urban transformation and resilience. Only in some rare cases did some interviews emphasise a very different analysis, e.g. on the notion of the term "urban resilience". It is critical to bear in mind that there are deficiencies in our understanding of harnessing the benefits of urbanisation, because the focus of most academic debates has been confined to developed or partly-emerging countries. The analysis of international literature clearly leaned to the positively-framed term of resilience. It is interesting but understandable that the view of many Durban experts of the concept of resilience is different from theoretical debates and in general more negative, as resilience would "keep the undesirable status quo". Here, one can see the specifics of a different connotation derived by the very separate circumstances of a "city of the south", with problems such as large inequality and a troubled past, in comparison with more developed cities in the global north, where maintaining the status quo is in fact a desirable state. Therefore, the advanced and more progressive concept of urban transformation, based on urban resilience, is the method of choice for cities such as Durban. There is much to say concerning the concept of 'Eigenart'—or character. Durban's 'Eigenart' is naturally one of great inventiveness and creative innovation. When considering the 100 Resilient Cities project in this context, it becomes ever more clear that true success in tapping into the city's potential to transform via resilience is not in the project or the politics

or the people alone, but rather in strengthening the power and clarity of communication and innovation across these lines.

The thesis shows that cities in the global south such as Durban are still grappling with what it means to be resilient, and are more preoccupied with how to transform. There is an awareness that transformation and resilience are linked, but resilience has to embed the reality of frugal institution building. This includes an embracing of the informal and ensuring that informal structures and processes are enabled and recognised as an integral part of an urban system in cities of the south. This makes generating sustainable transformation very different in the global south to the global north. Having said this, in troubled economic and social times, frugal institution building will most likely be desirable in the global north, making south-north learnings possible in the context of the new urban agenda. Without this recognition, one might find that attempts to universalise urban development goals are stopped dead in their tracks not because of problematic intentions, but because of the very many inextricable contingencies that impact on low- to middle-income cities. What this calls for is a better understanding of the matrix between urban sustainability, resilience and transformation. This research therefore describes the concept of urban transformation as a possible new urban development paradigm, one which could be better understood by analysing more case studies such as the one selected in this dissertation.

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List of annexures

- A. Letter of approval from eThekweni Municipality
- B. Letter of information for interviewees
- C. List of interviewed experts
- D. Interview Guideline / Questionnaire
- E. Indicators for SDG-Goal 11 “Make cities and human settlements inclusive, safe, resilient and sustainable”
- F. List of stakeholders in the 100RC campaign in Durban
- G. Set of ten infographics presented to stakeholders during the stakeholder engagement stage
- H. Article 1: Feltes, T. (2018) Mastering Africa’s Urban Future. Safety and Security in South African Cities. *International Reports (AI)*, Vol. 3, pp. 38-50.
- I. Article 2: Feltes, T., Musker, S. and Scholz, P. (2018) Regional Governance of Migration in the SADC: Migration Regimes and Their Implications for the Experience of Refugees and Migrants in South Africa. In: Kury, H. and Redo, S. (eds.) *Refugees and Migrants in Law and Policy*, pp. 555-577. Cham, SPRINGER International Publishing.



Sustainable Development & City Enterprises
Development Planning, Environment & Management Unit
Environmental Planning & Climate Protection

166 K E Masinga Road
P O Box 680, Durban, 4000
Tel: 031 311 1111, Fax: 031 311 7776
www.durban.gov.za

16th March 2016

File Reference: DRCRO1

Enquires: Dr Debra Roberts

Telephone: 031 3117527

Dear Sir/Madam

RE: APPROVAL FOR MR TILMANN FELTES TO CONDUCT RESEARCH ON THE 100 RESILIENT CITIES PROGRAMME IN DURBAN.

This letter serves to confirm that the eThekweni Municipality approves the research that Mr Tilmann Feltes will conduct toward his PhD (Topic: Urban transformation and urban resilience) at the Urban Futures Centre, Durban University of Technology (DUT), which includes the following:

1. Observing and participating in public meetings or forums that are linked to the 100 Resilient Cities Programme in Durban;
2. Reviewing public documents and minutes pertaining to the City; and
3. Conducting interviews with officials from the eThekweni Municipality whose work resonates with the 100 Resilient Cities Programme.

Should you require further information, please contact me on 031 311 7527 or debra.roberts@durban.gov.za

Dr Debra Roberts

Deputy Head: Environmental Planning and Climate Protection Department and Chief Resilience Officer
eThekweni Municipality

LETTER OF INFORMATION

Dear research participant, thank you for showing interest in this study. Please find below some more information and all necessary data about the research project.

Title of the Research Study:

“Urban Transformation at a local level. The case of Durban’s 100 Resilient Cities campaign”

Principal Researcher:

Tilmann Feltes, M.A.

Co-Investigator/Supervisor:

Professor Monique Marks, Urban Futures Centre, DUT

Brief Introduction and Purpose of the Study:

With the background of rapid urbanisation in Africa, the study will look at city governance as an anchor point and “driver of change” for urban transformation processes. Durban’s 100 Resilient Cities project (2014-2017) will be used as a case study to interrogate the local meaning of urban resilience and urban transformation processes in Durban.

Outline of the Procedures:

In addition to detailed theoretical desktop research, for a more detailed insight into the local understanding of urban resilience and the 100 Resilient Cities project in Durban, interviews with selected participants will be conducted. The interviews will be semi-structured with the use of a questionnaire. The questionnaire will be sent via e-mail beforehand to the interviewees with the option to respond either via e-mail or via skype interview.

Risks or Discomforts to the Participant:

The research does not involve the collection of or access to any private, sensitive or personal related data and there is no foreseeable risk of harm or discomfort to participants.

Benefits:

Publication planned for 2018; Presentation of research at international conferences and workshops; Generation of a knowledge base in this field.

Reason/s why the Participant May Be Withdrawn from the Study: N/A

Remuneration: N/A

Costs of the Study: N/A

Confidentiality:

Confidentiality will be offered and granted. The data will be obtained, recorded and published in a manner that the information is not immediately identified with the research participant who supplied it, but such a link is possible by the researcher if required or necessary.

Research-related Injury: N/A

Persons to Contact in the Event of Any Problems or Queries:

Please contact the researcher (till.feltes@web.de), his supervisor (084-4033934; moniquem@dut.ac.za) or the Institutional Research Ethics administrator on 031 373 2900. Complaints can be reported to the DVC: TIP, Prof F. Otieno on 031-3732382 or dvctip@dut.ac.za.

General:

Participation in this research study at any stage is completely voluntary.

I hereby confirm that I have been informed by the researcher, Tilmann Feltes, about the nature, conduct, benefits and risks of this study. I agree that the data collected during this interview can be processed in a computerised system by the researcher. The data will be obtained, recorded and published in a manner that the information is not immediately identified with the research participant who supplied it.

List of interviewed experts

Category 1: Experts from eThekweni Municipality

Name	Municipal branch	Area of expertise	Interview date and form
Dr. Debra Roberts	Environmental Planning and Climate Protection Department (EPCPD)	100RC project, resilience and transformation	27.12.2017; 10:00-11:00
A	Inner City Thekwini Regeneration and Urban Management Programme (iTrump)	Urban planning, Safer Cities	29.01.2015; 12:15-13:20
B	Municipal Institute for Learning (MILE)	Urban development strategy, learning and knowledge exchange	29.01.2015; 7:45-8:30
C	Economic Development and Investment Promotion	Local economic development, environment	29.01.2015; 14:00-16:00
D	Development Planning, Environment and Management Unit	Urban transformation, inner city regeneration, urban Planning	21.12.2017; 14:00-15:15

Category 2: Urban experts and academia

F	DUT, Department of Town and Regional Planning	Urban planning	08.12.2017; 10:00-11:30
G	Disruptive Thought Shapers, Hatch Consultancy	Urban development, planning, architecture	07.12.2017; 22:30-23:30
H	Human Sciences Research Council (HSRC)	Urban development, economy	27.11.2017
I	UKZN	Community development; traditional governance	20.07.2018; 15:00-15:30
J	Environment and Sustainability NGO	Urban development, environment and sustainability	13.12.2017; 9:00-9:50
K	CityInsight Consultants	Strategic planning and management	07.12.2017; 16:00-16:45

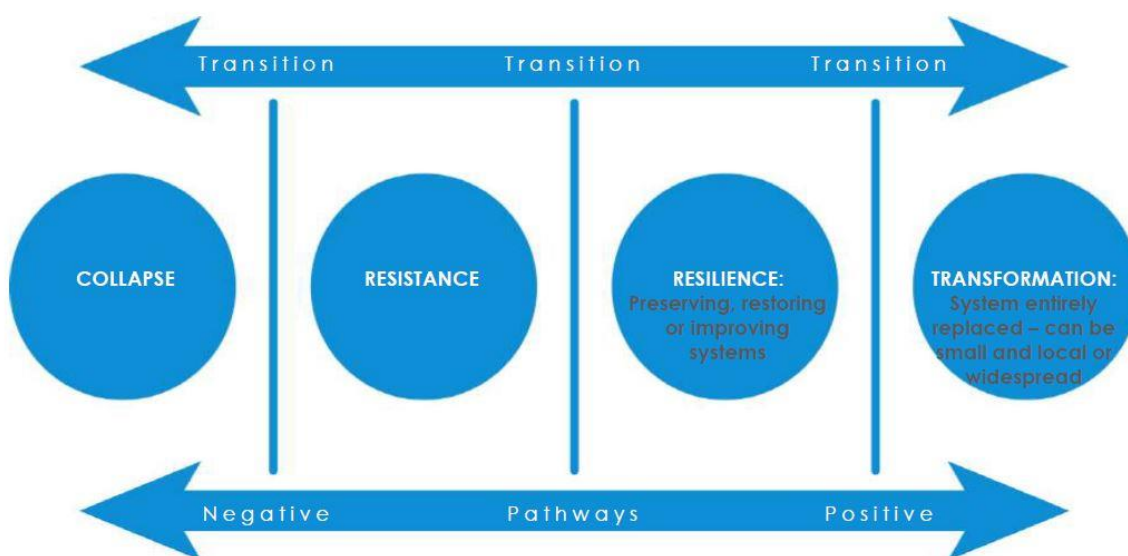
URBAN TRANSFORMATION AT A LOCAL LEVEL: THE CASE OF DURBAN'S 100 RESILIENT CITIES CAMPAIGN

A. General Questions:

- What is your understanding of the term “urban resilience”?
- How do the terms “resilience” and “change” relate to each other in Durban, in your view?
- What are the main current and future challenges for the city of Durban, in your view?
- Is Durban a resilient city in your opinion? What does this mean to you?
- Do you see institutional innovation in the eThekweni Municipality, and if so, where?
- How interdisciplinary and holistic is the eThekweni Municipality, in your view?
- Does the municipality respond well to well-defined challenges and stresses in your view?

B. Questions about the 100 Resilient Cities project in Durban:

- Are you aware of the 100 RC project in Durban and/or are you involved in it?
- Do you think the 100 RC project could be connected with an urban transformation agenda in Durban?
- How do you feel the 100RC campaign, as a “western model”, fits into the Durban context?
- Is the 100RC too project-based/too donor-driven?
- Do you see gaps in the 100RC project or in resilient planning in Durban?
- In what ways could the Durban 100RC project have transformative outcomes?



Source: Solecki, Dorsch and Pelling (in press)

These questions should provide guidance to answer the following overall research objectives:

1. How is the concept of urban transformation understood globally, and what are the interdependencies within the concept of urban resilience?
2. What does urban resilience mean in the local context of the 100 RC project in Durban?
3. What could a conceptualisation of resilience in the global south look like?

Indicators for SDG-Goal 11 “Make cities and human settlements inclusive, safe, resilient and sustainable”

11.1	by 2030, ensure access for all to adequate, safe and affordable housing and basic services, and upgrade slums.
11.2	by 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons.
11.3	by 2030 enhance inclusive and sustainable urbanization and capacities for participatory, integrated and sustainable human settlement planning and management in all countries.
11.4	strengthen efforts to protect and safeguard the world’s cultural and natural heritage.
11.5	by 2030 significantly reduce the number of deaths and the number of affected people and decrease by xy per cent the economic losses relative to GDP caused by disasters, including water-related disasters, with the focus on protecting the poor and people in vulnerable situations.
11.6	by 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality, municipal and other waste management.
11.7	by 2030, provide universal access to safe, inclusive and accessible, green and public spaces, particularly for women and children, older persons and persons with disabilities.
11.a	support positive economic, social and environmental links between urban, peri-urban and rural areas by strengthening national and regional development planning.
11.b	by 2020, increase by xy % the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, develop and implement in line with the forthcoming Hyogo Framework holistic disaster risk management at all levels.
11.c	support least developed countries, including through financial and technical assistance, for sustainable and resilient buildings utilizing local materials.

Source: Open Working Group of the General Assembly on Sustainable Development Goals 2014: 17

List of stakeholders in the 100 Resilient Cities project



	Stakeholder Group and description
1	KwaZulu-Natal Inter-religious Council A provincially based forum made up of representatives from different faith groups.
2	Women's Groups The Commission for Gender Equality, Agenda Feminist Media and other Women's representative groups from
3	Academia Durban based university and research institutions including University of KwaZulu-Natal (UKZN), Durban University of Technology (DUT), Mangosuthu University of Technology (MUT), the Human Sciences Research Council (HSRC), University of South Africa (UNISA), University of Zululand, DUT's Urban Future's Centre.
4	100 RC Local Government Technical Meeting A cross cutting group of approximately 30 eThekweni Municipality officials from different departments were invited to attend this workshop.
5	Durban Chamber of Commerce and Industry's (DCCI) Non-profit Organisations Forum A forum for Durban-based Non-profit organisations with varied interests.
6	KwaZulu-Natal Environmental Network A progressive environmental group in its infancy. Includes organisations like Earthlife, Groundwork and the South Durban Community Environmental Alliance.
7	eThekweni Conservancies Network (ECN) ECN is comprised of 25 registered conservancies in eThekweni Municipality.
8	Economic Development Committee Meeting The 100RC CRO and Project Management team report to the Economic Development Committee, which is a political committee comprising 30 councillors. The committee is chaired by the Deputy Mayor and meets
9	Informal economy representative groups This group consists of organisations that work actively with informal traders including Asiye eTafuleni, Women in Informal Employment: Globalizing and Organizing (WIEGO) and Street Net
10	Inanda Ntuzuma and KwaMashu (INK) Public Meeting A public forum meeting held in the INK Area Based Management District with representative NGO's. The INK area is a former township that was highlighted by the city as a priority area for development under its Area Based Management (ABM) Programme.
11	Informal human settlements representative groups This group consists of organisations that work actively with people living in informal settlements including the Community Organisation Resource Centre (CORC) and the Federation of the Urban and
12	Traditional Leaders Meeting Durban has a dual governance system: a formal system and a traditional system. The traditional leaders play a key role in managing some of the rural and peri-urban areas in Durban. This meeting was convened in the Abathembu Traditional Authority area.
13	Deputy City Manager Forum Meeting City leadership meeting attended by the 6 Deputy City Managers and chaired by the City Manager.
14	Durban Chamber of Commerce and Industry's Business Forum The Economic Affairs Committee of the Durban Chamber of Commerce is represented by various businesses in
15	Pinetown Public Meeting This meeting was set up by Municipality's Community Participation Unit who engage with public stakeholders.
16	The Creatives This meeting was attended by artists, writers, sculptors and architects based in Durban.
17	Diakonia Council of Churches The Diakonia Council of Churches represent a number of Christian Churches from Durban.

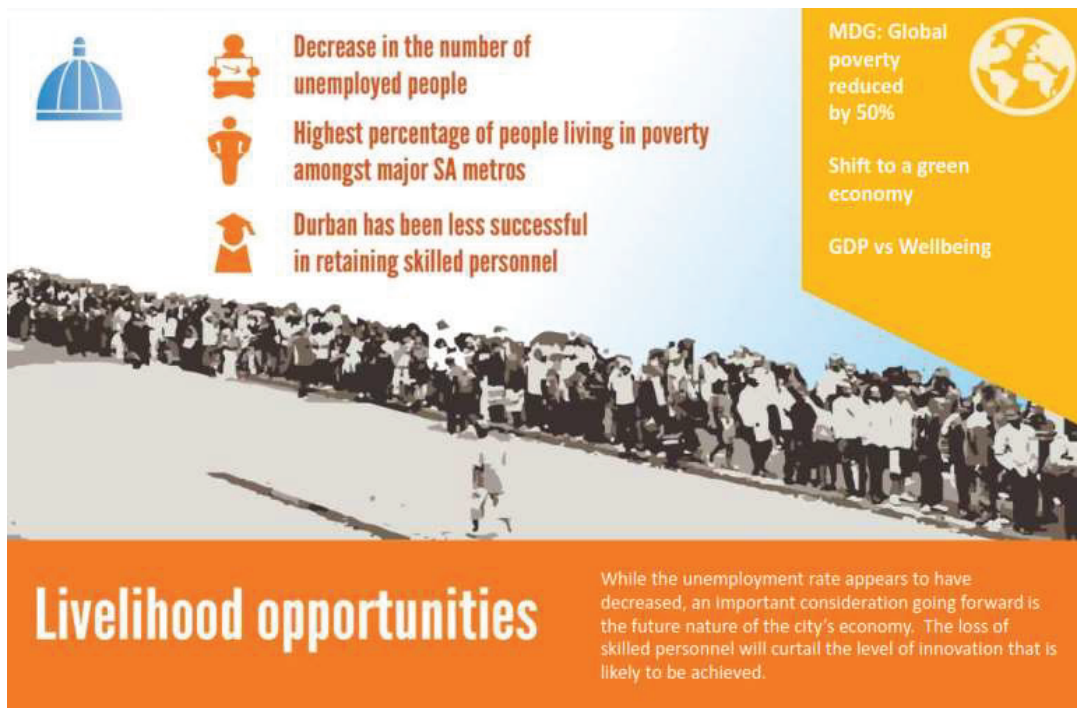
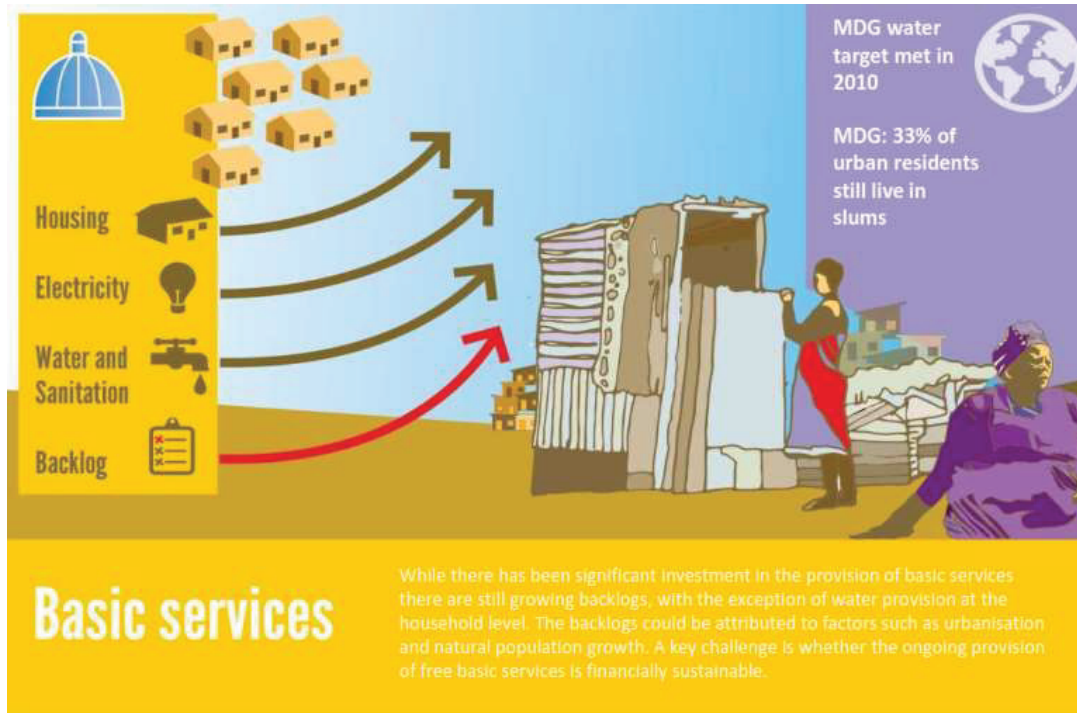


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100 RESILIENT CITIES

Durban's 100 Resilient Cities Programme

Set of ten infographics presented to stakeholders during the stakeholder engagement stage



Durban's 100 Resilient Cities Programme



Inequality

Drug-related crime

Vulnerability

0.62

Inequality is a growing global concern

Rising conservatism and nationalism

Rebuilding a fractured society

Despite the improved employment rates, there are high levels of inequality and vulnerability in Durban. Crime also has a negative influence on society and while cases of violent crime appear to have decreased, issues such as drug-related crime have increased.



Human Resourcefulness

Community-led innovation, creativity and decision making

Growing power of social movements

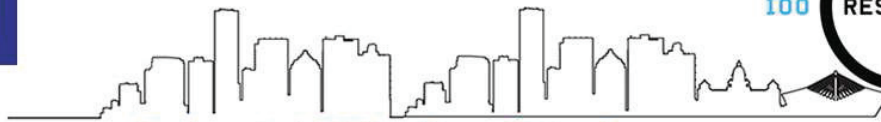
Active and engaged citizens

Citizens are increasingly frustrated with systems that do not facilitate human resourcefulness, community-led innovation, creativity and access to decision-making.



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100 RESILIENT CITIES



Durban's 100 Resilient Cities Programme



Treating nature
as ecological
infrastructure



Securing water
quality and
quantity



Addressing
Climate Change



Current
extinction
rate is 1000x
higher than
the natural
extinction
rate.

Two core planetary
boundaries (Climate Change
and Biosphere Integrity)
have been exceeded.



Environment

The natural environment plays a critical and foundational role in supporting human wellbeing and development and in helping cities to adapt to climate change. Ongoing development pressures threaten this system and the ecosystem services it provides (e.g. water supply), with 54% of the municipal area already having been transformed.



Transport

Trip length has increased
for private and public
transport



Energy Crisis

Renewable Energy barriers:

- Regulatory environment
- Uncompetitive pricing
- Lack of market awareness
- Limited grid connection

Growth of
Eco-mobility
and use of
regional
energy pools



Reliable Infrastructure

Enhanced access to affordable transport and energy security are seen as key to resilience.



Durban's 100 Resilient Cities Programme



Capacitated Local Government



Strengthen Partnerships



Facilitate platforms for discussion

Multi-level
engagement
and
involvement
of stakeholders



Governance

A strong sense from Durban stakeholders was that governance plays a critical role in supporting or undermining resilience efforts. In this regard, there is a need to re-think the nature of governance in Durban – from the way in which local government interacts and rebuilds trust with citizens, to looking critically at the role of politics in influencing strategic decision making. Partnerships will play a particularly important role in building resilience.



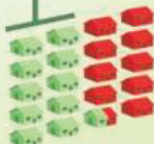
35% of the population currently receives free water



38% receive free sanitation services



7% receive free electricity



45% of the households in Durban are not rateable

Global
recession



New financing
mechanisms



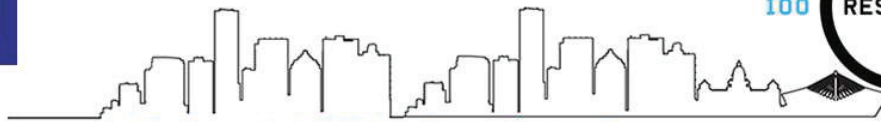
Financial systems

Within Durban, there are growing financial challenges. There is a need to determine whether there are different ways in which this challenge could be addressed.



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100 RESILIENT CITIES



Durban's 100 Resilient Cities Programme



Generating data in new ways



Growth of citizen science



Integration for decision making

Focus on 'Big
Data' and
citizen science



Knowledge systems

Knowledge, data and information play a key role in informing planning and decision-making. These areas will need to be strengthened and better integrated in order to ensure proper monitoring and evaluation.



Brave and Visionary Leadership

Creating a political environment
that facilitates our ability to
respond to change

Global
questioning of
leadership



Leadership

A very different future requires leadership that is able to listen to and engage with a range of issues and perspectives, make difficult (and sometimes unpopular) decisions, often with very little precedent to follow. Such a skills set needs to be enhanced and developed in current and future leaders.



Source: © Johnny Miller

From Village Community to Megacity

Mastering Africa's Urban Future

Safety and Security in South African Cities

Tilman Feltes

Africa's future is urban and young: by 2050, the urban population in Africa will have tripled, the number of African megacities will have quintupled, and the majority of urban residents will be young people. For some, these are the most important challenges surrounding development in Africa. Challenges such as safety and security will become an important focal point. How can crime prevention and policing keep pace with such challenges? Will Africa's urbanisation translate into a better and economically prosperous life for all, or is it set to increase violence, inequality and mal-administration?

Introduction

Over the last few years, the focus of debates around population growth and urbanisation and their implications for the governance sector has been shifting from Asia to Africa. The reason for this is that the predicted population growth rates for Africa will outnumber the Asian rates by far (see fig. 1 and 2). The overall political management of the challenge facing African urbanisation is also crucial for Europe given the geostrategic positioning of the African continent, and the interdependencies in the fields of economy, stability, food security and migration.

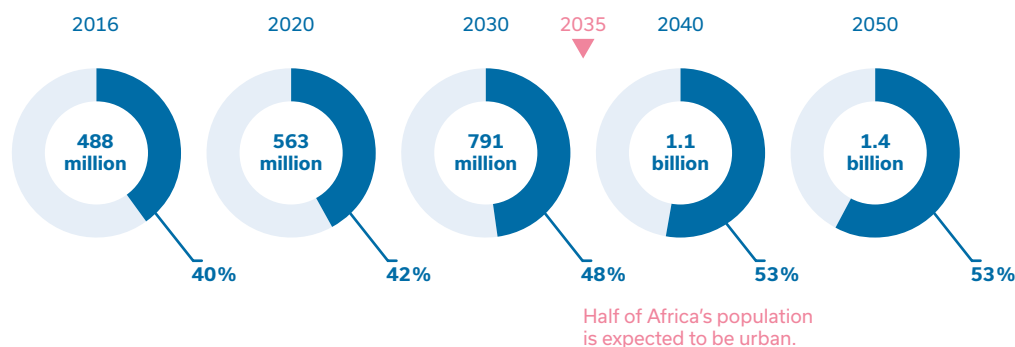
Urbanisation is a defining phenomenon of the 21st century. In 2050, two thirds of people will live in cities and the urban population on the African continent will have tripled. The majority of this growth will take place in low- and middle-income cities especially in Africa and Asia, while the share of growth in Europe, North America, and Oceania is projected to decline steadily until 2050. The London Urban Age Project calculated that in Lagos, for example, the population grows by over 58 people per hour. In comparison, London's population grows by only six in the same time. With an annual population growth rate of almost four per cent, Africa has the fastest urban population growth rate worldwide, and cities such as Ouagadougou, Bamako, Addis Ababa and Nairobi are currently growing at an even faster rate than that.¹

However, the process of urbanisation is not only accompanied by new chances and opportunities, but also by enormous challenges. Thus, the level of crime is especially high in metropolises: in a period of five years, 70 per cent of city dwellers in Africa fall victim to a crime.² To secure ongoing important technological, economic, urban, environmental, and socioeconomic changes, safety and security need to be improved in African cities, because safety and security play a key role in economic upsurge and democratic development in these societies.

Currently, the question of sustainable urban development is also on top of global development agendas such as the UN Sustainable Development Goals (SDGs), the African Union's Agenda 2063 and the UN-Habitat's African Urban Agenda. The newly established goal no. 11 of the SDGs ("making cities inclusive, safe, resilient and sustainable") in particular, shows that urban development is now perceived as an individual topic in its own right, as opposed to one that is cross-sectional. This promises new impetus for much-needed future urban investments and policies, which are vital, especially in Africa.

This article addresses the political relevance of urbanisation, the role of youth and related political fields such as urban governance and safety and security in African cities. The main focus will lie on urban violence and crime prevention as the most innovative and creative policy approaches are currently being developed in this field.

Fig. 1: Africa's Urban Population Growth 2016 to 2050



Source: Own illustration based on UN DESA 2014, n.1.

Urbanisation and Economic Growth

Research from the World Bank indicates that poverty is increasingly urbanising, some experts are warning about the “planet of slums”.³ The reality is that the majority of urban residents in Africa today live in slums or informal settlements, lack access to basic services, and have an informal low-wage and low-productivity job at best. Even though future improvements in urban poverty reduction are likely, the sheer number of poor (as well as young) people who lack access to the job market as well as to other social, medical or educational services is expected to increase dramatically. The African Economic Outlook 2016 predicts that Africa’s slum population will grow in line with the cities’ population growth. Hence, the aim of minimising urban slum populations will not be realised if the current development of the majority of countries will be followed.⁴ Even though such structural hurdles are highly problematic for the economic development of cities, urbanisation also goes hand in hand with great transformative potential. Cities have been and still are engines of economic growth, innovation and productivity. Yet in Africa, urbanisation takes place against the background of urban poverty and inequality.

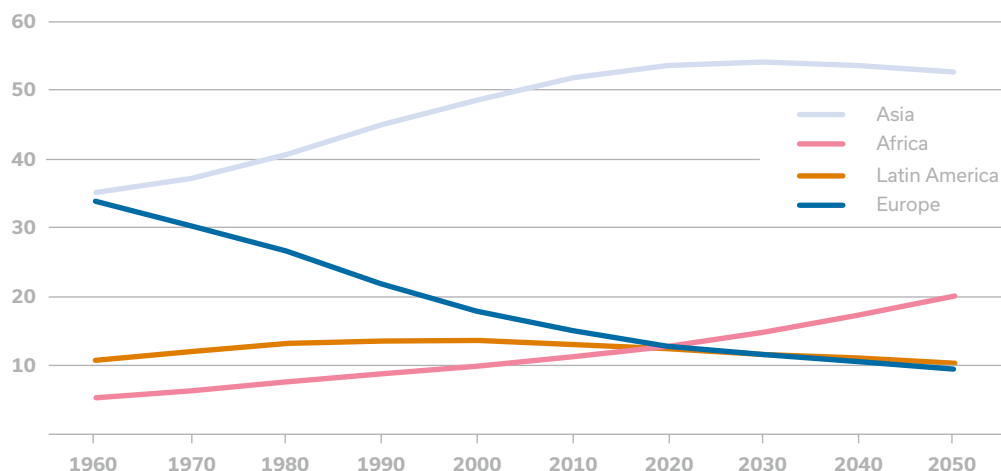
Furthermore, structural change that takes too long severely hampers the adjustment of the

cities and their administrations to the demographic development: there are still too few educational and job opportunities, social and healthcare provisions as well as the supply of electricity and water are inadequate in many places and young people’s future prospects are bleak.

Yet, more and more people, and especially the youth, migrate to the cities. Dissatisfaction with the public administration, as well as the implications of climate change and armed conflicts are the main reasons for rural exodus in Africa.⁵ In contrast to Latin America, Africans do not necessarily expect better employment opportunities from migrating to urban areas. New studies show that there is no real correlation between economic development and urbanisation in African cities as we witnessed in Europe decades ago.⁶

According to the African Economic Outlook, this “urbanisation without growth” has exacerbated the consequences of slow structural transformation in sub-Saharan cities. Economic development continues to positively effect urbanisation dynamics, but urbanisation in Africa can and does happen in contexts of low growth. At the moment, we can see this for example in the Democratic Republic of Congo (DRC) where the GDP per capita is one of the lowest worldwide yet the country’s level of urbanisation is in line

Fig. 2: Shares of World Urban Population between 1960 and 2050 (in Per Cent)



Source: Own illustration based on UN DESA 2014, n.1.

with the African average. In addition, countries such as Angola and Nigeria are urbanising rapidly despite the lack of industrialisation. These factors need to be analysed and monitored more carefully since we know that there is a link between urbanisation and development; higher levels of urbanisation generally correspond to higher levels of human development and vice versa (measured according to the HDI; see fig. 3). This is not yet the case for sub-Saharan Africa. Here, given the high official and even higher unofficial unemployment rates, the informal labour market in particular should be the focus of attention and subject to more in-depth analysis in regards to urban planning and development measures.

The Aspects of Safety and Security⁷ – Reasons, Challenges and New Crime Prevention Strategies

Violence and Crime in Cities

Incidents of violence, whether politically or criminally motivated, are common in Africa's cities, and, just like poverty, violence is urbanising. Crime rates are always much higher in large cities than in small cities or rural areas.⁸ In most

cases, urbanisation is inextricably linked to high rates of crime and violence due to factors such as extreme inequality, unemployment, inadequate services and health provisions, weakening family structures, less social ties, social exclusion and overcrowding.

While the rising number of armed conflicts in the area compels many to move to the city, unplanned, overcrowded settlements can also become a breeding ground for violence.

Furthermore, armed conflicts, riots and protests are on the rise in sub-Saharan Africa, too. The often oppressive state responses to protests are also a problem. In South Africa's Gauteng province (home to Johannesburg and Pretoria), for example, people took to the streets on average more than 100 times each year between 1997 and 2016 – more often than in any other African megacity⁹ region. Unplanned, overcrowded settlements populated mostly by marginalised

youth can be hotbeds for violence. Armed conflict has triggered rural-urban migration, and hence accelerated urbanisation. This is currently the case in the DRC and in Nigeria.¹⁰

Violence and conflicts weaken the democratic and economic development of cities and contribute to decreased levels of economic growth even of entire national economies. Conversely, there is a strengthening of local democracies and economic development if a decrease in violence, conflict and crime is achieved.

It goes without saying that private and public investors avoid high-risk districts and this negatively affects the socioeconomic stability in the country as well as the population’s quality of life. Even just a perceived lack of security poses a risk to a city’s sustainable development.

Safety and Security and the Youth Bulge

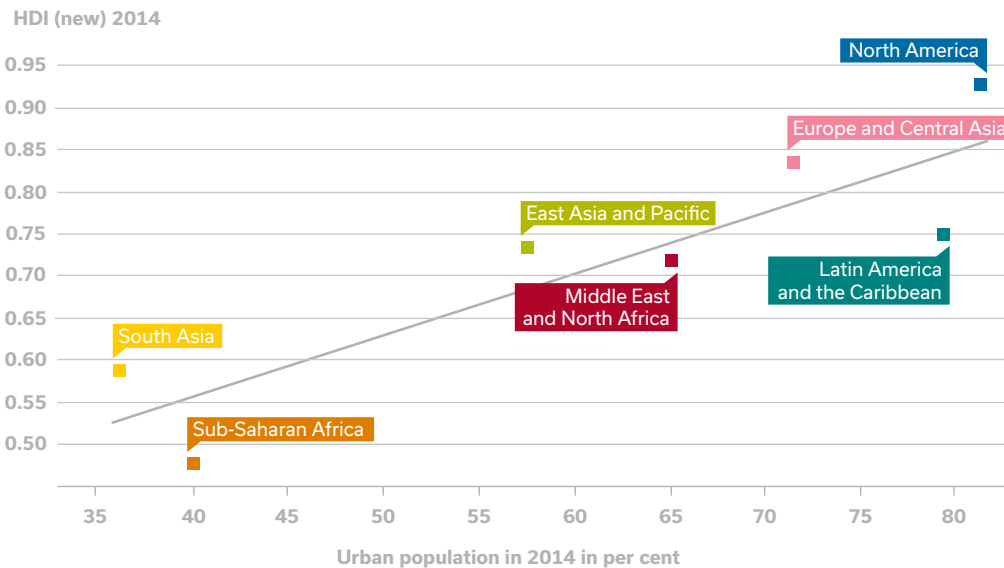
We refer to a “youth bulge” if at least 20 per cent of the population is between the ages of 15 and 24. This age group makes up the majority of

both victims and perpetrators of crime everywhere in the world.

The role of the youth needs to be a critical focus area in light of urban demographics in Africa (see fig. 4). Africa has by far the youngest population worldwide, and younger people are generally more prone to migrate to urban areas than older ones.¹¹ This boosts the proportion of the working-age population in cities and potentially contributes towards economic dynamism. On the other hand, the exclusion and marginalisation of urban youth may also increase the risk of urban violence.

The role and impact of young people on democratic and participatory governance as well as on economic development and social cohesion are important for every society and any future democratic development.¹² According to some, the youth represents huge potential for the development of democracy in the future, while others are more pessimistic and correlate, for example, the numbers of young people (mainly of young men) with the likelihood of violent

Fig. 3: Levels of Urbanisation and Human Development Worldwide Represented by Human Development Index (HDI) Rating



Source: Own illustration based on UN DESA 2014, n.1.



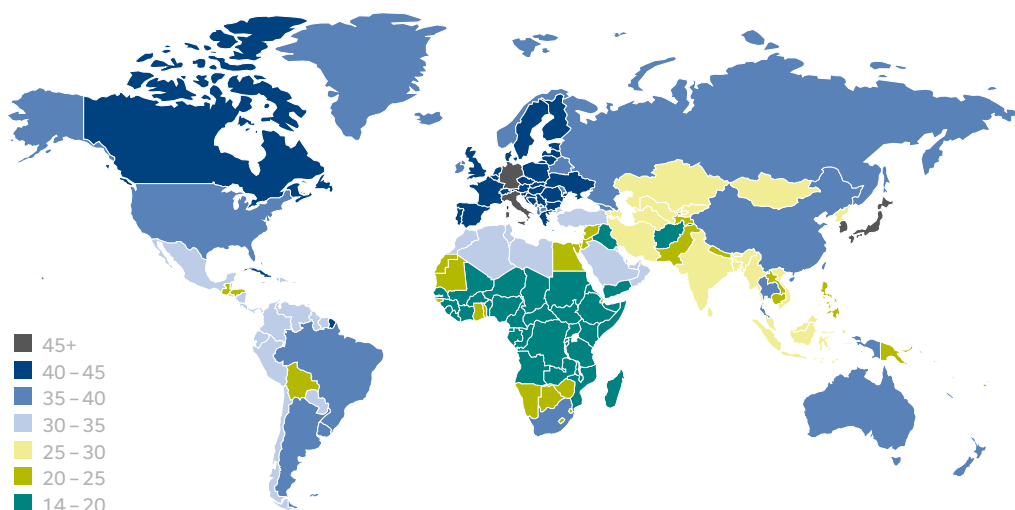
Incendiary mixture: Armed conflicts, riots, and protests are continually on the rise in Sub-Saharan Africa.
Source: © Siphwe Sibeko, Reuters.

conflicts¹³ – however, the majority see a stronger link between jobs, poverty and violence. Young people without proper school education or vocational training are more likely to commit crimes due to their experienced or perceived lack of individual development perspectives. If the youth cohort is reasonably well educated but there are no jobs, this will often trigger youth protests and cities are the main locus of these protests for the most part. The well-known “Arab Spring” uprisings in 2011 exemplify these types of urban protests; we now increasingly see them in sub-Saharan Africa, too. In Ouagadougou, Burkina Faso, urban youth-led protests in 2014 led to the resignation of long-term President Compaoré after 27 years in power. In South Africa, so called “service delivery

protests” were shaking communities and the hegemony of the ruling African National Congress (ANC). Another very prominent example are the *#FeesMustFall* student protests witnessed in South Africa over the last few years, which finally shed light on other political fields such as social cohesion etc.

This is why the youth needs to be the focus of political education measures; otherwise, social apathy, violence and crime will increase dramatically in urban areas. Young people must participate in societal debates and have a voice in the political arena. If the youth have no real voice in society, the resulting frustration could lead to a feeling of abandonment by society and easily turn into acts of violence and crime.

Fig. 4: Median Population Ages across the World



Source: Own illustration based on Central Intelligence Agency (CIA) 2011: *The World Factbook 2011*, in: <https://bit.ly/2NgdJzz> [20 Aug 2018].

Youth violence and juvenile delinquency must not be overlooked when it comes to international cooperation. It results in high economic and social expenses, alienates internal and external investors and is generally considered one of the greatest barriers to development.¹⁴

Crime and Violence Prevention Strategies in South Africa

Similar to other African countries, urbanisation in South Africa is striking. Whilst 52 per cent of the population lived in urban areas in 1990, 71 per cent will live in urban areas by 2030 and the figure will rise to 80 per cent by 2050 (see fig. 5). In addition to the facts already mentioned, the legacy of socially and spatially segregated urban development during apartheid plays a crucial role in South Africa.¹⁵ Violence and crime is particularly concentrated in urban centres. The South African government has developed a comprehensive national violence prevention policy (White Paper on Safety and Security¹⁶); however, implementation at the local level is generally weak. The country has a very high rate

of murders, assaults, rapes, and other crimes compared to most other countries. Crime rates have declined since the end of apartheid, but they remain 4.5 times higher than the global average. Unfortunately, the most recent statistics do not reflect this decline. In the last four years, the murder rate has again increased by 20 per cent and the number of armed robberies has risen by 30 per cent.¹⁷ This happened during a period when the South African Police Service (SAPS) annual budget increased by 50 per cent. Much of this undesirable development is associated with poor political appointments, arguably due to corruption linked to former President Jacob Zuma.

Crime Prevention in Townships: Hotspot Policing and Urban Upgrading

The described decline in the murder rate over the first two decades of democracy in South Africa was primarily due to the introduction of a new series of SAPS deployment strategies, shifting the focus towards “hotspot policing” or “high density policing” operations. The

interventions exclusively focused on the townships (South African term for slums) and their micro hotspots such as hostels, shebeens (formerly illegal bars) and taxi ranks. Reasons for violent crime in these hotspots are mainly alcohol and firearms misuse combined with youth unemployment, weak social cohesion and social norms that are generally pro-violence.¹⁸ During such operations, SAPS members are usually heavily armed and deployed in battle-ready formations with the support of armoured personnel carriers and helicopters. Soldiers from the South African National Defence Forces accompanied the police on many occasions. Today, SAPS have taken a more passive and complementary approach of policing urban hotspots and is moving towards community-oriented policing models, as is the case in many other countries¹⁹. In the meantime, community policing has become the organisational paradigm of public policing in South Africa.

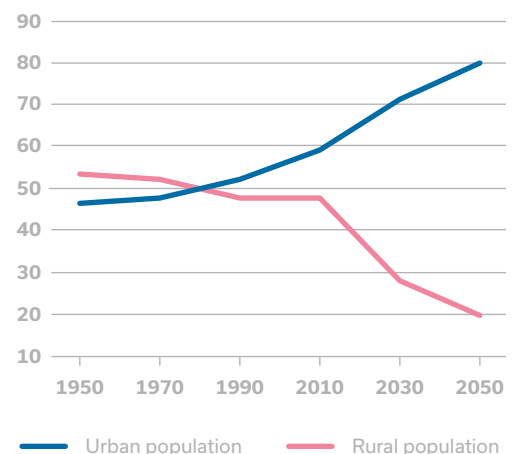
“Through community policing governments can develop the self-disciplining and crime-preventive capacity of poor, high-crime neighborhoods. Community policing incorporates the logic of security by forging partnership between police and public. Since safety is fundamental to the quality of life, co-production between police and public legitimates government, lessening the corrosive alienation that disorganizes communities and triggers collective violence. Community policing is the only way to achieve discriminating law enforcement supported by community consensus in high-crime neighborhoods.”²⁰

In one of the largest and most violent townships in Cape Town, Khayelitsha, local gang wars led to the temporary shutdown of all services delivered by the city. During a six-month gang war between the “Taliban” and the “America” gangs, schools were closed, transport was disrupted and health services in the community were restricted. As this example shows, crime is concentrated at specific places.²¹ Against this background, in June 2018, South Africa’s Police Minister announced a new “high density stabilisation intervention” to tackle crime. It includes the deployment of desk-based police officials to

the streets, particularly in “identified hotspots” such as Khayelitsha in accordance with the new community-policing philosophy.

“Hotspot policing” is now more often accompanied by social and infrastructural crime prevention initiatives. In Khayelitsha, for example, a municipal project called “violence prevention through urban upgrading” aims at reducing crime, increasing safety and security and improving the social conditions of communities through urban improvements and social interventions. The project is unique in South Africa insofar as it integrates all forms of development concepts and not only the infrastructural upgrading of urban spaces. The project combines planning efforts by state institutions with community-based protection measures.²² This includes the connection of policy frameworks, private security and neighbourhood watches and the easier access to justice for residents. The project uses different lenses, one being the “Situational Crime Prevention” approach. The term “Situational Crime Prevention” seeks to reduce crime opportunities by increasing the associated risks and difficulties, and reducing the rewards. It is assumed that positive changes

Fig. 5: Percentage of Urban and Rural Population in South Africa, 1950 to 2050



Source: Own illustration based on South African Institute of Race Relations (SAIRR), press release, 22 Jan 2013, in <https://bit.ly/2Ogmclg> [20 Aug 2018].

in the physical environment ultimately lead to safer communities. Changes such as the “Active Boxes” are to be used for this approach: small three-story buildings with offices, a caretaker flat and a room for community patrollers, which are built close to the so-called “micro hotspots” mentioned above. Another aspect of the project is the “Social Crime Prevention” approach that promotes a culture of lawfulness, respect and tolerance. The project focused on three areas: patrolling street committees combined with law clinics (in collaboration with the University of the Western Cape) and social interventions such as school based interventions and early childhood development programmes. The implementation is carried out using local resources to the greatest extent possible. A visible decrease in crime rates in Khayelitsha has been recorded since implementing the project.²³

Crime Prevention in South African Suburbs: “Cities Without Walls”

The counterpart to the townships are the wealthy South African urban suburbs. South Africa is one of the most unequal societies in the world, which these suburbs are a clear reflection of. At the end of apartheid, South African suburbs began to change dramatically due to rising levels of crime. This is a typical development for countries in transition, particularly for those characterised by high levels of inequality. With the demise of the inner city economy, businesses, together with their employees, started to move to the South African suburbs. The inner cities were abandoned and crime became widespread. With the associated increase in the fear of crime, suburb dwellers built higher walls and erected electrified fences as a means of defence. This initially attracted strong support and was bolstered by the private security industry, which had vested interests in the rush to monitor space and strengthen security.²⁴ To date, high walls have become a part of the accepted landscape in the suburbs. New research has now proven that crime rates are higher in places surrounded by walls. Solid, high walls are viewed as an obstacle to policing. Furthermore, natural surveillance

by neighbours and patrolling by police or private security services are limited. Against this background, another interesting approach to tackling crime is the “city without walls” project in Durban where academics, the Metropolitan Police Service, private security firms and local communities are working together. The objective is to challenge the perception of crime, to eliminate the perception of alienating neighbours and to strengthen a cohesive community. Selected communities and institutions such as the *Alliance Française* and the *Goethe-Institut* participated in the project, tore down their own walls and replaced them with transparent and see-through fences or walls. Research proved this pilot project to be successful: lower crime rates and more social cohesion in the pilot communities.²⁵

State police violence destroys trust in the police and democracy, as well as leading to a vicious circle of violence, aggression, prejudice and mutual rejection.

Conclusion: The Increasing Power of Cities and the Role of Good Governance

Cities in Africa have enormous potential to provide sustainable solutions to democratic development. They offer opportunities for social and economic change and participation but also for political protest and unrest. Unfortunately, there is a lack of urgency within local city governments to respond to these challenges and opportunities in a sustainable way. The reasons for this is that they are overloaded with other (social) problems, they are not equipped with the necessary knowledge and infrastructure, and they are not willing to see this problem for what it is: a real danger to future democracy in Africa.





Source of unrest: African cities have enormous potential for change. However, this potential often erupts into violence as well. Source: © James Akena, Reuters.

To ensure that the upcoming urbanisation translates into sustainable development, African cities need far better urban planning and innovative approaches that are tailored to their diverse urban realities. It is therefore important to foster political education and participation among the youth. Civil society together with political parties or political movements can be strong drivers to initiate dialogue and create platforms for engagement; however, local governments and authorities must always be involved in such processes.

The community-based and people-oriented policing approaches in South Africa after the end of apartheid are an example of how modern African administrative structures could be organised. On the other hand, exaggerated

state police violence as we saw recently in the DRC, Ethiopia, Burundi, Zimbabwe and Tanzania (against the political opposition) destroys trust in the police and in democracy, as well as leading to more aggression and a vicious circle of violence, aggression, prejudice and mutual rejection. As a result, young people develop deep hatred against the police and hence against the state itself. In this context, policing needs to be seen as a diverse and pluralistic set of social acts. Policing in African cities will also need to stay abreast of the current technology (including social media) for an enhanced system of communication with the local communities and to therefore improve safety in urban spaces.

The newly established “Institute for Global City Policing” at University College London stated

that due to the emerging political power held by city governments, they should be seen as “change agents of the future” or “change drivers”. In some cases, megacities now already have more political power than nation states. In light of this, local governments become more important in the national and the global context and need to be included as new players in global political processes such as the Sustainable Development Goals (SDG), the UN Conference of the Parties (COP) or the Intergovernmental Panel on Climate Change (IPCC). There are now a number of African cities in which progressive or liberal non-socialist opposition parties govern big cities or capitals (e.g. Johannesburg, Cape Town, Pretoria, Harare, Bulawayo, Dar es Salaam, Addis Ababa) and they often follow different approaches in regard to tackling crime and violence than those of the national government. Such a “non-coherence” of urban policies and strategies could hamper urban development, but in other scenarios, this could also lead to more independent and stronger cities. As regards security aspects, it could also lead to a stronger politicisation of the urban space including more political protests, demonstrations and violence.

The legitimacy of the people charged with ensuring public safety and order must be a key emphasis in every security environment. Increases in the numbers of police or the army should not necessarily be the best antidotes to insecurity. Military and policy exchange, as currently witnessed between the Colombian and Nigerian or the Malian and European police forces concerning the fight against local terrorism for example, together with an extended community or partnership approach would be an ideal framework for tackling future challenges. The root causes of crime and the foundations of law and order can be found in the nature and dynamics of each society. Therefore, a democratic, equal and just society based on the rule of law is the best prevention of crime and violence. Recently, the African continent presented an abundance of positive examples. Decade-long leaders or dictators together with their patronage networks were urged to

step down to make room for political improvements and reforms (e.g. in Angola, Zimbabwe, Ethiopia, South Africa, The Gambia) – these positive developments will trickle down to the local level and guide the process for more people-centred local government politics.

Tilmann Feltes is Desk Officer in the Team Sub-Saharan Africa at the Konrad-Adenauer-Stiftung. Until 2017, he was Trainee at the Stiftung's office in South Africa.

- 1 Cf. UN Department of Economic and Social Affairs (UN DESA) 2014: World Urbanization Prospects: The 2014 Revision, New York. Attention should be paid to the general limitations of data and projections on Africa's population. It should be noted, for example, that some of the former UN-Habitat projections were generally highly overestimated in this regard.
- 2 Cf. UN-Habitat 2014: The State of African Cities. Re-Imagining Sustainable Urban Transitions, Nairobi, p.276. Cf. UN-Habitat 2007: Enhancing Urban Safety and Security. Global Report on Human Settlements, Nairobi, p.55.
- 3 Davis, Mike 2011: Planet of Slums, London.
- 4 Cf. African Development Bank (AfDB), OECD and UNDP 2016: African Economic Outlook: Sustainable Cities and Structural Transformation, p.154, in: <https://bit.ly/2mIh6mI> [20 Aug 2018].
- 5 Cf. The World Bank 2016: From Oil to Cities: Nigeria's Next Transformation, p.63.
- 6 Cf. Jedwab, Remi / Vollrath, Dietrich 2015: Urbanization without Growth in Historical Perspective, in: Explorations in Economic History 58, Oct 2015, pp. 1–21.
- 7 In cities, the terms "safety" and "security" are often used interchangeably. In fact, in the German language, there is only one word (*Sicherheit*), and there is no differentiation. However, from a political and academic point of view, it makes sense to differentiate: Security is seen as the degree of resistance to, or protection from, harm. It applies to any vulnerable and/or valuable asset, such as a person, dwelling, community, item, nation, or organisation. Security is the more technical term, covering the process of establishing safety and relying on those, who are responsible for ensuring safety (such as the police). Safety is the condition of being protected from harm or other non-desirable outcomes, health and well-being included. Safety has both emotional and physical attributes, and both must be ensured for safety to be achieved. Safety is more than not being victimised and it implies the feeling of being safe. The existence of both safety and security is important because they are interrelated and the absence of one necessarily affects the other.
- 8 Cf. Glaeser, Edward / Sacerdote, Bruce 1999: Why Is There More Crime in Cities?, in: Journal of Political Economy 107: 6, Dec 1999, pp. 225–258.
- 9 Megacities have a population of ten million inhabitants or more. At the moment, these are Lagos, Cairo and Kinshasa. In 2030, Johannesburg, Luanda and Dar es Salaam are predicted to become megacities. In 2040, Abidjan and Nairobi and in 2050, Addis Ababa, Bamako, Ouagadougou, Dakar, Ibadan and Kano might join.
- 10 In Nigeria, the Boko Haram insurgency in the Northeastern part of the country has displaced an estimated 1.5 million people since 2009, and the city population of Maiduguri may have more than doubled to two million due to the influx of internally displaced people.
- 11 Cf. Fox, Sean 2011: Understanding the Origins and Pace of Africa's Urban Transition, Crisis States Research Centre Working Paper 89, Sep 2011, p.5.
- 12 Cf. Feltes, Tilmann 2013: Youth and Democracy: The Promotion of Youth Participation by the International Community in Kosovo, Security and Human Rights, Vol. 24, pp. 195–209, in: <https://bit.ly/2xWchMR> [20 Aug 2018].
- 13 Cf. Abbink, Jon / van Kessel, Ineke 2005: Vanguard or Vandals: Youth, Politics and Conflict in Africa, Leiden; Wagschal, Uwe / Metz, Thomas / Schwank, Nicolas 2008: Ein "demografischer Frieden"? Der Einfluss von Bevölkerungsfaktoren auf inner- und zwischenstaatliche Konflikte, in: Zeitschrift für Politikwissenschaft 18: 3, pp. 353–383.
- 14 Cf. Imbusch, Peter 2010: Jugendgewalt in Entwicklungsländern. Hintergründe und Erklärungsmuster, in: Imbusch, Peter (ed.): Jugendliche als Täter und Opfer von Gewalt, VS Verlag für Sozialwissenschaften, Wiesbaden, pp. 11–90.
- 15 Since violence and crime in South Africa are often a reflection of structural economic and socio-political exclusion, we also have to keep the historical context of policing during the apartheid time in mind. During the 1980s, one of the South African Police's responses to the growing political resistance in the country was to hastily train groups of men who were deployed as the "municipal police" to combat the so called "anti-apartheid terrorism" in the slums or townships. However, there was only little accountable control and thus, they gained a reputation for high levels of excessive and inappropriate use of violence against almost exclusively black South Africans. Many of the now 25 to 35 year-old black South Africans experienced police violence when they grew up. On top of that, witnessing violence as a child renders a person 3.8 times more likely to be a victim of domestic violence later in life, while living in a high crime neighbourhood makes someone 5.6 times more likely of the same.
- 16 Civilian Secretariat for Police Service 2016: White Paper on Safety and Security, in: <https://bit.ly/2Okz4MB> [20 Aug 2018].
- 17 Cf. South African Police Service (SAPS) 2016: Crime Situation in South Africa, p.10, in: <https://bit.ly/2tgDoC8> [20 Aug 2018].
- 18 Cf. Seedat, Mohamed et. al. 2009: Violence and Injuries in South Africa: Prioritising an Agenda for Prevention, in: The Lancet 374: 9694, 25 Aug 2009, pp. 1011–1022.

- 19 Cf. Department of Safety and Security 1997: A Manual for the South African Police Service, Apr 1997. Cf. Rosenbaum, Dennis 1994: The Challenge of Community Policing. Testing the Promises, SAGE Publications, London / New Delhi.
- 20 Bayley, David / Shearing, Clifford 1996: The Future of Policing, in: Law & Society Review 30: 3, pp. 585–606, here: p. 604.
- 21 In the most recent crime statistics, two per cent of police stations recorded 20 per cent of all murders in the country, and 13 per cent recorded 50 per cent of murders.
- 22 Cf. Violence Prevention through Urban Upgrading (VPUU) 2015: A Manual for Safety as a Public Good, in: <https://bit.ly/2N7YOXS> [28 Sep 2018].
- 23 Cf. Graham, Alastairs / Giles, Chris / Krause, Michael / Lange, Udo 2011: Violence Prevention through Urban Upgrading in Khayelitsha, Cape Town, South Africa: Achievements and Trends of a Bilateral Financial Cooperation Programme, in: Coeser, Marc / Marks, Erik (eds.): International Perspectives of Crime Prevention. Contributions from the 3rd Annual International Forum 2009, Godesberg, pp. 67–90.
- 24 In South Africa, the number of private security companies doubled in the last twelve years and now outnumbers the public police force by three to one.
- 25 Cf. Marks, Monique / Overall, Chris 2015: Breaking Down Walls: New Solutions for More Effective Urban Crime Prevention in South African Cities, in: Stability. International Journal of Security and Development 4: 1, p. 3, in: <https://bit.ly/2NLON8b> [28 Sep 2018].

Regional Governance of Migration in the Southern African Development Community: Migration Regimes and Their Implications for the Experience of Refugees and Migrants in South Africa



Tilman Feltes, Saul Musker, and Philine Scholz

Abstract South Africa's migration policy has evolved over time to become increasingly restrictive, and the latest proposed legislation reflects this trend, which closely traces a global increase in restrictions on movement. The first half of this article briefly traces the history of intraregional migration in the Economic Community of West African States (ECOWAS) in order to lay the groundwork for a longer and more detailed analysis of the existing migration regime in the Southern African Development Community (SADC) because they offer a clear contrast—ECOWAS has embraced and institutionalized freedom of movement, whereas SADC states have imposed very severe restrictions on transnational mobility. The second half of the article links these findings to the experience of migrants and refugees living in Johannesburg. Here it is shown that foreigners face systematic violence, exclusion, and exploitation. Hostility toward foreign nationals on the part of the South African government at least partially explains both the absence of regional governance of migration and the failure to protect or provide for foreign nationals in the country.

Keywords Migration regimes · Refugees · Refugee rights · Xenophobia · SADC · South Africa

T. Feltes (✉)

Durban University of Technology, Urban Futures Centre, Durban, South Africa

S. Musker

Brenthurst Foundation, Johannesburg, South Africa

P. Scholz

Goethe University, Frankfurt, Germany

Learning Outcomes

After reading this chapter, the reader should

- understand how Africa's two largest regional economic communities, SADC and ECOWAS, differ in their respective migration regimes;
- be aware of the increasing restrictiveness of South Africa's policy response to migrant and refugee flows from other sub-Saharan countries;
- know the rights of refugees but also the failures in their implementation in South Africa;
- appreciate the context of rising tensions and violence within South African society regarding inward migration, as well as recent instances of violence targeted at foreigners.

1 Introduction

The first part of this chapter will briefly trace the history of intraregional migration in ECOWAS in order to lay the ground for a longer and more detailed analysis of the existing migration regime in SADC. This comparison serves to show both the problems of SADC states to meaningfully advance free movement in the region and the realistic ways in which this could be achieved should they instead follow the example of ECOWAS. Indeed, a wholesale change in attitude and policy approach is necessary to enhance regional cooperation and ease mobility in Southern Africa. South Africa, as a regional leading power, has consistently blocked efforts to reduce obstacles to free movement in SADC and has adopted a hostile approach to inward migration, choosing to see it as a threat to national security and a source of rising unemployment rather than a potential catalyst for economic growth. This policy approach has resulted in an increasingly restrictive immigration regime and consequently a large number of undocumented migrants. Public resentment of foreign nationals has been stoked by political parties and prominent figures and reinforced by the official stances of government. It is therefore possible to view recent instances of violence as being connected to the policy approach adopted by the state. To that end, the second part of this chapter will examine the experiences of migrants and asylum seekers living in Johannesburg and their treatment by the state.

2 Regional Governance of Migration in SADC: Falling Behind the Rest of Africa

While the subject of regional integration in the Southern African Development Community (SADC) has received much attention in the academic literature (see Lewis 2001; Moshoeshoe 2012; Alence 2015), this attention has largely been

focused either on matters of trade and economic cooperation or on the resolution of conflict and instability in the region. It is common cause that the level of integration in SADC remains low and that regional institutions are weak and highly dependent on constituent states. One area in which the lack of regional cooperation is evident is migration. Southern Africa lags behind other regions in Africa and the rest of the world in terms of the facilitation of free movement, with severe restrictions on cross-border migration and few effective regional governance mechanisms in place. The best way to illustrate the failure of efforts to promote free movement in SADC is by comparison to a similar regional benchmark on the continent. In this regard, the Economic Community of West African States (ECOWAS) is an obvious point of reference. Despite past and ongoing challenges, West African states have managed to achieve a progressive easing of restrictions on movement between them and have done so multilaterally through cooperation at the regional level.

Migration in West Africa dates back to the precolonial era, during which mass movements of people due to environmental conditions or tribal warfare occurred frequently. In the eighteenth and nineteenth centuries, movement between the coast and inland areas increased for trade purposes, and individual migrations (as opposed to group relocations) became more commonplace. Under colonial rule, political territorial boundaries were established and movement across them restricted. At the same time, laborers from present-day Mali, Togo, Burkina Faso, and elsewhere were recruited or forced into work along the Gold Coast for construction projects or in agriculture and mining. Postindependence, many new governments in the region sought to restrict migration and to police their borders more rigorously in pursuit of national consolidation. These restrictions were largely ineffective, however, both because of established patterns and systems of labor migration and because of the weakness of arbitrary colonial borders, which left ethnic groups divided between various artificial “nations.” As a result, migration in the region continued at a large scale.

In the mid-1970s, realizing its potential economic benefits and perhaps mimicking similar efforts elsewhere in the world, West African states moved toward greater regional integration. As such, the 1975 Lagos Treaty (UNTS 14843) established ECOWAS as a supranational entity. In the preamble of the Treaty, member states declared “the ultimate objective of their efforts” to be “the elimination of all types of obstacles to the free movement of goods, capital and persons.” Four years later, a Protocol on the Free Movement of Persons and the Right of Residence and Establishment (ECOWAS Protocol A/P.1/5/79) was signed, which stated that “Community citizens have the right to enter, reside and establish in the territory of member states,” a right that would be progressively implemented in stages over a period of 15 years. The first stage, which involved the abolition of visas for ECOWAS citizens and unfettered entry to member states for up to 90 days, was implemented in 1980. Implementation of the second and third stages, however, which would allow for the rights to residence and establishment respectively, was hampered by the economic downturn in the region in the early to mid-1980s. Today, these latter stages have yet to be fully initiated, although member states ostensibly remain committed to them. The Common Approach on Migration, adopted in 2008, reinforces this commitment and details several initiatives to facilitate easier transport of goods and people within

the region, including the establishment of an ECOWAS passport and common identification card (ECOWAS 2008). Of course, serious obstacles remain to the full implementation of the Protocol in practice. Nonetheless, the existence of a clear regional governance mechanism for migration, the relative ease of movement that ECOWAS citizens enjoy between member states and their theoretical right to residence and establishment, and the consistency of member states' support for expanded rights in principle have led the regional body to be described as "a pacesetter among regional economic communities in Africa" (Adepoju 2003).

2.1 If ECOWAS Sets the Pace, SADC Has for More than Two Decades Struggled to Keep Up

Intraregional migration in Southern Africa also has a long history, beginning in the nineteenth and twentieth centuries when South Africa's nascent mining industries in Kimberley and on the Witwatersrand attracted a significant number of migrant laborers from neighboring states (whose relocation was not always voluntary). In recent decades, the general pattern of movement has remained the same: South Africa is the primary destination country for migrants within the region and indeed the continent as a whole, with very little outward migration from South Africa and comparatively few people choosing other destinations (although countries such as Botswana and Namibia receive a small number annually). However, the scale of intraregional movement has increased markedly since the end of apartheid. The total number of people entering South Africa annually from other SADC member states—for whatever purpose—increased from approximately one million in 1990 to over five million in 2005, a period of just 15 years (Crush et al. 2005). According to the International Organization for Migration (IOM), in 2013, there were 2.4 million migrants in South Africa and 230,000 asylum seekers awaiting a refugee status determination (IOM 2013). These figures exclude irregular migration, which is nearly impossible to accurately quantify—although most analysts suggest that the figures would be significantly higher if illegal entrants were counted. Whatever is the exact number, however, it is evident that intraregional migration occurs within SADC on a very large scale and has so for many decades.

The nature of intraregional migration is complex, with various different and often overlapping motivations for transnational movement. On the one hand, given that South Africa accounts for nearly 40% of the economic output of all of sub-Saharan Africa (Alence 2015), with other countries in the region suffering from extreme poverty and unemployment (even in conditions of rapid growth), high levels of migration for economic reasons are to be expected. On the other hand, political instability and violent conflict in Zimbabwe, Democratic Republic of the Congo, and Mozambique contribute to nearly constant inflows of asylum seekers. It is usually impossible to determine one single driving factor that motivates migration in these

cases, and the majority of entries into South Africa can thus most usefully be understood as mixed migration flows.

2.2 In This Context, the Effective Absence of a Meaningful Regional Regulatory Framework for Migration Is Somewhat Surprising

The current migration regime resembles a relatively uncoordinated patchwork quilt of national laws and bilateral agreements, particularly between South Africa and other SADC member states, together with some nonbinding agreements at the regional level. It is worth charting the historical evolution of this regime before focusing on South Africa's role and approach particularly.

SADC was initially constituted as the Southern African Development Coordinating Conference (SADCC) in 1980, with South Africa excluded, and was designed to facilitate cooperation between the various independent, antiapartheid states near South Africa. The SADCC was transformed into SADC in the last days of apartheid, when the new democratic dispensation was clearly imminent. In 1992, the 15 member states signed the SADC Declaration and Treaty (the Treaty) in Windhoek, initiating a process of progressive regional integration. The Treaty explicitly commits signatory states, in Article 5(2)(d), to developing policies aimed at “the progressive elimination of obstacles to the free movement of capital and labor, goods and services, and of the people of the Region generally, among Member States” (SADC 1992). Toward this end, a Draft Protocol on the Free Movement of Persons was proposed which would have promoted eventually unfettered free movement within the region, but this draft was rejected by South Africa, Botswana, and Namibia and was substantially revised to meet those countries' objections. South Africa played a leading role in forcing the abandonment of the initial text, opposing it immediately and vigorously (Williams 2006).¹ As a result, and after a long of delay characterized by political stalemate, a new Draft Protocol on the Facilitation of Movement of Persons was introduced in 2005 and was signed by a majority of member states. As the change in titles suggests—from “free movement” to “facilitation of movement”—the new Protocol made no commitment whatsoever to truly free movement within the region and limited its expectation of member states to the permission of a maximum of 90 days' visa-free travel by citizens of other SADC countries. Even this extremely diluted version has not yet been ratified by enough states for it to enter into force, and as such it remains nonbinding. As Dodson and Crush (2015, p. 14) note: “If it were to come into effect, it could have some

¹Oucho and Crush (2001) are blunt in their assessment of South Africa's role in this regard, arguing that the South African government unilaterally “aborted”, “stymied” and “blocked” SADC's efforts to realize free movement in the region.

symbolic significance, but it would not do much on its own either to protect migrants' rights or to facilitate free cross-border movement."

Several newer instruments have been negotiated by SADC member states pertaining specifically to labor migration in the region. In 2013, the SADC Labour Migration Action Plan was approved at an extraordinary meeting of ministers, leading 1 year later to the adoption of the SADC Labour Migration Policy Framework.² But this framework, while representing at least limited progress, does not achieve much in practice: it is nonbinding and recommendatory, calling for member states to create "national labour migration policies" by 2020 that are consistent with the policy framework; it applies only to regular labor migration and not to any other category of migrant; and it suggests the extension of only limited and mostly work-related rights to labor migrants residing in member states (e.g., the right to join labor unions, to safe working conditions, and to the transfer of remittances). In short, it imposes no real *obligations* on any member state, and to the extent that it confers any rights or protections at all, these do not extend to social or political rights. Most importantly, it has little to no effect on the current restrictions in place regarding all forms of intraregional migration and does not require member states to work toward a more open migration regime. In all of these ways, it suffers from the same apparently chronic problems that are inherent in previous agreements and is weak in both content and force.

2.3 SADC Lacks a Coherent or Effective Regional Framework for the Regulation of Intraregional Migration. But What of South Africa?

At least rhetorically, the South African government has committed itself to the *ideal* of free movement in the region and on the continent, as the following statement by a speech of former Home Affairs Minister Malusi Gigaba (2015) attests:

One of our most important international obligations is to the region. South Africa has committed itself to African and regional integration, to progressively weaken colonially imposed borders and make it easier for SADC and African citizens to move without restriction. So while we may have concerns about the impact of mixed migration on our domestic labour market, we must balance this with regional solidarity and enlightened self-interest, as South Africa will benefit in the long-term from a more integrated, more prosperous region and continent.

Nevertheless, South Africa's approach to intraregional migration has to date been incredibly restrictive. South African immigration policy "has tended to focus... on control and exclusion" with the result that "rights of permanent residence and settlement are extremely difficult to obtain" (Crush et al. 2005). While citizens of SADC member states are permitted to enter South Africa for a maximum period of

²See Landau and Vanyoro (2014) for the full text of the Framework, and a more detailed analysis.

between 30 and 90 days, any stay longer than this requires the granting of a temporary visa, permanent residence status, or refugee status. Very few foreign citizens are granted permanent residence in the country annually, with just 1283 residence permits approved in 2012 and 6801 in 2013 (Statistics SA 2013, 2014). This reflects an intentional preference for granting renewable temporary visas to applicants in the vast majority of cases. At present, in order to qualify for a temporary residence visa with the right to stay and work in South Africa, applicants must either prove that they plan to make a prescribed financial capital investment in the country (to be granted a business visa) or show that they possess a skill or qualification deemed “critical or scarce” or demonstrate that they have a job offer with a contract and endorsement from their employer (Department of Home Affairs 2015).³ These are onerous requirements and make no adequate or formal provision for the type of low-skilled labor that constitutes the overwhelming majority of prospective migrants from within SADC. As a result, large numbers of people each year either enter South Africa clandestinely or obtain a visitor’s visa and then remain illegally (Oucho 2007). As Nshimbi and Fioramonti (2013, p. 59) point out:

That considerable cross-border migration here consists of undocumented migrants is at odds with SADC’s declared goal to progressively eliminate obstacles to free flow of inter alia labour. It is precisely because there is no free movement in the region that there are so many irregular movers.

The restrictive nature of South Africa’s policy approach to migration is perhaps best, and most provocatively, illustrated by its deportation scheme. Between 1988 and 2010, South Africa systematically detained and deported over 2.5 million people, more than almost any other country worldwide (Segatti 2011). Publicly announced crackdowns on illegal and undocumented migrants living in South African cities remain frequent.

Unfortunately, more recent indications do not promise a change in approach. In launching the new Green Paper on International Migration in June 2016, former Home Affairs Minister Malusi Gigaba (2016) made a clear rhetorical commitment to advancing regional cooperation toward free movement in SADC and on the continent, declaring that South Africa “is committed to regional economic integration” and acknowledging “the importance of freeing movement on the continent”:

The movement of people is a core issue of regional integration, in Africa and other regions globally . . . Contributing to the economic development of our region and continent as a whole, in line with our long-standing, Africa-oriented foreign policy, is in our enlightened self-interest.

Our policy must equip us to work with regional partners, to progressively liberalize movement, in line with the aspirations of the people of our continent for Africans to be able to move freely in Africa.

³These regulations are stipulated by the Immigration Act no. 13 of 2002, as amended in 2011.

The Green Paper explicitly endorses the aspiration of a free movement regime in SADC, affirming that “the goal of achieving the free movement of people, goods and capital in the region has long been a priority for SADC, and is seen as integral to promoting development, poverty alleviation, and prospects of greater integration”. It goes on to say as follows:

South Africa fully supports the vision of an Africa where its citizens can move more freely across national borders, where intra-Africa trade is encouraged and there is greater integration and development of the African continent (ibid., p. 57).

Despite this explicit rhetorical stance, however, the substance of the document in fact indicates an aggressive further clampdown on migration to the country. It looks to reduce barriers to entry for prospective migrants with skills or investment and business interests, introducing a point-based system for evaluating applications and creating new visa categories for business owners in the region. In this way, the policy aims to attract migrants viewed as “desirable” and of benefit to the national economic interest, drawn from a regional and international transnational elite. But it proposes certain policy changes that would adversely affect migrants considered to be “less desirable,” in particular economic migrants and asylum seekers.

With regard to *economic migrants*, the Green Paper envisages a “quota-based system” whereby a specified number of low-skilled migrants from SADC member states would be permitted entry for a fixed period annually and would not qualify for permanent residence status based on the number of years they spend in the country. While this offers at least *some* legal avenue for migrants of this category (as opposed to the status quo, in which no legal options exist whatsoever), the avenue proposed is clearly aimed at restricting rather than opening access to the South African labor market in reality. The fact that no transition to permanent status is provided for indicates that such migrants would be deemed necessarily temporary and their meaningful integration into South African society thus discouraged and effectively prevented. Furthermore, the determination of prescribed quotas would be “a political decision,” and there is no guarantee that the figure specified would be adequate to the scale of would-be economic migrants in the region. Finally, the effect of this measure would at best be to put a Band-Aid on a gaping wound: if hundreds of thousands of low-skilled migrants enter and reside in South Africa illegally at present, why would the same not occur once the given quota was reached? The logic of the proposal is evidently to make as little concession toward truly free movement as possible, short of doing nothing to alter the current regime.

More concerning are the further proposed restrictions on *asylum seekers* entering South Africa with the intention of applying for refugee status. The Green Paper identifies “opportunistic applicants for asylum” as a key problem to be addressed, arguing that economic migrants exploit the asylum system in order to gain the right to stay and work in the country while their application is being processed. In response, the new proposal is to create “asylum seeker processing centres” close to the border, where applicants could be placed in administrative detention while their applications are considered. In the interim, they would typically not be allowed to leave and would be denied the right to work or study in the country—the proposal

goes as far as to suggest that “only refugees and not asylum seekers will be allowed to integrate into communities.” Moreover, refugees would no longer be offered a path to permanent residence, and asylum seekers entering South Africa from “third countries” considered to be safe would be forced to apply for asylum there rather than pass through and across the border.

These measures would be vulnerable to a legal challenge both in terms of the South African Constitution, which grants equal rights to all who reside in the country, and in terms of international law regarding the rights of asylum seekers and refugees. In particular, the creation of processing centers would be a clear infringement of the right to freedom of movement, and it is reasonable to assume that the envisioned processing centers would confine asylum seekers to extremely poor conditions that would violate their rights and make them vulnerable to further abuse.⁴ Consistent allegations of human rights violations at the Lindela repatriation camp are reason to expect similarly poor treatment of those held in processing centers managed by the state or its private contractors.⁵

The proposed policy changes pertaining to asylum seekers are, once again, irrational responses to the problems in the status quo and are clearly designed to restrict movement into the country. While concerns about opportunistic applicants abusing the asylum system are valid, collectively punishing all applicants by subjecting them to degrading conditions is not a morally or legally legitimate response. Moreover, there are other (and better) options available for addressing this problem: first, the slow, corrupt, inefficient, and unwieldy application processing system must be overhauled to reduce processing time and root out unjustified applications more quickly, and second, other legal pathways must be provided to economic migrants such that they do not have to resort to dubious asylum applications.

2.4 Clearly, There Is a Significant Gap Between Rhetoric and Actual Policy at Both the National and Regional Levels

While SADC expresses an aspiration to achieve free movement within the region and considers this to be a central tenet of meaningful regional integration, efforts to

⁴The recent furore over conditions in Australia’s detention camps on Nauru island has highlighted the fact that, even in highly developed destination countries, “processing centres” are typically intended as a deterrent to potential asylum seekers rather than as a safe or habitable environment. See *The Guardian* (2016).

⁵A 2015 investigation into the Lindela centre by the South African Human Rights Commission found *prima facie* violations of sections 10 (the right to human dignity), 12 (the right to freedom and security of the person), 27 (the right to health care, food, water and social security), 33 (the right to just administrative action) and 35 (the rights of arrested, detained and accused persons) of the Constitution.

realize this are weak or nonexistent. Similarly, South Africa consistently pledges its support for the liberalization of movement and for more open borders but has “systematically opposed free movement” in practice (Nshimbi and Fioramonti 2013, p. 62). As a regional leading power, South Africa not only has failed to exert its influence in furthering regional cooperation in this regard but has in fact actively and aggressively obstructed it.

The comparison between ECOWAS and SADC brings into sharp relief the failure of the latter to meaningfully advance free movement between its member states. The reason for this lies in the preponderant influence of South Africa and its hostile approach to migration from the region. Indeed, South Africa’s consistent refusal to contribute to the strengthening of regional public institutions regulating migration—indeed, its active obstruction of any efforts in that direction—represents an unwillingness to support a meaningful process of institutionalization in SADC. The country’s insistence on unilateral regulations and bilateral commitments, as opposed to multilateral cooperation like that pursued in ECOWAS, leaves any project of regional free movement stillborn. By contrast, regional leading powers in West Africa—Nigeria and, to a lesser extent, Ghana and Côte d’Ivoire—have expressed a desire to deepen regional integration through multilateral mechanisms and have recognized the central importance of free movement to this effort.

3 South Africa’s Development of a More Restrictive Migration Policy: Implications for the Situation of Refugees and Migrants in Johannesburg

South Africa’s migration policy has evolved over time to become increasingly restrictive, and the debate around the current Green Paper on Immigration reflects this trend. Before illuminating the microperspective of migrants and refugees in South Africa and in particular the experience of those living in Johannesburg, a broader approach shall be employed to further examine how South Africa regulates migration with a special focus on the rights of people who newly arrive on the country’s territory. Although South Africa claims to uphold human rights and progressive principles in its treatment of foreign nationals, the actual experience of many living in the country challenges this common narrative.

As stated before, South Africa has been a receiving country for migrants throughout its recent history; however, the influx has notably increased since the end of the 1980s (Gordon 2014, p. 3). The admission of citizens from other African countries was deemed a responsibility by the first democratically elected government as many South Africans had found refuge in other parts of the continent when the apartheid regime was still in place. Post-1994, South Africa committed itself to acknowledging the need for special protection of refugees,⁶ a commitment that is reflected in two

⁶South Africa signed the two international legal documents concerning refugees in 1996: the 1951 Convention Relating to the Status of Refugees and the 1967 Protocol.

separate domestic legal acts, the Immigration Act and the Refugee Act (South African Government 2017a, b). According to UNHCR (2016), South Africa and Germany are currently facing the largest backlog of registered asylum applications worldwide (see Fig. 1). These growing numbers could be attributed to the recent political crisis in some countries in the Middle East and Northern Africa (Germany), as well as political turmoil and economic decline in several countries in sub-Saharan Africa (South Africa). By June 2015, South Africa had registered 798,100 undecided applications (almost 490,000 of them supposedly in Johannesburg), while Germany followed second with 311,600 (UNHCR 2015, p. 13). Due to these significant refugee and migrant flows, the South African experience is of particular relevance in comparison to other countries.

3.1 The Current Legal Regime in South Africa Offers Ample Protection to Asylum Seekers and Refugees, at least in Theory

People who flee political persecution in their country and aspire to seek asylum in South Africa are issued an asylum transit permit once they enter the country, which is nonrenewable. Within the following 14 days, they must submit their application at one of four Refugee Reception Offices. These offices are spread over the country; one is located close to the Zimbabwean border in Musina, one in Marabastad near Pretoria, one in Cape Town, and one in Durban. Importantly, Marabastad alone dealt with 70% of all asylum applications in 2015 (Department of Home Affairs 2016a, p. 4). The situation was aggravated by the closure of the Refugee Reception Offices in Johannesburg and in Port Elizabeth in 2011 and 2012 respectively (Amit 2015a, p. 20). These closures had far-reaching consequences and increased the pressure on other operating offices, with serious consequences for asylum seekers. Many asylum seekers who have been waiting for an official decision had to travel to another Refugee Reception Office involving unexpected material costs for traveling. Importantly, according to a survey conducted by the African Centre for Migration and Society (ACMS) and Lawyers for Human Rights (LHR), almost one third of asylum seekers report experiencing corruption at some point during the procedure.⁷ These results showed sharp differences with regard to the different Refugee Reception Offices, and it was obvious that the most incidents were reported in Marabastad. Most commonly, people were denied access to the office, or papers were not issued unless a bribe was paid. According to the report, it is questionable whether the asylum process is still characterized by the general principles of the rule of law (Amit 2015a, p. 19). Of course, corruption is closely related to an overburdened

⁷The survey included 928 people who were either already granted asylum or still awaiting a decision. The study was grounded on a narrow definition of corruption as it only included “a request for money” (Amit 2015a, p. 13).

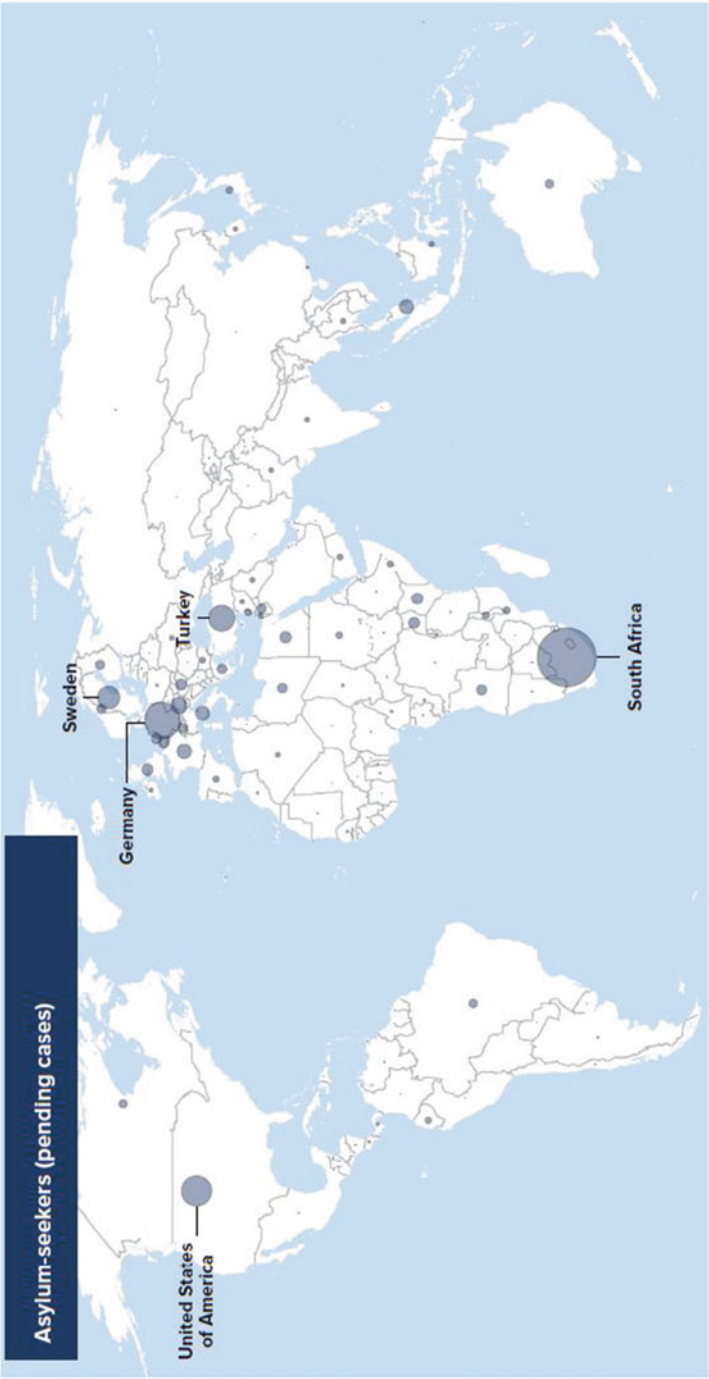


Fig. 1 The worldwide distribution of pending asylum applications (2015). Source: UNHCR (2016, p. 10)

bureaucracy and to the integrity of the respective South African institutions in general (*ibid.*, p. 18). While the legal process promises fairness and certainty in theory, in practice these are far from achieved.

According to the latest statistics of the Department of Home Affairs, the overall number of asylum applications has exploded since the end of the last century.⁸ It rose by almost seven times from about 11,000 in 1998 to 70,000 in 2013 before dropping slightly in 2015 to about 62,000 (Department of Home Affairs 2016a, p. 7). Zimbabweans account for the biggest share of asylum seeker applications, followed by Ethiopians, citizens from the Democratic Republic of the Congo, and Nigerians (Department of Home Affairs 2016b, p. 30). Until their case is decided, asylum seekers receive a so-called Section 22 permit, which allows them to stay for up to 6 months in the country. Furthermore, the asylum seeker is theoretically allowed to work and study and is protected against deportation. Within this period, the application should be determined by the state (Department of Home Affairs 2017).

According to many practitioners,⁹ however, this duration is not fixed and practically depends on the particular case at hand; as a result, many asylum seekers remain in limbo for significantly longer than expected. Around 800,000 individuals are currently estimated to hold this status. Nonetheless, as highlighted above, the administration has an immense backlog of application files. Therefore, many applicants wait several years until they are informed about their status. Only a fraction of asylum seeker claims are successful. While in 2014 only 15% of the submitted claims were granted, the number deteriorated tremendously in the following year. Only 4% of asylum-seekers' claims were granted in 2015, primarily to Ethiopians, Somalis, DR Congolese, Congolese, and Eritreans (Department of Home Affairs 2016a, pp. 18 and 24). In fact, South Africa is the country with the highest application rejection rate worldwide (Collins 2016). This effectively means that "it is an asylum system in name only, while in reality it functions solely as an instrument of immigration control" (Amit 2012, p. 85). Nonetheless, many rejected that asylum seekers stay irregularly in the country.

If an asylum seeker is assigned refugee status, the refugee is equal before the law with a South African citizen except for the right to vote. However, this only applies for 4 years until the visa has to be renewed. In theory, after having lived in South Africa for 5 years, a refugee can apply for a permanent residency, but in practice this status is usually never approved.

⁸The number of submitted applications reached its peak in 2009 with more than 223,000 applications (Amit 2015a, p. 18).

⁹For the purposes of this article, the following experts were interviewed on the base of a semi-structured questionnaire: Asmita Parshotam (South African Institute of International Affairs, SAIIA), Johan Viljoen (Jesuit Refugee Centre Johannesburg).

3.2 This Legal Regime Is Set to Change, Introducing Further Restrictions

The proposed Refugees Amendment Bill of 2016, which is currently before Parliament's Portfolio Committee on Home Affairs for initial approval, would introduce significantly greater restrictions on the rights of asylum seekers arriving in South Africa. Two changes are particularly important. First, proposed changes to Section 21 of the Refugees Act of 1998 would reduce the period of time granted for prospective asylum seekers to present themselves at a Refugee Reception Office to just 5 days, from 14. This could prove a significant hindrance to asylum seekers, who must find a way to travel far distances in a new country with few resources or face a potential automatic disqualification. Second, further amendments empower the Director General of Home Affairs to require asylum seekers to report to "any place specially designated," which opens the possibility—floated by the government in the past months—of the establishment of refugee camps to house asylum seekers while their applications are processed. This would end the previous extension of full freedom of movement to asylum seekers during this period. Finally, changes to Section 22 of the original Act would deny the right to work to asylum seekers who (a) could be supported by family members or relatives or (b) could receive basic amenities from the UNHCR.

This would effectively deny any asylum seeker the potential to move and work freely in the country and would undoubtedly result in extremely worse living conditions than under the current legal regime. These additional restrictions follow an established trend of the mistreatment of foreign nationals and an attitude of hostility toward them by the state.

3.3 Deportations Are Used Increasingly as an Instrument of Migration Management

As indicated before, deportations play a crucial role in South Africa's migration management. In case an asylum application is denied, the individual has to leave the country within 15 days. The same applies for migrants whose working visas have expired and were not renewed. People who are caught either by a police or an immigration officer staying illegally are detained at the Lindela detention camp, which was opened in 2002 (Amit 2015b, p. 2). Up to 4000 people can be held in this camp, but the real number of those detained is often higher (ibid., p. 1). Importantly, by law, no person may remain in Lindela for longer than 120 days (ibid., p. 6). However, it is well known that many are detained for times exceeding the maximum period and are often denied adequate food or guaranteed access to health care (ibid., p. 6). Although the South African Human Rights Commission is entitled to monitor the camp, the Commission has never visited Lindela. Most people who are being deported are originally from surrounding countries (Department of Home Affairs

2016b, p. 31), which might also depict that people from neighboring countries might attempt to secure a foothold in South Africa, which is still deemed to be the safe haven on the African continent. In the last years, around 80% of the deportees came from Mozambique, Zimbabwe, and Lesotho (ibid., p. 31).

3.4 The Progressive Right to Work and Education Is a Reality Only in Theory

Although it is necessary to differentiate between refugees and migrants as the two categories entail diverging responsibilities that have to be respected by the state, certain common experiences emerge in the testimony of people from both categories. It is written in the Constitution of South Africa (Chapter 2, 29) that everyone, and not only citizens, has a right to basic education. Nonetheless, while the current asylum permit grant holders the right to work and study, it lacks recognition in practice by many employers and private or public institutions, including schools and hospitals (Khan 2007). Thus, refugees, as well as asylum seekers, shall be able to attend school. According to the law, the South African state ought to guarantee universal availability and accessibility of school education. But almost every fourth school-aged asylum seeker does not attend school due to various barriers on different levels, such as the lack of necessary legal documentation or resistance by principals (LHR and CoRMSA 2010). Unless they possess the asylum permit, education is often not accessible to them. Considering the administrative challenges of Refugee Reception Offices, it is obvious that many foreigners are vulnerable to exploitation and do not benefit from the full realization of their rights due to a lack of appropriate documentation. Furthermore, as interviewees noted in focus group interviews,¹⁰ asylum seekers whose children are born in South Africa have to apply for asylum for their children as well. Given the corruption and the long period of time that it usually takes to acquire legal documentation, often children are unable to start school by the age of six. Moreover, interviewees stated that although they enrolled online, they often received neither a confirmation nor a rejection but once the school year started were told that their child could not attend school. Several people also confirmed that the schools sometimes expected money to be paid, which they could not afford. Beyond that, costs for transport, uniforms, and other school equipment or language deficiencies are often given as excuses to not provide access to schooling. Furthermore, many refugees and asylum seekers are excluded from fee exemptions (LHR and CoRMSA 2010).

The same obstacles are true for the right to work that is stipulated in the existing Refugees Act, which states that an asylum seeker is allowed to work in South Africa as soon as he/she submits an asylum application (Section 27). However, in reality,

¹⁰Focus group interviews were conducted with a total of 50 refugees at Arrube Women's Centre Johannesburg on 21 March 2017.



Fig. 2 English classes with a group of Congolese women at Arrupe Women's Centre in Johannesburg. Source: Photograph by Tilmann Feltes

foreigners face obstacles accessing especially the formal labor market since many companies refuse to hire foreign nationals or demand a work permit, which refugees normally do not possess. Besides refugees, undocumented economic migrants are also vulnerable to exploitation at work as they cannot approach the authorities to ask for protection in case their rights have been violated. Therefore, they are often exposed to poor working conditions or are denied a fair salary. As a result, many foreign-born workers work in the informal sector. Indeed, estimates claim that about every second, foreign-born person works informally in South Africa (Budlender 2014, p. 29). Since support from the state is often lacking, several independent organizations aim at the empowerment of people so that they can support themselves. Arrupe,¹¹ for instance, situated in Yeoville, a suburb of Johannesburg where many foreigners reside, offers vocational training courses in baking, sewing, and hair dressing, as well as English language classes to refugees and migrants (see Fig. 2). Most graduates of the three-month classes remain in the informal sector, but the program enables them to support themselves independently. Many others, however, do not receive any support whatsoever as nonstate resources are extremely limited.

¹¹Arrupe Women's Centre is an initiative by the Jesuit Refugee Centre Johannesburg. The vocational training courses last 3 months and aim to enhance women's chance to have a steady job. While it first started in 2015 as a program only for refugees, it now also includes South Africans and thereby tries to contribute to the integration of non-nationals in South African society. In 2016, 300 women were trained. Misereor International is one of the donors of the centre.

3.5 *Recent Xenophobic Attacks Are an Expression of Broader Tensions*

In addition to the structural obstacles faced by refugees and economic migrants alike, both are confronted with social resentment and frequent violence. In recent years, South Africa has experienced xenophobic attacks, which culminated in the killing of 60 people in 2008 and seven people in 2015. These tragedies reflect widespread hostility toward foreign nationals within South African society. In a survey by Gordon (2014, p. 9), only 38% of respondents agreed that foreigners who fear harm in their country of origin should find refuge in South Africa, while the larger percentage (44%) opposed that view and 18% abstained.

Compared to a survey undertaken by the Southern African Migration Project (SAMP) in 2006, the situation has been aggravated over time. A decade ago, 47% were in favor of harboring refugees, while the rest either rejected them (30%) or were indecisive (17%) (ibid., p. 2). Many South Africans falsely claim that foreigners are the causes of crime or unemployment (Gordon 2016), fears that are often spread by local politicians seeking an easy scapegoat.

According to the latest results, the opposing positions within the South African public are not restricted to one particular socioeconomic group but rather a phenomenon that can be observed in every class (Gordon 2014, p. 9).¹² Based on these observations, it can be assumed that, as a result, “anti-immigrant attitudes are widespread in South African society” (Gordon 2015, p. 494), and violent outbreaks represent the upwelling of this resentment. Nevertheless, the incidents need to be analyzed in their context (Naidu et al. 2015, p. 1). The victims originated mostly from other African countries,¹³ especially Somali shopkeepers in the townships in Durban and Johannesburg. Responsible for the attacks were primarily black South Africans living in urban townships (ibid., p. 3).¹⁴ It is often argued that the prevailing economic situation, with high levels of poverty and unemployment, are the main causes of these attacks (Gordon 2015, p. 500). Thus, one factor might be that the attackers feel betrayed as foreign workers are sometimes preferred to them due to their willingness to work for a lower payment (Naidu et al. 2015, p. 4) or

¹²Nonetheless, variations exist looking for instance at the education level of the analyzed group, it becomes obvious that the higher educated the people are, the more likely they are accepting foreigners (Gordon 2015, p. 501).

¹³In accordance with this, South Africans hold a more positive attitude towards Europeans and North Americans in comparison to those originating from African countries (ibid., p. 497). In 2012, for instance 55% of South Africans stated that African foreigners were the least favored group (ibid., p. 499).

¹⁴Important to notice, the tensions have not only been erupting between non-nationals and South Africans but have also been noticeable between different foreigner groups. It seems to suggest itself, that conflicts that have been prevalent in the countries of origins also play a role if people from opposing groups clash on a different terrain.

because they are more motivated or even better educated.¹⁵ As a consequence, aggressors might see foreigners as a serious threat to their job security.

With respect to these particular incidents, it has to be mentioned that an additional proximate cause of major violent attacks is political leaders' statements about foreigners in South Africa. For example, the isiZulu King Goodwill Zwelithini demanded in a public address in 2015 that all foreigners be "sent home," alleging that they would take over the businesses of South Africans and therefore represent a threat to the South African people (The Herald 2015a). Shortly after this, President Zuma's son echoed the King's message (Naidu et al. 2015, p. 4). Besides making a plea for foreigners to leave, he also implicated them in criminal behavior such as the ownership of weapons and drugs (The Herald 2015b). These public statements represent trigger events that light the fuse of festering resentment and anger, as occurred in 2015. The government's increasingly restrictive legal regime, its open hostility toward foreign nationals and its failure to protect them from exploitation feed into xenophobic violence and reinforce the sentiments that fuel it.

4 Conclusion

South Africa is a major destination country for refugees, especially from other African countries. Existing legislation such as the Refugees Act grants progressive rights to asylum seekers and refugees, such as the right to seek employment and the right to basic education. Nonetheless, in practice, asylum seekers are confronted with numerous obstacles. Due to failures in administrative capacity and corruption, asylum applications are not processed within the mandated time frame and many people wait years before they are informed about the outcome of their request. Furthermore, corruption prevents fair process and leads to regular exploitation. It remains difficult for asylum seekers in particular to access their rights as a result. In addition to these structural challenges, foreign nationals are vulnerable to xenophobic attacks, which have erupted frequently in recent years. The blaming of foreigners for broader problems such as high unemployment and official statements by political leaders supporting this narrative stoke the flames of violence and resentment.

What emerges from an examination of both the regional governance of migration in SADC and the experience of foreign nationals living in South Africa is a clear hostility on the part of the South African government to migration from other countries in the region. Where other regions in Africa, notably ECOWAS, have achieved far more sophisticated regional instruments and greater freedom of movement, SADC remains closed to most cross-border flows. This is because of a sustained attempt by South Africa, which holds a preponderant power in the region, to restrict movement into the country. This policy approach is indicative of a widespread resentment of foreign nationals both within the voting public and the

¹⁵Here, especially Zimbabweans are generally much better educated than South Africans.

political elite, which at least partially explains the failure to protect foreign national residents in South Africa, as well as further proposed restrictions to their rights.

Questions

1. What explains the differences in the regional governance of migration between ECOWAS and SADC?
2. What will proposed further restrictions on the rights of asylum seekers mean for those arriving in South Africa?
3. How could the South African government provide better protection for refugees?
4. How could widespread hostility toward foreign nationals in South Africa be addressed in the future?
5. Compared to Germany, how has South Africa responded to the influx of refugees?

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URBAN TRANSFORMATION AT A LOCAL LEVEL?
THE CASE OF DURBAN'S 100 RESILIENT CITIES CAMPAIGN

Tilman Felix Feltes