1 Introduction

Africa's urban challenge

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With the world's fastest growing rates of urbanization, Africa's urban population has doubled in the last decade, and is predicted to increase threefold between 2010 and 2050 (UN-Habitat, 2014). Already home to seven megacities as well as a rapidly multiplying number of secondary cities, the transformation of this continent formerly regarded as rural to one that is largely urban is undeniable (UNDESA, 2018).

Over the past two decades, a growing body of work examining Africa's 'urban revolution' has emerged (Parnell & Pieterse, 2014). An important strand of this work distinguishes itself from traditional and conventional urban research and theory by recognizing that the drivers, scale, pace, and nature of urban growth in Africa are vastly different from the experience and historical patterns of urbanization in the North (Parnell & Robinson, 2012; Fox, 2014). Urbanization without industrialization, high natural growth rates, and housing, employment, and basic services that are predominantly generated without government intervention or regulation are only some of the many characteristics of African urbanisms (Pieterse, 2011; Cobbinah et al., 2015).

This means that many of the concepts, models, and logics traditionally associated with urban growth and development – and related to the role of the state, economy, and society – either do not apply, or operate in very different ways, and therefore need to be rethought, reformulated, or simply considered in their own right (Robinson, 2006; Bekker & Fourchard, 2013; Myers, 2011). The growing scholarship on African cities recognizes that this reality is part of a wider geographical realignment occurring in urban studies over the past years, in which southern perspectives are representing new points of departure for theorizing the city and urban governance, development, and planning (Edensor & Jayne, 2012; Caldeira, 2017; Simone, 2010; Roy, 2009, 2011; Parnell & Oldfield, 2014; Bhan et al., 2018; Watson, 2009; Satgé & Watson, 2018).

The need to better understand African cities in order to shape the continent's urban future is also increasingly recognized in the policy sphere (UN-Habitat & UNECA, 2015), reflecting a global shift acknowledging the role cities will need to play if global development agendas such as the Sustainable Development Goals and the New Urban Agenda, as well as agreements such as the Paris Climate

Agreement, are to be realized. High-level support for these global agendas by African governments, and the adoption of continental policies such as Agenda 2063 and national development plans with an urban focus, mark an important watershed, and a departure from policies predominantly focused on the rural. However, in spite of this discursive turn, there remains a disjuncture between urban policies and practice (Pieterse, 2018). National governments across the continent often remain unresponsive to the needs of urban citizens, while local governments continue to lack the political, administrative, and fiscal means and resources to adequately plan, govern, and manage sustainable and inclusive cities and human settlements (Silva, 2016; UN-Habitat, 2014).

As a result, few African countries are on track to meeting global goals by 2030 (UNECA, 2018; SDG Center for Africa & SDSN, 2019). While a lack of financial and technical resources represents an important barrier to the implementation of plans and policies for more sustainable development, a shortage of the data and knowledge that can adequately guide and monitor progress and implementation of such plans and policies is just as obstructive. Indeed, much of the knowledge that is produced in and on urban Africa does not speak concretely to the challenges that are experienced by those who govern and are governed on the ground.

This edited volume seeks to address the disjuncture between urban research, policy, and practice, with a particular focus on African cities. It brings together contributions from various members of the African Urban Research Initiative (AURI), a pan-African interdisciplinary and applied urban research network that comprises universities, think tanks, research institutions, and practitioner agencies concerned with urbanization and its impacts across various scales on the African continent. As such, the following chapters present research entirely conducted by researchers and practitioners working in and on Africa, most of which is also applied, and was conducted in collaboration with local communities, governments, and other relevant stakeholders on issues that directly relate to local challenges.

This introductory chapter provides an overview of Africa's urban challenge, and emerging modes and methods – expanded on in subsequent chapters – to reframe this challenge through knowledge co-production.

Africa's urban challenge

The challenges of rapid urban growth, poverty, unemployment, mounting social, economic, and spatial inequality, and vulnerability to climate change in globalizing and urban Africa, and the systems of exclusion these challenges produce are increasingly well-known and documented by researchers, international organizations, and development institutions alike. However, solutions to address these issues too often continue to be shaped by external or outdated perceptions of development, and implemented in top-down, isolated ways that do not respond to the complexity of local dynamics, needs, and priorities.

This is partly because – in spite of growing interest and scholarship – there is still not enough research conducted in and on urban Africa. In this context, researchers

have pointed to the geopolitics of urban data production: 'If 21% of the world's urban population will be living in African cities in 2050, this part of the world is still largely overlooked by existing global urban databases . . . partly due to capacity issues, as the technical and human resources needed to collect, process, and analyse urban data is often lacking in municipal departments' (Robin & Acuto, 2018, p. 79). Moreover, existing global urban databases often do not include the full range of stakeholders producing urban data, such as local research institutes, civil society, or even national governments (Robin et al., 2017).

When looking at research on urban sustainability, most of the influential and mainstream academic scholarship also continues to largely emanate from the global North (Nagendra et al., 2018). A lack of research funding represents a major impediment to local research output and knowledge creation. The decline in research funding in Africa due to a combination of factors can be traced back to the 1990s. These factors include the destabilizing influence of political events and civil wars, the impact of a change in the policies of the World Bank and other international agencies on higher education, and continued low investment in science by African governments. These factors in turn affected research infrastructure and research management and support within higher education institutions, further hindering robust data production (Mouton, 2018). These research challenges have also been exacerbated by rising student numbers and the mushrooming of private higher education institutions, often of dubious quality and standards (Mahlubi et al., 2007; Banya, 2008).

But the deficit is not just about the lack of sufficient research; it is also about the kind of research that is being produced. The hegemony of western thought in education and knowledge production is still reflected in many African universities, where teaching programmes premised on colonial models of knowledge production and taught in colonial languages continue to reproduce themselves (Mamdani, 1993; Jensen et al., 2015). Nevertheless, most of the calls for the decolonization of higher education remain limited to South Africa (Crossman, 2004). In some cases, calls for decolonization ironically are the result of changing international donor agendas, which are increasingly beginning to support local or endogenous knowledge production (Shizha, 2010). The sum result is that most of the research produced in and on Africa continues to be disconnected from local issues.

According to the Kenyan scholar Nyanchoga:

The process of decolonizing education system has been slow. Many times universities in Africa are indifferent to the social climate in which they operate in because they are alien to it. University education fails to integrate the multicultural traditions of the society in which they operate largely because many of them had their roots in the colonial order. They simply manifest lack of a social responsibility to society. Consequently they are unable to mediate between cultural diversity and nation building, ethnic contours and political disjuncture.

(Nyanchoga, 2014, p. 64)

Due to the ways in which much research on or in Africa is funded and conducted, it often does not find its way back to prospective users, whether policymakers or local communities. This lack of reciprocity also reflects the power dynamics between researchers and the communities they study. While this is not just an African problem, it is one that requires urgent attention in an environment where the value of research goes far beyond academic curiosity and can inform innovative and inclusive policy.

As noted by the international expert panel ‘Science and the Future of Cities’ (an independent, international effort to assess the state of the urban science-policy interface for global sustainability):

Cities need better science-policy connections. To harness the global efforts around these agendas, we urgently need to address two key matters: forge new knowledge that responds to complex urban challenges, and accelerate uptake of scientific urban information by practitioners.

(*Science and the Future of Cities*, 2018, p. 3)

This assessment illustrates an emerging call for more applied work that bridges the gap between science/research and policy, especially in the field of cities and urban sustainability, as well as adequate support for such work (e.g., Mauser et al., 2013). Building on this call, this book identifies Africa’s overarching challenge as the need for new knowledge production, through the use of methodologies and approaches that bridge the science-policy gap with an explicit intention to adequately, sustainably, and inclusively respond to the continent’s development challenges.

As such, the questions underpinning this book’s rationale are: what modes of knowledge production are needed to fill the knowledge gaps in/on African cities? And how can different ways of producing knowledge contribute not only to knowing more about Africa’s urban challenges, but also to reframing the challenges themselves?

Reframing through knowledge co-production

There is growing interest and an expanding body of work around the notion of ‘co-production’. Many still use this term in the way it was first introduced in the 1980s, from work on street policing in the US that argued that security was not delivered solely by the police, but rather was the product of relationships, negotiation, and collaboration between police officers and local residents (Brudney & England, 1983, cited in Mitlin & Bartlett, 2018). In their review of the concept in a special issue of the journal *Environment and Urbanization*, Mitlin and Bartlett (2018) outline how the concept moved to the global South in the mid-1990s, but still retained a focus on service delivery (Ostrom, 1996; Evans, 1996). As such, the primary emphasis of the contributions published in that special issue is on the co-production of public services such as water and sanitation, informal settlement

upgrading, or post-disaster reconstruction, with each contributor using a different definition to describe the nature of the collaborations involved.

Another strand of work instead focuses on the co-production of *knowledge*, with a view to bridging the gap between science and society (Gibbons et al., 1994; Jasanoff, 2004). In more recent years, this work has increasingly moved into the field of sustainable development, emphasizing the need to produce ‘usable’ knowledge not just *on* but *with*, as well as *for*, society (Polk, 2015; Clark et al., 2016). This kind of work is also referred to as ‘transdisciplinary’ research, in the sense that it represents a ‘reflexive, integrative and method driven’ way of doing research aimed at the solution or transition of societal problems . . . by differentiating and integrating knowledge from various scientific and societal bodies of knowledge’ (Lang et al., 2012, pp. 26–27; see also Jahn, 2008; Lawrence, 2015).

In an attempt to synthesize this growing body of work, a large group of researchers have collectively defined knowledge co-production in the context of sustainability research as: “Iterative and collaborative processes involving diverse types of expertise, knowledge and actors to produce context-specific knowledge and pathways towards a sustainable future”(Norström et al., 2020). Norström et al. also distinguish four principles that can contribute to high-quality knowledge co-production for sustainability. Specifically, they suggest that processes should be:

- 1 Context-based: situated in a particular context, place, or issue.
- 2 Pluralistic: explicitly recognizing the multiple ways of knowing and doing.
- 3 Goal-oriented: articulating clearly defined, shared, and meaningful goals that are related to the challenge at hand.
- 4 Interactive: allowing for ongoing learning among actors, active engagement, and frequent interactions (Norström et al., 2020).

The chapters in this book demonstrate that knowledge co-production is an appropriate approach to conduct urban research in the context-specific manner demanded by the challenges facing Africa’s cities. This imperative stems from the fact that while key urban trends can be discerned across the continent, local dynamics, needs, systems, actors, and priorities remain highly specific to local contexts, mostly undocumented, and often contested and in flux. Knowledge co-production represents a way to include voices typically absent in research, and in the process, to foster new relationships between key stakeholders. Such an approach not only generates new knowledge concerning societal problems, but also renders actionable knowledge for problem-solving. While still incipient, the use of knowledge co-production by researchers in and on Africa is growing, especially with reference to (urban) sustainability challenges related to slum upgrading, coastal flooding, and waste management (Buyana, 2019). Much of the work done so far has been concentrated in South Africa, where experiments with knowledge co-production can be seen as having emerged in the post-apartheid era as a way for researchers to call for more reflexive approaches to policy deliberation (Swilling, 2014).

At the African Centre for Cities (ACC) at the University of Cape Town in South Africa, knowledge co-production has become ingrained in the ACC's DNA through its work over the past decade as part of Mistra Urban Futures, a network of researchers using co-production processes for achieving sustainable urban futures and realizing just cities (Mistra Urban Futures, 2016). The network is part of a number of multi-country, multidisciplinary, and multi-partner research consortia across the global North and South engaged in research for urban sustainability and equality (Osuteye et al., 2019).

Central to ACC's work has been the CityLab programme, which started in 2008 with the aim of brokering 'interdisciplinary engagement, both across academic disciplines and between the academy and broader society, towards new knowledge generation and knowledge sharing, and the creation of working partnerships to engage with the issues pertinent to the African urban situation' (Anderson et al., 2013, p. 2). CityLabs can have different meeting formats, ranging from seminar series to the establishment of a think tank or collaborative research projects. In Cape Town, they have been both place- and theme-based, concentrating on particular parts of the city or on topics ranging from healthy cities and sustainable human settlements, to climate change, urban violence, safety, and governance, and have resulted in a variety of outputs from academic journal articles, book chapters, and edited book volumes, to popular publications and policy documents (Cartwright et al., 2012; Brown-Luthango, 2015; Cirolia et al., 2016).

Altogether, the ACC CityLabs can be seen not just in the literal sense as referring to places of work or 'labour' (Anderson et al., 2013, p. 2), but also as laboratories or sites representing 'experimentations with knowledge co-production' (Culwick et al., 2019, p. 9). As such, they fit into a broader body of work on 'urban experimentation' (Bulkeley & Castán Broto, 2013; Karvonen & van Heur, 2014; Evans, 2016; Patel et al., 2017).

While important and needed, knowledge co-production – through CityLabs or other research methods – is not without its difficulties. Based on their experiences as sustainability researchers in research projects in Kenya, Switzerland, Bolivia, and Nepal, Pohl et al. (2010) point to three specific challenges. The first is the challenge of addressing power relations and ensuring that no single actor or viewpoint is privileged over others. The second concerns the challenge of integrating and interrelating different perspectives on the issues at stake in order to achieve a more comprehensive or balanced understanding of the issue and its corresponding solutions. The third has to do with the challenge of working with the concept of sustainable development as a framework that is normative and contested and therefore requires negotiation around its use as 'a starting point and key motor of the co-production process' (Pohl et al., 2010, p. 272). Dealing with these various challenges requires a set of practical skills – often acquired in past experiences as practitioners – to enable researchers to let go of their own viewpoints and assumptions as academics, and assume roles that can vary from reflective scientists to intermediaries or facilitators (Pohl et al., 2010, pp. 277–279).

Experiences from the ACC CityLab programme further highlight challenges around knowledge co-production, including micro-politics, getting people to

move out of their disciplinary and practice biases (and related norms, values, and ethics), the difficulties of writing and producing knowledge in interdisciplinary groups, and the fact that this type of work is more time-consuming than standard research (Anderson et al., 2013; Smit et al., 2015). Culwick et al. (2019, p. 4) therefore conclude that ‘the CityLab model is not suited to all contexts or objectives. They require commitment and joint goals, and a willingness to engage and rethink current practices and ways of knowing’.

Indeed, knowledge co-production is inherently complex, time-consuming, and often unpredictable in terms of outcomes (Simon et al., 2018). In order for such research to feed into the formulation, implementation, and monitoring of urban policy – and ultimately changed practices – there is a need to find sustained modes of collaboration between government, researchers, practitioners, and communities.

The African Urban Research Initiative

The AURI network emerged in 2013 at the ACC at the University of Cape Town in South Africa out of a sustained engagement with policy actors and Africa-based research centres seeking to reach a shared understanding of the scope and implications of the urban transition in Africa. The project is driven by the premise that unless an active network of durable knowledge institutions, focused on applied urban research and capacity-building, is urgently established, the decision-makers for the continent’s rapidly growing urban centres will not be in a position to understand their urban development dynamics, let alone address them effectively.

AURI is distinct not just because its contributions come from researchers and practitioners who live and work on the ground, but also in its methodological focus on knowledge co-production. ACC cofounders Susan Parnell and Edgar Pieterse point to the need for appropriate understandings of urbanization in Africa to go beyond theoretical, dogmatic, and dichotomous approaches, and to focus instead on ‘endogenous readings of the urban’ (2014, p. ix), firmly grounded in the complex local realities of African cities. Such efforts require different theoretical and methodological practices to generate the kind of urban research and knowledge that is needed to understand and inform Africa’s urban transformation. In other work, Parnell and Pieterse call this ‘translational research’: a method that is, at least initially, primarily descriptive, and which builds on ‘the co-construction of a knowledge base to provide a legitimate and shared understanding of the state of the city and its needs’ (Parnell & Pieterse, 2016, p. 241). Parnell and Pieterse see translational research as a method that is not just practically suited to and needed in light of the constraints of doing research in Africa, but also as a deeply political practice that aims to enable urban transformation.

Members of AURI recognize the necessity for research centres in Africa to be networked, in order to exchange knowledge, know-how, and expertise, and thereby foster a foundation of credible and resilient knowledge institutions on the continent that are at once rooted in local realities and engaged with broader trends.

AURI currently consists of 21 interdisciplinary applied urban research centres. These institutions include university-based research centres, think tanks, and civil society organizations. The basis for membership is voluntary, requiring only an active participation in the urban research agenda, and a commitment to building and strengthening local knowledge networks. AURI's core objective is to develop a collaborative pan-African network that relies upon and actively nurtures African expertise and research agendas. This network is intended to serve as a platform for both innovation and strategic thinking for Africa's urban challenges and opportunities. At present, the membership of AURI is as per Table 1.1.

Contributions: outline of the book

This book includes a selection of research undertaken by AURI members as part of the 2017–2019 work programme on 'Spatial Inequality in African Cities:

Table 1.1 AURI member institutions

<i>Institution</i>	<i>City, Country</i>
Centre for Urban Research and Innovations	Nairobi, Kenya
Institute for Urban Development Studies, Ethiopian Civil Service University	Addis Ababa, Ethiopia
Development Workshop Angola	Luanda, Angola
Takween Integrated Community Development	Cairo, Egypt
Lagos Urban Research Network, University of Lagos	Lagos, Nigeria
Ecole Africaine des Métiers de l'Architecture et de l'Urbanisme	Lomé, Togo
Laboratoire Citoyennetés	Ouagadougou, Burkina Faso
Environnement et Développement du Tiers Monde	Dakar, Sénégal
Centre for Urbanism and Built Environment Studies, University of the Witwatersrand	Johannesburg, South Africa
Cairo Laboratory for Urban Studies, Training and Environmental Research	Cairo, Egypt
Sierra Leone Urban Research Centre	Freetown, Sierra Leone
Laboratoire d'Etudes et de Recherche sur les Dynamiques Sociales et le Développement Local	Niamey, Niger
Urban Research and Advocacy Centre Malawi	Mzuzu, Malawi
Centre for Urban Research and Planning, University of Zambia	Lusaka, Zambia
Centro de Análise de Políticas, Universidade Eduardo Mondlane	Maputo, Mozambique
Institute for Human Settlement Studies, Ardhi University	Dar es Salaam, Tanzania
College of African and Oriental Studies, Addis Ababa University	Addis Ababa, Ethiopia
Faculty for the Built Environment, Arts and Science, Ba Isago University	Gaborone, Botswana
African Centre for Cities, University of Cape Town	Cape Town, South Africa
Institute for Development Studies, University of Nairobi	Nairobi, Kenya
Centre for Settlement Studies, Kwame Nkrumah University of Science and Technology	Kumasi, Ghana

Source: AURI

Research and Practice'. AURI members responded to a call for proposals for contemporary applied research to be carried out over a 12-month period with the support of the Ford Foundation.

There were three broad themes:

- Urban governance.
- Infrastructure and service delivery.
- Dynamics and nature of informality in African cities.

Researchers were asked to respond with proposals for research that included knowledge co-production methodologies as well as critical comparative analysis. The result is this new body of research that makes three important contributions. First, it demonstrates the depth of contemporary urban research being undertaken by African knowledge institutions across the continent. Second, it allows the reader to examine a selection of African cities beyond the (traditional) frame of city classification as measured by criteria such as population size, global competitiveness, or economic productivity. Third, the collection of work contained in this volume provides important perspectives on how ideas such as knowledge co-production travel across boundaries and, in particular, differentiate across diverse African contexts.

The six chapters are grouped together under the two broad themes of (in)formality and infrastructure, with issues of urban governance underpinning all of them. While an attempt has been made to include contributions from across the continent, not all linguistic or geographical regions, such as Francophone Africa, East Africa, or the islands of Africa, are equally represented. However, by covering large metropolitan areas (Cairo, Johannesburg, Luanda), mid-sized cities (Kumasi, Lusaka, and Alexandria), small cities (Minya), and peri-urban spaces (Thika) alike, different urban environments are represented. Moreover, the chapters collectively cover some of the issues most pertinent to African cities – from urban inequality to climate change, the urban food economy, and land and housing – as entry points into wider discussions on urban governance and development in Africa. In addition, all chapters have sought to adopt innovative mixed methods and research approaches to knowledge co-production, as well as comparative experimentation.

(In)formality

The book's first three chapters are concerned with the governance and different manifestations of urban informality. In spite of the importance of the informal economy across the continent, government actions continue to be, at worst, aimed at eliminating informality and, at best, formalizing it. The Zimbabwean scholar Kamete (2013) explains this urge by discussing African city authorities' 'fetish about formality', which he sees as 'fuelled by an obsession with urban modernity and Western notions of the "desired city"' (p. 24). However, as Indian scholar Ananya Roy (2005) has persuasively argued in the context of urban India, in the process of denying informality, states often play an important role in

(re-)producing informal practice. The chapters in this first part of the book provide insight into the different actors and practices involved in producing informality, and the particular, complex, and interwoven nature of the ways in which these interactions manifest in the African urban context.

Chapter 2 presents the Centre for Urban Research and Planning (CURP) at the University of Zambia's research investigating the 'everyday' in Zambia's largest urban food market, with the goal of better understanding the formal-informal continuum, and thus grounding policy to support more inclusive and sustainable urban development in the global South. Conducted together with policy officials from Lusaka City Council as well as a range of food actors from the Soweto Market, the research process included round-table meetings, multi-stakeholder meetings, learning labs, and a policy dialogue on the Soweto Food Market. Through this collaborative process, the team gained insight into the ways in which formal rules and regulations are used and contested by multiple actors and practices in ways that are neither fully formal nor informal, but rather a constantly negotiated hybrid, structured by 'multiple sites' of power and control.

Chapter 3 comes from practitioners at the Cairo Laboratory for Urban Studies, Training and Environmental Research (CLUSTER), who have been undertaking urban research and design interventions in Egypt's post-uprising era since 2011. In a multi-scalar study across three different Egyptian cities, the researchers developed a comparative framework that utilizes the variables of borders, crossings, activities, and flows to explore the nature of the interconnections between the informal and formal. Working with practitioners, academics, community leaders, and experts in each city to examine different physical, social, and economic variables that have often emerged as responses to policies seeking to combat informality, the chapter proposes a redefined understanding of informal spaces and activities as central nodes of urban integration and connection, with the aim of illuminating larger questions around how to promote integrated urban policy.

Chapter 4 is written by researchers from the Centre for Urban Research and Innovations (CURI) at the University of Nairobi. Through a series of CityLabs bringing together community members, nongovernmental organizations (NGO), and city officials in the informal settlement of Kiandutu in the peri-urban municipality of Thika on the outskirts of Nairobi, the research team explored prospects for land sharing as an approach to resolving long-standing local conflicts and contestations around land tenure. Based on this experience, the chapter offers useful insights into the challenges and opportunities for community engagement and negotiations around land tenure and slum upgrading, exploring land sharing not only as a potential solution to a housing problem, but also as a rights-based model that may illuminate new ways of teaching, conceptualizing, and implementing urban planning in contested and fragmented spaces on the continent.

Infrastructure

An important link connects informality and infrastructure. As Pieterse (2018, p. 40) puts it: 'infrastructure systems . . . reveal most clearly the coexistence of

formal and informal systems of social and economic reproduction'. We can see this in areas from energy to transport and housing, but also in their social manifestation, as urban scholar AbdouMalik Simone describes, using his notion of 'people as infrastructure' (Simone, 2004). In both their social and physical dimensions, studies of infrastructure offer useful insight and critique on the extent to which global agendas such as the Sustainable Development Goals can be monitored and achieved in African cities (Pieterse et al., 2018).

Chapter 5 brings together contributions from researchers at the Takween Integrated Community Development practice in Cairo and the Centre for Urbanism and Built Environment Studies (CUBES) at Wits University in Johannesburg. Mapping and comparing the locations and levels of access to basic services and infrastructure, the chapter shows how inequality is manifested differently both between as well as within the two cities. It further argues that there is a recursive relationship between service provision and inequality: that lack of public services is not only a manifestation or measure of inequality, but also a producer of social inequality, and that these inequalities are often disguised by scale. In doing so, the chapter highlights the importance of spatial analysis and localized measures that reflect the local nature and diverse characteristics of urban inequality as they are manifested on the ground.

Chapter 6 reflects on a study conducted by researchers from the Centre for Settlement Studies (CSS) at Kwame Nkrumah University of Science and Technology in Kumasi, Ghana. Addressing the increasing devastation caused by recurrent floods, the research team conducted a series of CityLabs in the flood-prone settlement of Sepe-Buokrom in the city of Kumasi. Through focus group discussions and stakeholder meetings, the team brought together local community members and leaders, as well as city and national government officials to explore the potential for developing a community resilience framework (CRF) for flood-risk management. In the process, the role and importance of different levels of leadership sharing a common vision – and existing impediments to a spirit of collaboration – emerged as a key enabling factor for the successful development of community-based approaches to flood-risk management. The research further concluded that a shift in methodological approach to co-production is vital if the gap between research and policy in Africa is to be bridged.

Chapter 7 presents findings from research conducted by the NGO Development Workshop (DW) in Angola. This work builds on decades of action research conducted by DW among peri-urban communities and informal settlements as well as the monitoring of the implementation of global agendas at the Angolan government's request, bearing in mind the goal of building sustainable and equitable cities that leave no one behind. Based on a combined set of mixed and participatory research tools, the research shows the limited impact of the Angolan government's ambitious Urbanization and Housing Programme, launched in 2009 with the aim of building 1,000,000 houses, and suggests a more inclusive approach to rebuilding Angola's war-torn cities that builds on and supports self-built 'social production of housing'.

Knowledge co-production

Taken together, the chapters in this book represent the diverse set of actors, practices, and experiences involved in urban governance and development across the continent. In their work the researchers affirm a heterogeneous concept of knowledge co-production (van der Hel, 2016) by giving concrete examples of how difference can play out at the city, neighbourhood, and settlement levels. As such, they offer useful learnings on the localization, monitoring, and implementation of global and local urban policy agendas, and importance of recognizing urban difference and complexity (Parnell & Robinson, 2017).

In their collective pursuit to adopt innovative and more inclusive approaches to knowledge production, one of the major learnings that comes through from the chapters in this volume is the importance of close relationships between researchers and representatives from local governance structures, which in most of the cases have been fostered and built over long periods of time. In a context where levels of trust – both in public institutions as well as among different members of urban communities – are generally low, the importance of such relations cannot be underestimated. However, even with such relationships in place, the chapters also demonstrate the challenges of working with those local leadership structures – including traditional authorities or local party cadres – which are vital for access to local communities, but also function as gatekeepers. Often, day-to-day cultural and political practices and dynamics, as well as ‘conflicting rationalities’ (Watson, 2003), determine the scope, availability, and willingness of local leaders and communities to participate in research projects and knowledge co-production, even when these projects are aimed at community participation. Overcoming such challenges requires a deep understanding of the complexity and workings of local governance structures, as well as the factors, systems, and dynamics that can contribute to building trust and collective action.

This volume contributes to the growing literature on urban research, and specifically offers a view from the ground that provides insight into the wide spectrum of actors, systems, processes, and modes of governance that constitute African cities. Rather than offering and replicating a standard research approach across the case cities, the collection demonstrates the fluidity of urban themes and concepts, as examined across six African cities. Most importantly, the work contained in this book amplifies the need for urban research in African cities to be viewed beyond its ability to conform to or defy northern typologies. The output of this research collective demonstrates that indeed there are other understandings and knowledges of urbanization that require different terms of engagement. We offer this work from AURI – a nascent pan-African collaborative network – as a contribution to both new forms and methods of knowledge production.

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