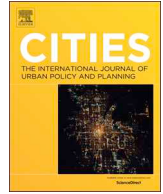




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The road to sustainable Kigali: A contextualized analysis of the challenges

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ABSTRACT

Rwanda, despite being a predominantly rural country, has remarkably performed in the post-conflict (late 1990s) period on the socio-economic fronts. Contemporary challenges in Rwanda's capital city, Kigali, are widespread informality, both in the economy and urban built environment. Informality significantly hinders human health and wellbeing attainment. This paper assesses the development trajectory of Kigali with reference to the Sustainable Development Goals (SDGs) using mixed research methods, including field visit. In doing so, the study dwells on three theories; postcolonial urbanism, post-conflict state building and neoliberalism. The paper diagnoses informality, polarized health sector and governance, as critical limitations to the attainment of sustainable development in Kigali. It argues that urban development in post-conflict Kigali is deeply rooted in capitalist and neoliberal ideology, where the state functions as the architect and facilitator of wealth accumulation for the few elites. Based on the analyses of the current development patterns, inclusive governance is identified as a key intervention to achieve sustainable development in Kigali.

1. Introduction

Rapid urbanisation in developing countries has changed the spatial distribution of people, resources and the use and consumption of land. While such changes can spur social and economic development, the general observation is that many countries lack the supporting policies and frameworks that can help to leverage the process for optimum developmental gains. With more than 80% of the global GDP generated in cities, sustainable urbanisation has every potential to contribute to sustainable growth by increasing productivity, while allowing innovation and creativity (World Bank, 2019). In contrast, uncontrolled urbanisation poses several challenges, such as poor housing conditions and poverty, which undermines the achievement of the Sustainable Development Goals by 2030.

In Africa, the idea of "new cities" or "modern cities" has emerged strongly and is increasingly adopted as urban visions and in development plans (Watson, 2014). These visions, which require massive investments in urban infrastructure, including roads, housing, business districts, industrial parks, and other basic services (Nikuze, Sliuzas, Flacke, & van Maarseveen, 2019), aim to improve the living conditions

of urban population while spurring local economies towards sustainable development (Meredith & MacDonald, 2017; Mitra et al., 2017). On the continent, the new urban visions largely take the form of urban redevelopment, reorganisation and upgrading of vast areas of existing cities (Nikuze et al., 2019). Though sustainable urban futures continue to underpin many urban development initiatives in Africa, their scales, implementations, political commitments and impacts are widely varied and poorly documented, particularly in academic literature.

Kigali has emerged strongly over the past two decades as a model city in Africa. Post-conflict Kigali, in addition to resettling of large numbers of genocide returnees, has seen several policy interventions, often combining strategies of modernization, reconciliation and development (Booth & Golooba-Mutebi, 2012; Clark & Kaufman, 2008; Hasselskog, 2015); including *Umuganda*¹, which aims to include citizens in the developmental process. In particular, the government has embraced urbanisation as a vehicle to catalyse Rwanda's transformation from an impoverished rural society to a prosperous modern economy. To reinforce this desire, the country set a target to reach the urbanisation level of 35% by 2020 (Ministry of Finance and Economic Planning, 2013). Importantly, the modernization agenda has largely

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¹ *Umuganda* literally means people coming together for a common purpose. The idea is to foster a spirit of collective responsibility and civic pride by working hand-in-hand on practical local schemes. The initiative stems from the genocide, when so many people were wiped out over a three-month period. During that disastrous episode, *Umuganda* became a weapon of propaganda as leaders mobilised ethnic Hutus and exhorted them to kill minority Tutsis and Hutu sympathisers. Repurposing the concept is helping to undo the legacy of social division and motivate citizens to offer mutual assistance and get involved in collective actions that promote unity and a sense of belonging". (Turok, 2019: 223)



Fig. 1. Built-environment variation in Kigali, 2019. Informal settlements were juxtaposed to formal settlements (top). Often, informal housing uses iron corrugated sheets for walls and roofs (bottom right). Kigali's CBD office building (bottom left). Photo credit: Authors and SHLC.

focused on improving spatial planning and land-use management to effectively leverage urban growth, and underpinning this agenda is the Kigali City Master Plan 2013, which details proposed land use and zoning plans that serve as a guide for the city's future urban development agenda (Nduwayezu, Sliuzas, & Kuffer, 2016). Since its inception in 2013, there has been a massive reconfiguration of the central business district (CBD) in the shapes of development of new office complexes (see Fig. 1) to support varied business services and rapidly emerging IT-based enterprises (Turok, 2019).

Given its unprecedented economic achievement and improvements in the lives of its populace over the past two decades, post-conflict Rwanda is presently being hailed as an exemplary city to other sub-Saharan African countries (Crisafulli & Redmond, 2012). On the economic front, for instance, the desire to attain middle-income status by 2020 has seen the country achieving consistently high economic growth over the past decade (Crisafulli & Redmond, 2012). While Gross National Income per capita increased three-fold from 2000 to 2017, the share of exports in GDP rose from 6% in 2000 to 18% in 2017 (Turok, 2019). Importantly, GDP has been growing between 6% and 8% annually since 2003, and it on record to be one of the highest rates in the world (World Bank, 2019). On the social front, there has been significant achievements in social progress. For instance, the proportion of people living below the poverty line decreased from 57% in 2006 to 39% in 2017 (World Bank, 2019). It is also on record that Rwanda topped the list of sub-Saharan African countries who made tremendous strides towards attainment of the MDGs (UN 2013), with 17% drop in the country's Multidimensional Poverty Index (MPI) from 2005 to 2010 (OPHI, 2013). Further, the incidence of child mortality has declined from 181 per 1000 births in 2000 to 38 in 2017, with stunting halved from 20% in 2000 to 9% in 2017 (World Bank, 2019). Also, primary school completion rate has risen from 23% in 2000 to 76% in 2017 (World Bank, 2019). More so, hotels, shopping centres, venues for

international conferences, meetings and events are being given particular attention to revitalize and boost tourism and hospitality businesses (Turok, 2019). Moreover, to attract both domestic and international investors, large industrial parks and economic zones are being built in suitable locations to allow firms to thrive under a conducive environment (Turok, 2019).

Despite the tremendous progress over the years, critics have raised many concerns, which tend to raise doubt as to whether Kigali is indeed a 'model city'. For instance, it has been argued that the current socio-economic progress is not consistent with the realities on the ground, as national and poverty statistics are loaded with errors, but also overly misinterpreted (Ansoms, Marijnen, Cioffo, & Murison, 2017). Rural and urban poverty is rife. Meanwhile, the implementation of the master plan and related planning policies have led to displacement, livelihood loss and increased poverty (Nikuze et al., 2019). Using locally grounded and socially disaggregated assessment of well-being, Dawson (2018) argued that Rwanda's modernization and transformation policies which have been regarded successful through limited impact evaluations, have exacerbated inequality and imposed restrictions on the urban poor. Political silencing, intimidation, rising informality as a result of rural-urban migration and increased insecurity and polarization of health, characterize modern Kigali (Gaynor, 2014; Kanamugire, 2016; Human Rights Watch, 2019). On scholarship front, there is a dearth of research on urban development in post-conflict Kigali. The few existing studies have focused on issues such as planning regulation (Goodfellow, 2013b), displacement and resettlement (Nikuze et al., 2019), low-carbon development (Colenbrander, Sudmant, Chilundika, & Gouldson, 2019; Gloria, Olivier, & Angella, 2019), political settlement (Goodfellow, 2014; Goodfellow, 2018; Goodfellow & Smith, 2013), urban land value capture (Goodfellow, 2018) and sustainable sanitation (Tsinda et al., 2013). These studies discuss issues in isolation and also tend to be narrower in scope with little resonance to the sustainable

development goals (SDGs). Importantly, issues of urban health, informal housing and economy as well as governance have received little attention. Existing studies do not allow us to understand what lies beneath the various impressive statistics. There is an urgent need for a rethinking of Rwanda's urban development, particularly if the country is to achieve the Sustainable Development Goal (SDG) 11 "Sustainable Cities and Communities." A study offering a diagnostic of the current urban development challenges in modern Kigali would therefore not only be relevant but a step in the right direction. The present study takes a deeper dive into the pressing urban challenges in Kigali. The study applies three different but closely linked theoretical perspectives to understand Kigali city. The first theoretical perspective is the post-colonial urbanism to understand Kigali city as an emerging colonial city with a strong modern outlook, but heavily bedevilled with lots of social ills. To unpack the development trajectory in post-genocide Kigali, we dwell on post-conflict urbanism theory to understand the post-conflict reconfigurations of the city, as highlighted by Goodfellow and Smith (2013). The third theoretical perspective is neoliberalism, which helps to put the city on a global radar, but also conceptualize and characterize the current urban morphology as a product of capitalism.

This paper was informed by a weeklong field trip to Kigali, as part of the Centre for Sustainable, Healthy and Learning Cities and Neighbourhoods (SHLC) research activities. The SHLC is a consortium of seven universities committed to studying urban neighbourhoods in African and Asian cities to understand the internal structures of cities. Dwelling on mixed data collection methods – literature review, field observations and interaction with urban residents and public officers in Kigali, the present study aims to bring to the fore, the major sustainable development challenges in Kigali city, focusing on three major challenges: urbanisation and informality; urban governance; and health. These areas were selected to fill the knowledge gap, as evidenced by the existing studies on Kigali. By throwing light on such issues, we hope that policymakers would be aware of the pressing urban realities, which will form the ground for informed pragmatic policies and tailored actions.

The structure of the paper is as follows; the next section theorises urban development, dwelling on postcolonial urbanism, post-conflict state-building and neoliberalism literature. This is followed by the contextualisation of Kigali from the perspective of urbanisation and informality (a major consequence of urbanisation and neoliberal planning). We then present polarization of health, followed by urban governance, as the core missing ingredients in the current development process. The final section presents the conclusion of this study, where we argue that inclusive governance is critical for sustainable urban development in Kigali.

2. Theorizing Kigali urban development: From postcolonial urbanism to post-conflict state building and neoliberalism

Postcolonial urbanism is understood as "colonial cities and their transformation through projects of nationalism and development; and heterogeneous forms of subalternity through which colonial cities are lived, negotiated, and shaped" (Roy, 2011: 312). Underpinning the postcolonial urbanism framework is the idea of "worlding", which Ong (2011: 10) describes as "a milieu of intervention," a "claim to instantiate some vision of the world in formation." Postcolonial cities have been regarded as centres of global capitalism, operated through competitive market-oriented mechanisms and supported by private property rights and good governance systems as core ingredients to prosperity (Sheppard, Leitner, & Maringanti, 2013). According to Roy (2011), to practice postcolonial urbanism means to provincialize the concept geographically, which is to identify and empower new areas of articulation (Werner, 2012), providing the impetus to contest mainstream global urbanism (Sheppard et al., 2013). Robinson (2006: 169) argues for post-colonizing urban studies by developing a theory that can "travel widely, tracking the diverse circulations that shape cities

and thinking across both similarities and differences amongst cities, in search of understandings of the many different ways of urban life.' In view of this, Roy (2011: 308) welcomes postcolonialism 'as a critical, deconstructive methodology'. Importantly, postcolonial research functions as a critique of the universal theorization of the "urban" by global north scholars (Storper & Scott, 2016). Scholars (e.g. Patel, 2014; Roy & Ong, 2011) in this domain of research have advocated for the denunciation of what Sheppard et al. (2013) called 'Ameri-Eurocentric' application of urban theories to the cities in the south. These scholars see modernism developmentalism as a thesis that delegates cities of the Global South to the status of underdevelopment and decline (Storper & Scott, 2016). Postcolonial scholars advocate for an approach to urban studies that is provincial, comparative and focus on particularity. They embrace the notion of worlding but reject the idea of theorizing southern cities following western theories, narratives and concepts (Ibid). Though a powerful lens in understanding the morphology of postcolonial cities, as a theoretical framework, the postcolonial urban theory has been criticized on several grounds. The mainstream global urbanism is believed to have had a negative toll on urban livelihood streams – particularly among the marginalized in the developing world, but also failed to achieve its prosperity agenda and has resulted in a type of urbanisation that keeps invoking and reinforcing the colonial masters' model of the world (Blaut, 2012; Sheppard et al., 2013). Notwithstanding, Kigali city offers a perfect postcolonial space to provincialize the concept on the bases of particularity, but also to decipher the development contradictions in a southern city context.

Considering the eventful past, one of the established theories that can clarify the urbanisation process of Kigali is the *post-conflict urbanism*. It is a promising theory that can be engaged in understanding how Kigali moved from being an epicentre of the genocide to a thriving city in the current days. Though this theory has its limitations, it covers a wide aspect of developments in terms of (re)building physical infrastructure and establishing the (lost) social fabrics in the post-1994 period. Cities have always been the key targets during the period of conflicts as they hold the critical infrastructure and violence is more common in these areas (Goodfellow & Smith, 2013).

The most predominant form of post-conflict urban redevelopment is directed towards restoring the physical damages, such as the buildings or specific sites in the cities (Garstka, 2010). Though this approach was accepted as a quick fix to the physical scar the cities have endured, it did less to address the social impact the communities were left to endure. For this reason, this model received major criticism as it attempted to dichotomise the role of 'experts' versus community in urban regeneration discourse (Bhat, 2015). Over time, this theory has gone through a "refocus on rebuilding civil society through the reconstruction, building and urban planning of the built environment – a subtle but important shift that prioritises the rebuilding of society over the physical rebuilding" (Garstka, 2010; p. 87). Around this development, Bhat (2015) argues that the architecture of cities after the crisis is nested within the broader framework of post-conflict strategy. It is, therefore, an imperative task to consider the anthropological aspect of recovery from the ruins to integrating the survivors and rebuilding the city to meet the global trends (Goodfellow & Smith, 2013).

During the genocide, Kigali was in the centre of conflict (see next section for further details). When the world was watching how the Rwandan state would deal with the mounting task of dealing with the lasting trauma, it carried on with the Gacaca process (a form of the court to deal with reconciliation) (Clark, 2010), which has received international recognition (Jones, 2012). With increasing trust, Kigali and other cities were most often the preferred areas for the displaced people to return. This influx of returnees led to the growth of informality and has been a key factor in shaping the cities. While Kigali was still recollecting itself, it became a hub for the inflow of international resource (Goodfellow & Smith, 2013), which, according to Buscher, Komujuni, and Ashaba (2018) is a form of 'humanitarian urbanism' in post-conflict situations. The resources collected are invested

in social aspects as well as restoring/rebuilding the lost physical infrastructure. In the heart of post-genocide recovery, 'Umuganda' has held a significant social position and key social services such as health sector have received heightened focus from the state. As the post-conflict theory suggests, these actions can be looked as the approaches aimed at (re)establishing the social fabrics. Furthermore, equitable allocation and access to all forms of resources is key to recovery from the crisis and Kigali and the Rwandan state has been vocal in it. Considering all these events, post-conflict urbanism could be used as a great perspective in understanding the growth of Kigali from the ruins.

In the era of neoliberal urban development, states have withdrawn their role from the provision of urban services and create an environment to facilitate the private sector to deliver them. Rwanda has engaged in privatisation programmes since the late 1990s (AfDB/OECD, 2007) as part of its reconstruction process. This reduces urban planning to a mere facilitator of market forces in the city. From the neoliberal perspective, urban planning is seen as distorting land markets, increasing transaction costs through the bureaucratisation of the urban economy, thus present alternative approaches. Indeed, neoliberalism reorients from redistribution to competition, institutional rescaling (given greater power to sub- and supranational level) and revitalising of the urban economy through privatisation, liberalisation, decentralisation, deregulation and increasing fiscal disciplines (Afenah, 2009). As a result, neoliberal undercuts planning as a tool for correcting and avoiding market failure and privileges, and minimal spatial regulation aim to facilitate development (Gleeson & Low, 2000). The neoliberal regime is characterized by inequality (in its various forms), undermined urban governance and social injustice (Carmody and Owusu, 2016), a situation which undermines the well-being of urban dwellers. This has led to the replacement of 'city as right' entitlement with the city of possibility and opportunity (Carmody & Owusu, 2016), as current urban development of Kigali seeks for.

3. Rwanda's urbanisation: Kigali as the primate city

Rwanda, relatively a small country, both by area (26,338 km², 149th comparison to the world) and population (13 million, 74th comparison to the world), is one of the least urbanised countries (18.4%, world urbanisation 54%) with an urbanisation growth rate of 3.5%. Rwanda's urbanisation level and urban population growth rate are slower than Eastern Africa/Africa (see Fig. 2). The recent population projection shows that only 18.4% of 11.8 million Rwandans live in urban areas, and the target is to reach 35% by 2024 (MININFRA, 2019). Currently, about half of the Rwandan's urban population reside in Kigali and this trend is likely to be until 2035 (UN-DESA, 2018).

Like elsewhere, Rwanda's urbanisation has been shaped by natural growth, reclassification, and migration. In 2012, natural growth contributed to 16% of urbanisation in Rwanda (Jaganyi et al., 2018). As per Demographic and Health Survey 2015, urban Rwanda's fertility rate (births per woman) was 3.6 and infant mortality rate (deaths of children under one year of age per 1000 live) was 32. The corresponding figures for rural Rwanda were 4.3, and 44 respectively (World Bank, 2017a).

During 2011–14, Rwanda's internal migration as a share of the population was 9%: 7% in rural areas; and 23% in urban areas (World Bank, 2017b). Notably, Rwanda's rural-to-urban migration was not dominant as often perceived. During 2011–14, rural-to-rural migration was 34%; rural-to-urban – 20%; urban-to-rural – 27%; and urban-to-urban 19%. Whereas in urban Kigali, the share of internal migrants was 27% during the same period. The net migration rate between 2002 and 2012 in Kigali city was 17%; meaning that for every 100 residents 17 were migrants.

Kigali city has three districts – Gasabo, Kicukire, and Nyarugenge (Fig. 3) – with 35 Sectors (15, 10, and 10), 161 Cells (73, 41, and 47), and 1176 Villages (494, 355, and 327) (NISR, 2018). As per the 2012 Census, villages with a significant built-up area with infrastructure (e.g.

schools, electricity, and bank) were considered urban. According to the same census, the total population of Kigali city was 1.13 million, where 47% lived in Gasabo, 28% lived in Kicukiro, and 25% lived in Nyarugenge. Notably, Kicukiro was the highest urbanised (88%), followed by Nyarugenge (75%), and Gasabo (69%) (NISR, 2012).

Urban agglomeration in Kigali is one of the rapidly growing, with an average annual growth rate of over 3% (UNDESA, 2018). As per the UN's Millennium Development Goals Indicators in 2014, 53.2% (1.8 million) of Rwandan urban population lived in slums (UNDESA, 2014). The primacy of Kigali exists in term of the population (~50% of the Rwanda's urban population) and the economy as it accounted for 61% of Rwanda's non-agricultural GDP and 40% of total GDP in 2012 (World Bank, 2017c, 2017a).

The periphery and fringe zones of Kigali have experienced extensive expansion (World Bank, 2017a). The overall density of Kigali city was 1644 people per km² in 2012, much less than other African cities. The World Bank report cites Kigali's expansions could be other than the unavailability of land, for instance, the higher price of land, and stricter building codes. For the last 25 years (1990–2015), the built-up area has expanded from 50 km² to 74 km² and built-up densification has increased from 5000 people/km² to 15,000 people/km² (Florczyk et al., 2019) (see Fig. 4). Another dataset reveals that between 1999 and 2014, a total of 43.35 km² of the built-up area was added to the Kigali urban extent. Of that added built-up areas, only 24% was infill, 66% was the extension, and 11% was inclusion (Atlas of Urban Expansion, 2020).

Like the cities in other low-income countries, growth of Kigali's infrastructure has not paced with the population growth. This mismatch has proliferated informal settlements, in both terms—number and size. Currently, three in five people from Kigali live in these informal settlements. During our visit to some of the informal settlements, we observed overcrowding in these spaces. On the other hand, making sustainable provisions of basic services, such as sanitation and water is most challenging in these areas (Tsinda et al., 2013).

4. Contextualizing urban challenges in Kigali: Integrating informality and improving health well-being

4.1. Informality in Rwanda's economy and built environment

Kigali's informality is largely associated with housing and employment in urban areas. The inability of city authorities to meet increasing housing demand by rising urbanites has resulted in the emergence of informal settlements in many developing countries (UN Habitat, 2015: 4). Informal enclaves are usually occupied by rural migrants and poor urbanites, who earn too little to afford decent accommodation in more regularised neighbourhoods. Common challenges in such enclaves range from irregular livelihood patterns, lack of basic social services (e.g. potable water, toilet facilities) to social vices such as crimes and teenage pregnancy. Nonetheless, the informal sector plays a major role in economic development, as it absorbs most of the labour force. Falco, Kerr, Rankin, Sandefur, and Teal (2011) argue that the growing informal economy is a result of the failure by the state to create a vibrant industrial sector to provide wage avenues. Informality in Kigali is a major postcolonial phenomenon with a strong root to the conflict period. As highlighted in section two, the majority of the returnees preferred urban spaces and there was an influx in Kigali. We discuss two major informal sectors: employment and housing.

4.1.1. Informal employment

In Rwanda, the informal sector contributes 46% to GDP, while accounting for 64% of all industrial output (Rukundo, 2015). The country's economic landscape is largely characterized by informal businesses. This is confirmed by field observations and a recent report, which observed a high concentration of large and medium-sized enterprises in this sector (Gökgür, 2011). The report noted that job

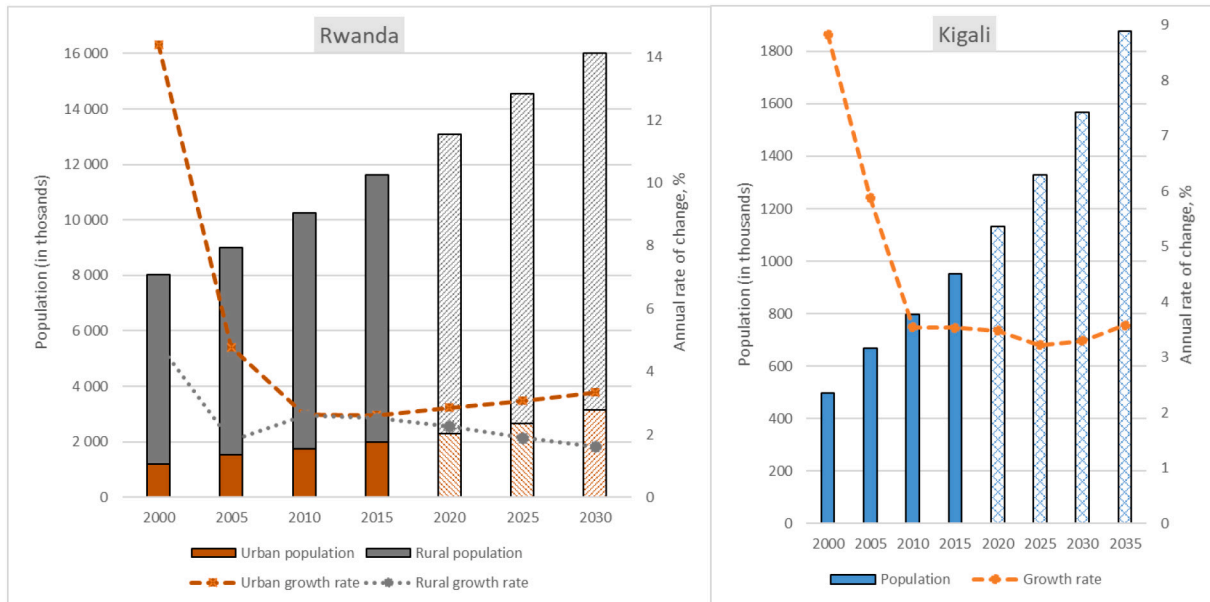


Fig. 2. Rwanda and Kigali's population and growth rate, 2000–2035. Since 2005, Rwanda's urban population growth rate has been higher than the rural population growth rate. Kigali's population growth rate is higher than the national urban population growth rate but expected to be slower after 2030. Rwanda's urban population growth rate (2.61% in 2010–15) is slower than the urban population growth rate in Eastern Africa (4.55% in 2010–15) as well as Africa (3.70% in 2010–15). Both Rwanda and Kigali experienced a surge in urban population growth in post-genocide periods (1990–1995 & 1995–2000) because of returning refugees. Data source: (UNDESA, 2018).

creation by the formal sector was only 8810 between 2006 and 2010, which was far below the World Bank's estimates of 120,000 to 125,000 to absorb the growing labour force (Gökgür, 2011). Given the current population growth and increasing land scarcity, some scholars have argued strongly that the only way to allow the low skilled people to partake in the country's economic revolution is to be absorbed in the

informal sector, largely non-farm micro-businesses and other household enterprises (Ansoms & Murison, 2013). Gökgür (2011) reported a vibrant, but fragmented informal sector, supporting 115,279 micro-businesses and 615,108 non-farm household enterprises. The report provides enough impetus while underscoring the criticality of the sector, especially when the employment opportunities in the formal

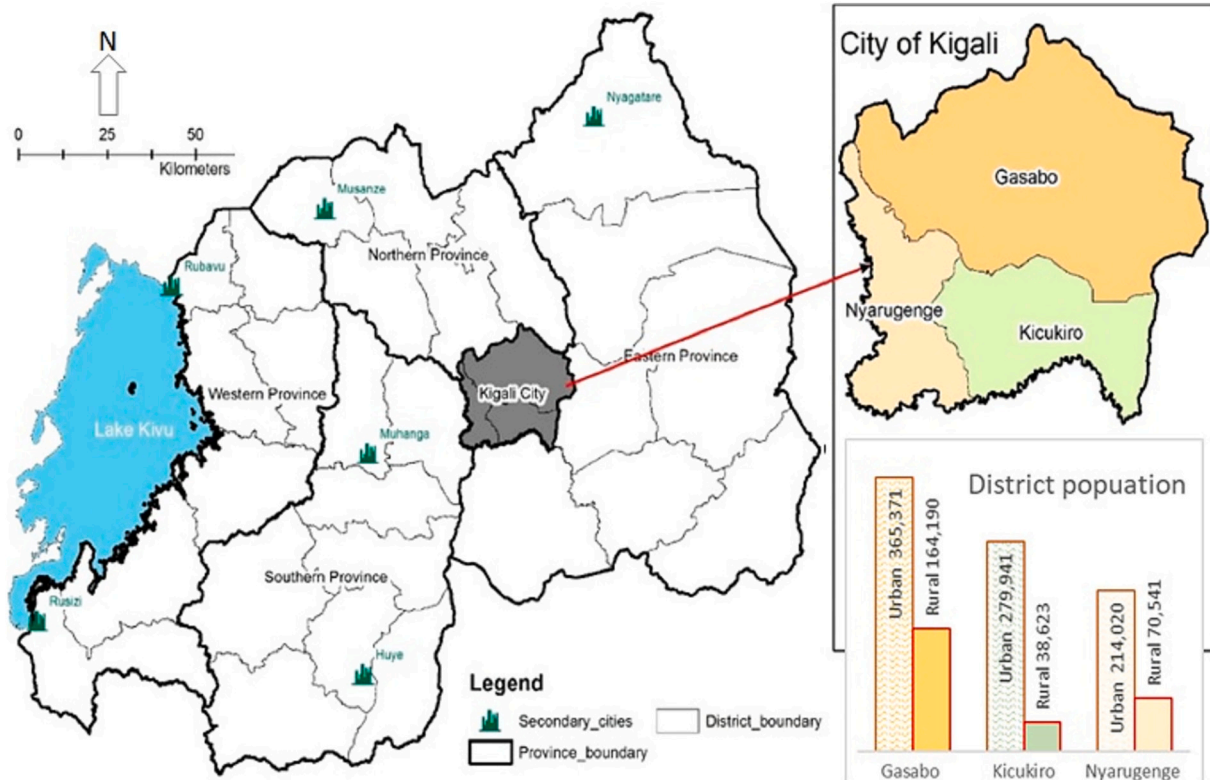


Fig. 3. Administrative map of Rwanda and the city of Kigali. Kigali is one of the five provinces, located centrally. Currently, Kigali has more than half of Rwanda's urban population, but secondary cities are planned to distribute the population. Source: Adapted from Kazora and Mourad (2018).

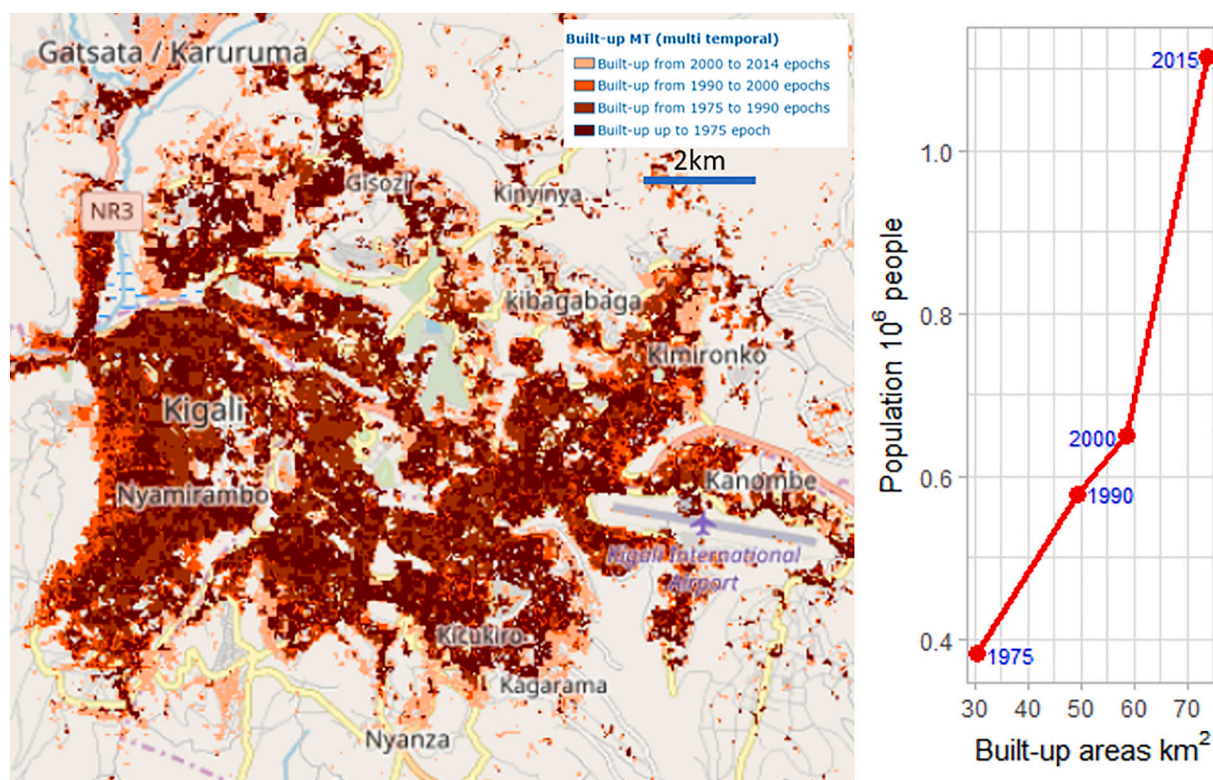


Fig. 4. Built-up area expansion in Kigali 1975–2015. Data source: Florczyk et al. (2019).

sector is limited and restricted to a certain category (the few elites) of people. Interactions with residents revealed that, for most of the people, the only way to survive is to work in the informal sector. It was made known that formal employment opportunities are limited and the few advertised positions always get oversubscribed, making it extremely difficult for officials to pick the best candidate. In this case, people with strong political connections get favoured, sometimes even at the expense of well-qualified applicants. This is not too surprising and peculiar to Rwanda, because nepotism has always been an endemic issue in other African countries, including South Africa (Bekker, 1991), Kenya (Clotey, 2010) and Nigeria (Nnanna, 2017).

Despite its significant role, informal operations face critical upheavals, largely targeted at regularization by the government. For some time, the sector was consistently confronted with increased taxation, formal registration and strict regulations (Bumbakare, 2009), which are key features of neoliberal regime. Economic commentators argued that the formal requirements, particularly discouraged grass-root business initiatives, as they compelled most entrepreneurs to cut short their dreams (Ansoms & Murison, 2013). Compelling evidence (Ansoms & Murison, 2013; Syfia Grands Lacs, 2011; Sommers, 2012) abound on how the sector was stifled by government machinery. For instance, Sommers (2012) highlighted how the prohibiting nature of street vending, considered as ‘unorganized commerce’, negatively impacted the economic wellbeing and livelihood of the youth, particularly in Kigali. The author observed that ‘what has ensued is a kind of economic cat and mouse, involving people trying to hawk goods without getting caught and government officials on the lookout for precisely this sort of economic behaviour’ (Sommers, 2012: 36). Other prohibited activities were petty trading, bicycle riding business (Syfia Grands Lacs, 2011) and brick and tile making (Ansoms & Murison, 2013). Arguments such as city aesthetic, accident prevention and environmental protection have been strongly advanced by the government, as justifications for undermining informal jobs (Ansoms & Murison, 2013). It should be noted that the move was not entirely overambitious and punitive, as the underlying motive was to regularize businesses to expand tax coverage.

Rukundo (2015) notes that some informal operations are strategic, as some business owners intentionally chose to remain informal to escape taxations, avoid regulations and social insurance schemes. Though some punitive measures are gradually being eroded, which can be argued to be a positive sign of integration, it only favours entrepreneurs who seek to do genuine businesses. The government continues to create a conducive environment for thriving and successful formal businesses (Ansoms & Murison, 2013) at the expense of those in the informal sector. Field observations and interviews revealed that people doing small-scale businesses are especially cut out of the system, since there are no incentives from the government. Meanwhile, evidence shows that the informal sector is critical in reducing the effects of unemployment and poverty in Kigali (World Bank and Institute of Policy Analysis and Research, 2012). Many interviewees alluded to the significance of their informal personal businesses to their household. If the business was not there, they would have gone back to their villages. The government’s idea is to project Kigali as a prosperous ‘modern city’. However, we argue that this type of urbanism is largely built on capitalism, which is shrouded with strong neoliberal ideologies, targeting wealth accumulation for the few elites. Clearly, rather than entirely ignoring and undermining the sector, it would be more prudent if tailored policies can be enacted to streamline the activities, which will go a long way to enhance business sustainability, reduce urban poverty, and ultimately contribute in achieving SDG 1 – “End poverty in all its forms everywhere.”

4.1.2. Informal housing

The informal settlements in Kigali have evolved over the past decades. The resettlement of the post-conflict returnees is often cited as one of the major precursors of unplanned urban settlement and expansion, and inefficient land use patterns in Kigali (Ministry of Infrastructure RoR, 2019). Rapid urbanisation fuelled largely by rural-urban migration has also played a significant role in driving informal settlements. Interactions with the people revealed that the majority have come to Kigali from their villages to seek greener pastures. Despite being one of

the least urbanised countries in Africa (17%), recent integrated living conditions survey (EICV4) estimates that 62.6% of urban households in Kigali live in unplanned urban settlements (Republic of Rwanda, 2015). Another reason, we argue, is the government's neoliberal planning strategy, which seeks to facilitate land accumulation for property development by private estate developers. The use of 'land expropriation' to acquire lands in the name of 'public interest' has rendered many residents homeless, but also poor. Our field visit reveals the living conditions in the informal neighbourhoods were in complete contrast to the formal parts (see Fig. 1). The development of such segregated neighbourhoods contradicts with the urban design the city of Kigali has envisioned (Ghandour, 2016) but perfectly fit into the spaces of neoliberal practices. It demonstrates the pervasiveness and endemic nature of informality in the country. It is estimated that more than 340,000 housing units would be needed to meet the growing demand by 2022 (Kanamugire, 2016). According to official sources, the worst areas are rather located in distinctive pocket enclaves in the inner city, with astonishingly higher population densities, lacking access to infrastructure and basic social services (Republic of Rwanda, 2015). Interestingly, empirical evidence suggests that people wish to remain in informal enclaves (Ilberg, Rutayisire, Soussan, & Rollins, 2008), which is a sharp contrast to the popular belief. For instance, Wakhungu, Huggins, Nyukuri, and Lumumba (2010) reported that between 83% and 90% of residents living in informal settlements in Kigali are satisfied with their living conditions and do not plan to move. This could be explained by the widely held view that the conditions in such environments are relatively better than those in other African countries (Wakhungu et al., 2010). Our field observations confirmed that conditions in such informal settlements are far better than, for instance, those in Kibera (Nairobi), Nima (Accra) or Dharavi (Mumbai).

The informal settlements in Kigali are spontaneous neighbourhoods, with mostly small brick houses. Particularly, houses are built in an unorganized manner, occupied by low-income people who are mostly rural migrants, daily wage workers and or informal traders. A major problem that residents consistently grapple with has to do with land security, and almost all the interviewed residents reported this (Baffoe, Malonza, Manirakiza, & Mugabe, 2020). Evidence shows that 85% of residents do not have land security (Rwanda Housing Authority, 2014), a situation which threatens their very survival. Post-conflict attempt to regularize informal settlements includes the Land Tenure Regularization process, which has been in place since 2010. This framework is believed to have legalised and boosted private land and real estate market, in addition to the adoption and enforcement of urban planning measures (Republic of Rwanda, 2015). A key achievement has been the decline of people living in informal settlements, from 90% in 2007 to 79% in 2014 (Republic of Rwanda, 2015). The National Housing Policy is another pragmatic initiative that stresses the need to upgrade and integrate existing informal housing units into the formal housing stock to the highest possible degree (Republic of Rwanda, 2015). Though promising initiatives, implementation is largely in the hands of private developers, who continue to build targeting the upper class at the expense of the poor, reinforcing neoliberal practices. Upscaling the affordable housing project and in-situ upgrading by a relevant government agency, targeting the lower-income groups, would be critical in addressing the current housing deficit, while contributing in achieving SDG 11- "Make cities inclusive, safe, resilient and sustainable." In the following section, we allude to other post-conflict reconfigurations that have taken place in the health sector.

4.2. The death and revival of Rwanda's health system

The unfortunate and dehumanised genocide has left a long-lasting trail of toll in the physical and mental wellbeing of the people who were exposed to or were witness of it. The aftermath of the tragedy showed a sharp rise in poor health outcomes, where the physical health had a strong link to the psychosocial outcomes of the victims and survivors of

the conflict (Rieder & Elbert, 2013). The situation of health care need became unmanageable as there were less than 200 health care workers left in the country (Grundman, 2016). The road to recovery from scratch was indeed not free from all different forms of challenges.

Kigali, which was in the centre of the conflict witnessed one of the worst forms of brutality. Apart from killing, 'rape' was the weapon used to harm most of the young women in Kigali and most of these survivors tested positive for HIV (Sharlach, 2000). Children were orphaned either by the ongoing genocide or by HIV/AIDS or as a result of their parents being sentenced for genocide. The dismissal of the traditional protective structure for children during the conflict left them to suffer long-term and continued cycles of exploitation and abuse (Rakita et al., 2003). The peaking of physical and mental health conditions following the conflict was not just associated with the violence perpetuated, it was also the consequence of the breakdown of the existing health system (M'kumbuzi, Sagahutu, Kagwiza, Urimubenshi, & Mostert-Wentzel, 2014). The mental health impact of the genocide is still visible among the survivors. The sharp increase of traumatic episodes during the annual genocide memorial period highlights the long-standing impacts it has left in the societies (Njelesani, Siegel, & Ullrich, 2018).

Post-conflict Rwanda, however, is now transforming and rebuilding its dismantled social fabric. Over the course, the health system has significantly progressed, with the steepest declines in premature mortality and a commendable improvement in life expectancy (Farmer et al., 2013). The genocide contributed to the high prevalence of physical injuries and disabilities, but in the aftermath, it led to the disability movement in the country. This led to the beginning of the civil society movement to protect the disabled and initiate the rehabilitation of those affected (Njelesani et al., 2018). The healthcare system has moved towards a restructured and decentralised process, making district health offices as an autonomous body to manage their services in their catchment areas (Logie, Rowson, & Ndagije, 2008). Public health facilities account for up to 70% of the health care provisions (Maurice, 2015). Community health workers and community-based health insurance are important aspects of modern-day health care in Rwanda (Dhillon, Bonds, Fraden, Ndahiro, & Ruxin, 2012). When we look at the significance health sector has received from the state during the recovery, it can be argued that it is not just the infrastructure that is being (re)built, it is also the social fabric that is being considered, a true insight of the 'post-conflict urbanism' that has been discussed in an earlier section. During a week-long trip, we observed the segregation of population in formal and informal settlements, the presence of multiple healthcare service providers, active participation in neighbourhood activities and safety in the streets of Kigali. Even with the existence of multiple health care providers, basic health services are equitably distributed in the country (World Bank, 2017d). In this context, we explore the key social determinants that shape the health and wellbeing of the people of Kigali. the health and wellbeing of the people of Kigali.

4.2.1. Changing landscape of health needs

Rwanda is on a similar path as other low-income countries in terms of the epidemiological transition. While communicable diseases are still the common causes of morbidity and mortality, there is an increasing prevalence of non-communicable diseases (NCDs) (Nahimana et al., 2017). Currently, the proportion of NCDs accounts about one-fourth of the total burden of diseases in Rwanda (Alleyne et al., 2013). Diseases such as neonatal disorders, respiratory infections, diarrhoeal diseases, malaria and HIV are still major threats in Kigali, while the increasing prevalence of non-communicable diseases and road injuries are resulting in a double burden of diseases. Prevalence of HIV infection in Kigali city is 5.5%, which is the highest value in the regional context. Injuries and accidents are also on the rise, particularly in the cities, mostly attributed to the disobedience of traffic rules (Ministry of Health, 2015).

Kigali's rapid urbanisation has improved socioeconomic status that resulted in the shift in lifestyles of urban residents. Kigali city has one of

the highest rates of daily smokers in Rwanda (Habiyaemye, Rwunganira, Musanabaganwa, Muhimpundu, & Omolo, 2019). The Ministry of Health report shows the rate of alcohol consumption is higher in rural areas but the cities in Rwanda have a higher proportion of problematic drinking. The level of high MET (metabolic equivalent) of the exercise was the lowest in Kigali (46.7%) compared to other provinces. The same report has highlighted the high prevalence of obesity in urban areas (10% compared to 1.5% in rural areas) including the city of Kigali (Ministry of Health, 2015).

One of the major challenges of addressing the double burden of disease in Kigali and Rwanda is the inadequate data to guide health care and services (Juma, Juma, Shumba, Otieno, & Asiki, 2019). The slow and inadequate action towards this shifting trend of the disease will result in a mismatch of services provided and required. The issue of data management and service provision is further complicated because of the presence of multiple agencies involved in the health sector, which is discussed in the next sub-section.

4.2.2. The multiplicity of healthcare service providers and health financing

Though the key healthcare service providers are public institutions, there is a significant presence of not for profit health institutions mostly operated by religious groups and private institutions (Maurice, 2015). Most of the country's private health providers, though fragmented are primarily located in Kigali. The private sector is increasingly becoming more common in Kigali and their utilisation is in the rise more recently (Serneels & Lievens, 2008). Some of the leading facilities in Kigali such as the King Faisal Specialist Hospital are now privatised and has opened a bigger opportunity for the private service providers. While the public and faith-based organisations deliver all form of health care services, the private sector is more oriented towards curative services only. The management of the private sectors is often poor, are not adequately regulated and quality controlled (Pose & Samuels, 2011).

The faith-based organisations provide a range of health care services and their work against HIV/AIDS and other communicable diseases have been widely recognised. These institutions account for up to 30% of Rwanda's health institutions (Maurice, 2015). Though they are non-governmental facilities, they work closely under the Ministry of Health and abide by all the policies and strategies (Pose & Samuels, 2011).

Like the national financing landscape, Kigali's health finance comes from four sources: the government's revenue, community-based health insurance, out-of-pocket expenditure and the external or donor funding. With the wide coverage of the health insurance system, health care is more accessible and available to everyone in Kigali and elsewhere (Maurice, 2015). In Rwanda, performance-based financing was introduced between 2002 and 2004 and all the public health facilities in Kigali are included under the scheme (Janssen, Ngirabega, Matungwa,

& Van Bastelaere, 2015). As highlighted in previous sections, the level of informality (in the economy or housing sector) is high in Kigali, and as argued by Durairaj et al. (2014), this could put significant drawbacks in achieving the commitments and targets set in the health sector.

4.2.3. The neighbourhood environment

More than half of Kigali's land consists of flood area plains, swamp and steep slopes (Rwanda Environment Management Authority, 2013). Human settlements in these areas have put residents in hazardous environments with adverse health consequences. The extensive nature of informal settlements, as discussed in earlier sections, point out high risk to the health and wellbeing. Residents in informal settlements have limited access to sanitation facilities and have poor living conditions. Traditional pit latrines are the most common sanitation facilities in Kigali, which are prone to leakage and other health-related hazards, not just to the household but the surrounding (Tsinda et al., 2013). Furthermore, the lack of the network of sewer system has resulted in the disposal of untreated wastewater into wetlands or infiltrate into the groundwater (ibid). With the improvement of the socioeconomic status of the city dwellers and the change in lifestyle, the consumption pattern has changed too resulting in the fourfold growth in the amount of solid waste in five years (between 2007 and 2012) (Rwanda Environment Management Authority, 2013). This has put added pressure in waste management (Isugi & Niu, 2016).

4.2.4. Light through the tunnel

The National Urbanisation Policy of 2015 has encouraged interdisciplinary cooperation and collaboration in creating safer cities. It lays focus on the provision of accessible infrastructure with special emphasis on the sustainable environment around the city. The policy has also attempted to address the natural hazards in urban areas (Ministry of Infrastructure, 2015). The ongoing master plan of the city of Kigali also puts the sustainable development in the heart by making provision of dedicated zones for environmental protection. Furthermore, the ban on the use of single-use plastic from 2008 is an encouraging move towards curbing pollution and sustainable development (McLellan and Aquarium, 2014). Being guided by the masterplan, the concept of vision city is an approach to addressing the overcrowded Kigali and is a step to develop model smart neighbourhoods (Kuo, 2017), which is indeed an encouraging move to make healthy city space.

Kigali integrates functions of healthy people in a healthy city. In Kigali, young people are encouraged to leave early from work once a week (on Fridays) to take part in physical activities (Ntwari, 2016). During this day, the stadiums in most of the cities, including Kigali, are free for young people to use. During our trip, we got an opportunity to



Fig. 5. Public participation in Umuganda in Kigali, 2019. Road repair work as part of the Umuganda in Kigali (left), and Post-activity public meeting (right). Photo credit: Authors.

be involved in the monthly (last Saturday) programme of 'Umuganda', we participated in the neighbourhood cleanup activity and attended the meeting that followed afterwards (See Fig. 5). The initiative of 'Umuganda' brings together the neighbourhoods with the principles of participation in their community development (Uwimbabazi, 2012), which provides the city dwellers with the feeling of safety and belongingness to the area they live in and it is an important determinant of health and wellbeing (Hooper, 2014; Richard, Gauvin, Gosselin, & Laforest, 2008). All these encouraging cases reflect the key aspects of post-conflict urbanism in Kigali and in Rwanda as a whole, where human values are in the centre and building stronger societies and have a special place in policies and actions.

4.3. Urban governance in Kigali

Post-conflict Kigali is heavily criticized for not doing enough to uphold human freedom and governance. The political system, which consists of centrally-designed and enforced policies (Gaynor, 2014), is solely blamed for undermining inclusive governance (Dawson, 2018). Kigali's rapid transformation is engulfed by reservations. The top-down approach has hindered effective urban governance, as there is a disconnect between national and local planning and administrative bodies (Turok, 2019). Not even the famous *Umuganda* programme is devoid of limitation, as some urban communities and skilled middle-class participants continue to express frustrations due to their inability to maximise benefits (ibid). While urban neighbourhoods seek the freedom to engage in diverse tailored communal activities, middle-class people desire activities beyond the usual manual work (Rwanda Governance Board, 2017), with the premise being that this will improve local ownership and control over projects while boosting civic pride (Turok, 2019).

A related issue is the practice of expropriation as part of the 2013 Kigali City Master Plan, which has had far-reaching consequences for urban governance. To put it in perspective, both the development and implementation processes lacked public consultation and participation (Legal Aid Forum, 2015). Residents expressed dissatisfaction about the whole process, particularly concerning compensation. Although Article 12 of the Expropriation Law makes explicit provision for a consultative meeting with the public before expropriation, interactions revealed that this is seldom in reality, denying citizens the opportunity to participate in the urban development decision-making process. People decried the lack of inclusion and their inability to voice out their concerns. The situation reflects the key attributes of neoliberalism, including reductionist planning approaches and poor governance. Surprisingly, this is not characterized by protest among the populace, which is in contradiction to the experiences across the globe. This can be explained by what Goodfellow (2013a) called the 'politics of silence', the idea that you criticize in vain, and sometimes at the expense of your life. The political atmosphere frowns on not only protest but also criticism of government policy. Given that governance is critical for development, there is no doubt that there is a need to create a space for non-violent contestation (Goodfellow, 2013a). Following, we discuss how the government machinery is undermining human rights while perpetuating social injustice- a key manifestation of the neoliberal regime.

4.3.1. Authoritarian political terrain

The ruling Rwandan Patriotic Front (RPF) continues to dictate the political environment in Rwanda. This has polarized the political climate, with government employing tactics such as intimidation, arrest, and forced exile to silence opposition leaders (Human Rights Watch, 2019). A recent report by Human Rights Watch highlights the severity of such polarization. For instance, the report notes that for the first time in 11 years, the United Nations Subcommittee on Prevention of Torture (SPT) terminated a planned visit to Rwanda, due to a lack of cooperation from Rwandan authorities. Meanwhile, a report on the killing of Congolese refugees by police in the Western Province is yet to be made

known (Human Rights Watch, 2019). In February 2018, the Rwandan police force was reported to have used excessive force and fired live ammunition to deescalate a demonstration of Congolese refugees who protested the camp conditions and a cut in food rations in Karongi district, Western Province. According to the United Nations Refugee Agency (UNHCR), the brutality resulted in 11 deaths, but a commissioned investigation report remains a mystery (Human Rights Watch, 2019). Moreover, a Human Rights Watch researcher was reported to have been denied access to the country in January 2018, the same month a Rwandan consultant employed to work with Human Rights Watch was rendered incommunicado after being detained and arbitrarily held for six days (Human Rights Watch, 2019). These abuses do not only stifle the work of civil society and media (both local and international) groups but also leaves one to question the readiness of Rwanda to join the democratic elite nations in Africa, in addition to toppling efforts in the attainment of SDG 16 – promotion of peace, justice and strong institutions. Given the genocide scar and the general political environment, people often find it uncomfortable talking about issues of governance and human rights abuses, as it was evident in our futile attempts. This notwithstanding, one could observe that participatory democracy is a major challenge that people contend with. The government is very authoritative. There is a need for openness, freedom and respect for human rights in Kigali, particularly if the 'modern city' agenda is anything to go by.

5. Conclusion

In the post-conflict period, Rwanda has successfully progressed in several socioeconomic fronts, employing several policy interventions, combining the strategies of modernization, reconciliation, and development. The post-conflict interventions have played a major role in reconfiguring the city to its present status. Despite progress, however, Rwanda/Kigali faces several developmental challenges, such as the widespread informal economy and informal human settlements, which have negatively influenced human health and well-being. We argue that urban development in Kigali is deeply rooted in capitalist and neoliberal ideology, where the state functions as the architect and facilitator of wealth accumulation for the few elites. In its bid to support private sector development through market mechanisms, informality has inadvertently become rife and undermined governance and social justice. Growing informality in housing and economy perpetuates urban poverty while undermining social mobility. The changing health needs, the landscape of service provisions and neighbourhood environment along with the informality are putting the city dwellers in heightened health risks. With an increasing presence of inadequately monitored private health care providers in Kigali those are focused on delivering curative services only, it can be argued that the health gap could be widened. Meanwhile, polarized political environment and lack of participatory democracy and or governance suppress human freedom, presenting a good recipe for spontaneous social unrest and political activism. Our analyses suggest inclusive governance, as one of the key interventions, for the integration of informal sectors (housing and employment) and the improvement in health and wellbeing as well as governance in Kigali. For example, Kigali needs more affordable housing units and integrated and incentivized informal economy. Inclusive governance, in other words, people participation or bottom-up decision-making process, is critical to achieving sustainable goals and enhancing participatory planning. Also, there is a need to uphold the rule of law and respect for human rights. In addition to contributing to the discourse on postcolonial urbanism, state-building and neoliberalism in the global south, this study would be relevant for policy-makers and planning authorities, particularly those in post-conflict states. The Kigali case shows that there is a disconnect between neoliberal policies and practices and social wellbeing. Neoliberal practices, including privatisation of housing production and health sectors, will always affect the urban poor by making them poorer, fuelling

informality in the process. Policymakers need to think carefully about strategic city-level interventions, particularly those which aim to promote economic growth by constricting land use planning and good governance. Inclusivity and social resonance of policies and interventions should be prioritized.

CRedit authorship contribution statement

Gideon Baffoe: Conceptualization, Methodology, Formal analysis, Investigation, Writing - review & editing. **Sohail Ahmad:** Conceptualization, Methodology, Formal analysis, Investigation, Writing - review & editing, Visualization. **Ramjee Bhandari:** Conceptualization, Methodology, Formal analysis, Investigation, Writing - review & editing.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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