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**‘Transforming Freetown’:  
Dilemmas of planning and development in a  
West African city**

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**Abstract**

The urban development and planning challenges facing Freetown, the capital of Sierra Leone are typical of the significant issues which face most cities in Africa, including rapid growth, resource constraints, burgeoning informal settlements and inadequate planning regimes. In parallel with many African cities, colonial neglect and racial bias in planning the urban form created a city which is ill-prepared to cope with post-independence growth. This paper examines how these trends have played themselves out in the case of Freetown, and also draws attention to particular issues which have exacerbated urban development, and the environmental and planning challenges facing the city. Notably, the effects of the devastating civil war and Ebola outbreak in 2014/15 are discussed. While the city council and local NGOs are attempting to address local development challenges, significantly more needs to be done to improve the well-being of Freetown’s population and this paper provides an indication of how urban planning might contribute to this.

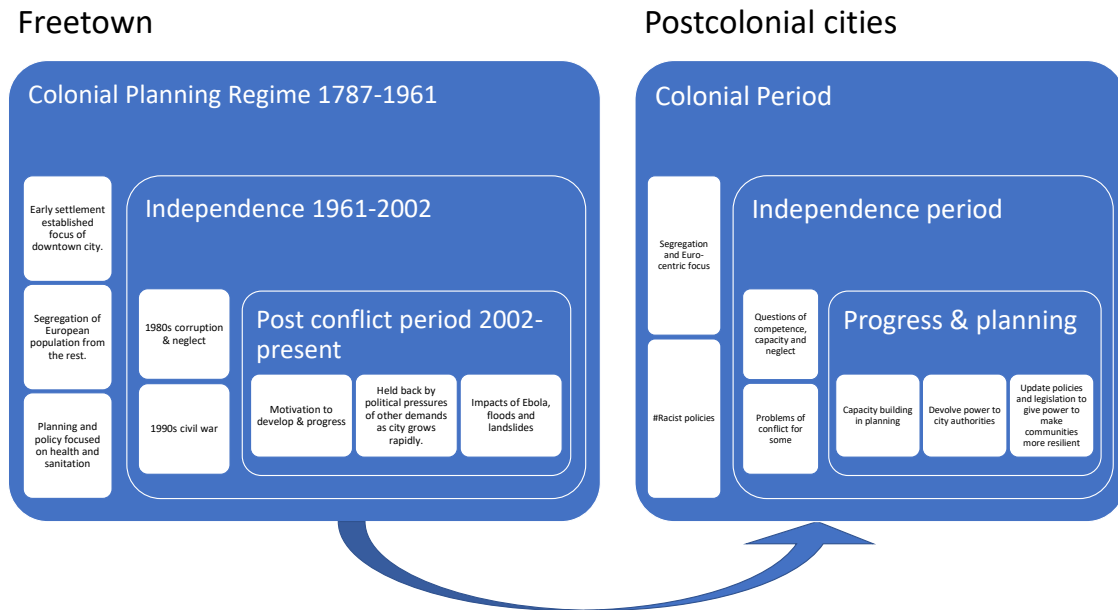
**Key Words:** Freetown, Sierra Leone, planning, urban growth, development

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# ‘Transforming Freetown’: Dilemmas of planning and development in a West African city

## Graphical Abstract



## Highlights

- We explore the colonial, early independence and postcolonial planning and management approaches, discussing their challenges and shortcomings.
- We analyse the evidence of planning and urban management in Freetown, Sierra Leone from 1787 to the present day.
- We illustrate the manifestation of the colonial and postcolonial legacies in the structure of the city
- We show how the imprint of history has left the city vulnerable during a series of humanitarian crises.
- There is an urgent need to build planning and urban management capacity, to devolve power to the city and to update policies and legislation .

## Introduction

The current rapid growth and development of African cities are considered by some to be a replication of the rapid urbanisation that occurred historically in the Global North. The experiences of Western European and North American cities were not without challenges, particularly in the nineteenth century (see, for example, Engels 1845 / 1987). Many cities of the Global South are currently seeking to apply planning models, either borrowed internationally, or more rarely generated locally, in an attempt to respond to the impacts of city growth. African cities, such as Lagos (Nigeria), Kinshasa (Democratic Republic of Congo) and Freetown (Sierra Leone), are often portrayed as being chaotic or disorderly, partly because they are considered to be the location or even the fulcrum of civil conflict, and partly because of the large proportion of their populations that live in informal settlements that have arisen spontaneously without tenure or planning (Gandy, 2006; Myers, 2011, 2018). These perceptions are reinforced where city growth is rapid and uncontrolled, with some African cities experiencing the most rapid growth rates in the world, often in a context of minimal economic and employment growth, and leading to inevitable housing, employment, services, planning and infrastructural shortfalls (Binns *et al.*, 2018). Cobbinah *et al* (2015) reported that Africa's urban population grew from 33 million to 288 million in the period 1950-2000 and is predicted to grow to 1.3 billion by 2050. This scale of change is regarded as 'alarming' and, according to Cobbinah *et al*, "its unguided nature poses a range of development threats, including unsustainable exploitation of resources such as land and increased urban poverty" (Cobbinah, 2015:63).

Conceptualisations of disorder have historically been the result of a counterpoint to order, contrasting planned and managed settlements with rising cultures of violence, breakdown in social order, traditional values and increased volatility. Such discourses of order and disorder, planned and unplanned, formal and informal, are not new (Myers, 2011). What is new is that a settler power is not imposing such dichotomies. Instead they are emerging as a result of contemporary social, political and economic situations, in the context of the broader global agenda. The result is a growing global process of urbanisation, overlain on the historical urban structure. As Myers puts it:

Urban majorities find themselves entangled within power dynamics that position them at the city's margins, literally and figuratively, working to make places they can live with in the face of injustice, inequality, violence, or underdevelopment (Myers, 2011; 13).

Within this context it is important to bear in mind that many cities in the Global South were established as the product of imposed colonialism which, in addition to subjugating local populations, often designed cities for the colonial elite only, in terms of the provision of services, housing and infrastructure, coupled with frequent restrictions on the urbanization of indigenous people. These controls were often founded on concerns for urban public health issues, articulated as sanitation concerns. After controls were lifted post-independence, most African countries have generally failed to manage rapid urbanization in centres which were never designed to cope with burgeoning and usually poor populations

(Rakodi, 2001; Harrison, 2006). The frequent persistence of inappropriate western planning systems and building codes in the context of low levels of formal employment, minimal low rates bases and the inability of cities to cope with growth, have led to the phenomenon of the 'urbanization of poverty', with expanding informal settlements and huge planning challenges (Njoh, 1998; Binns *et al.*, 2012, 2018). As a net result of these issues, Nunes Silva suggests that 'this complex and uneven African urban condition requires an open discussion of past and current urban planning practices and future reforms' (Nunes Silva, 2015: i).

At a broader level, the challenges facing Africa's cities must also be contextualised within the framework of global urban transformation. As the world's international organisations implement HABITAT III's *New Urban Agenda* (UN Habitat, 2017), a number of position papers have underlined that more than 50 per cent of the world's population are now living in cities and that this proportion will grow over the next few decades. As a consequence, UN-HABITAT's (2017) *New Urban Agenda* seeks to enable these cities to focus on global initiatives to improve the living conditions of the world's poorest and most vulnerable populations, as well as to ameliorate impacts of human induced climate change. There is an increasing awareness that as countries sign up to the United Nations Sustainable Development Goals (SDGs) and climate change policies, the potential role of urban planners has probably become more crucial than ever (UN, 2015). For example, UN-HABITAT reports that globally cities account for only 2 per cent of the world's land area, but 70 per cent of the economy, 60 per cent of global energy consumption, 70 per cent of greenhouse gas emissions and 70 per cent of global waste. Already, despite a widespread perception of Africa as being largely rural, the UN (2018) estimate that it is 43 per cent urbanised and that Africa and Asia will account for 90 per cent of global urbanisation between now and 2050. As a result, African cities are projected to accommodate 50 per cent of the continent's population by 2030, or approximately 800 million people. And so cities, globally and in Africa in particular, are the focus of significant societal challenges, which means that future economic and environmental challenges will largely have to be tackled by the planning and management of the fast-growing cities of the global South, which addresses historical legacies, current challenges and provides mechanisms to cope with future issues. But, as we will see later, the capacity for urban planning is weak in many African cities and planning strategies are often inappropriate for the challenges that exist.

The focus of this paper is on urban trends in the capital of Sierra Leone, a West African country (71,740 sq km), which is slightly smaller than South Carolina and Scotland, and with an estimated population of 7.5 million, which is growing at 3.2% annually (Fig. 1) (Sierra Leone Statistics, 2017). It is currently one of the world's poorest countries, and in 2019 was classified by the United Nations Development Programme (UNDP) as having 'Low Human Development' and was ranked 181 out of 189 countries according to the Human Development Index. Sierra Leone's population has an average life expectancy of 54.3 years, GNI per capita of US\$1,381, and a skilled labour force of only 15.2%. This contrasts sharply with statistics for Norway, for example, which is ranked #1 in HDI, and where life expectancy is 82.3 years, GNI per capita is US\$68,059 and with a skilled labour force of 84.3% (UNDP, 2019). Freetown, the capital (see Figure 2), which is the focus of this paper, faces significant challenges as identified in a Freetown City Council study (2014, i): 'Freetown has long been put under considerable pressure by the urbanization process and urban sprawl, resulting in negative social and environmental impacts on settlements living in risk-prone areas and

unsanitary environmental conditions’. This scenario has been significantly aggravated by post-independence crises, most notably a protracted civil war 1991-2002 and the more recent outbreak of Ebola 2014-15, which are detailed later. Combined with a weak economic base, these crises have been beyond the planning and service capacity of the local authority, leading to severe environmental stress, poverty and inability to manage informal growth, particularly in the pre-existing 18 slum settlements (Guma Water Valley Company, 2008; Freetown City Council, 2015).

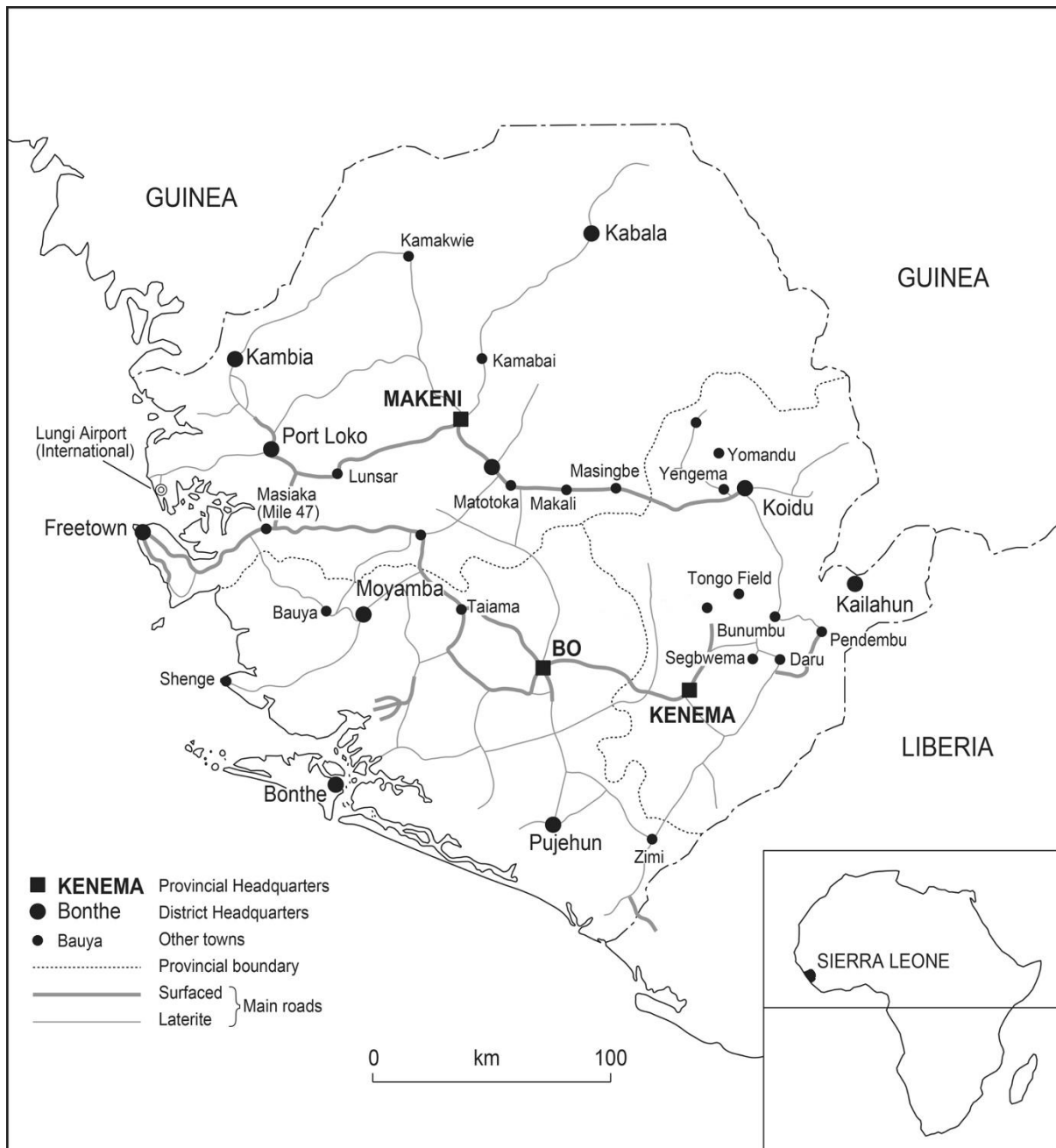
Some of the key landmarks in the development of Freetown are summarised in Table 1, in which it is apparent that the early interventions were focused on segregation and the relevant legislation largely responding to public health concerns. The paper will refer to events recorded in the table and will refer back to it throughout the discussion.

**Table 1: Freetown planning timeline**

Year	Event
	<b>PRE-COLONIAL</b>
C18th	Trading of natural resources, such as kola and a number of slave trading posts.
1787	Jonah Hanway and Granville Sharp’s abolitionist Committee for the Relief of the Black Poor support the settlement of 400 former slaves of mixed origins, but born in Britain, at Granville Town on a site bought from King Tom a local sub-chief.
1792	1,200 freed slaves from Nova Scotia, in recognition of their fighting for the British in the US War of Independence with the support of the newly established Sierra Leone Company, another abolitionist initiative.
1807	British declared that the Temne tribe should be excluded from an eleven-mile radius around Freetown
	<b>COLONIAL</b>
1808	Freetown becomes a Crown Colony.
1811	Population: 2,117.
1821-1874	Freetown served as the capital of British West Africa
1827	Fourah Bay College is founded – the first western style university in West Africa, attracting students from across the region.
1893	15-member Freetown City Council established, 12 members elected, only three places reserved for colonial officials.
1896	British Protectorate established over the rest of Sierra Leone
1899	Dr Ronald Ross visits to Freetown as part of the Malaria Research Expedition and confirms a link between mosquitoes and the malarial lifecycle.
1900	City Improvement Act
1902	In the wake of Ross’s second visit and recommendations to the City Council, first construction of two storey houses at Hill Station.
1903	Narrow gauge railway connecting Cotton Tree to Hill Station is opened.
1925	Mayor Cornelius May, a respected public figure, is convicted of fraud and sentenced to 9 months in prison. The Freetown City Council is dissolved and a majority European Municipal Board established.
1929	The Hill Station railway is discontinued.

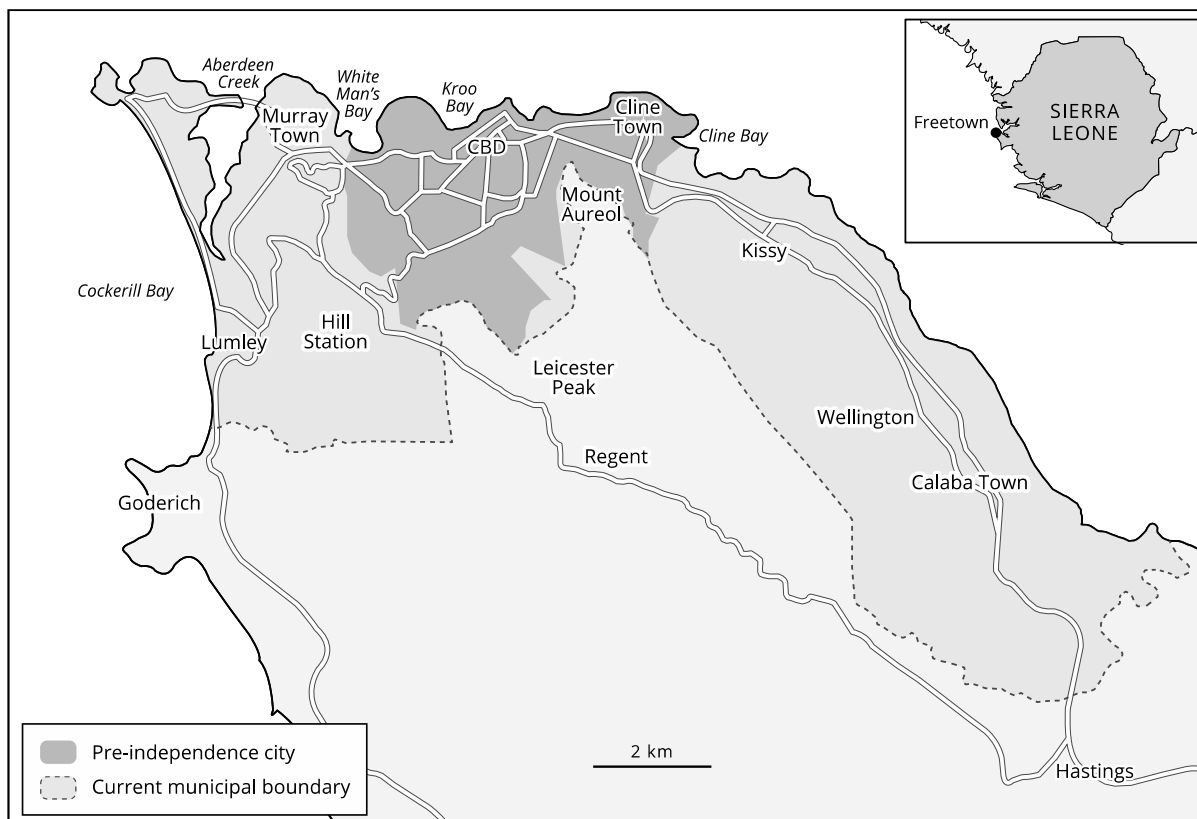
1947	Town and Country Planning Act
	<b>INDEPENDENCE</b>
1961	27 <sup>th</sup> April, Sierra Leone achieves independence with Sir Milton Margai as President.
1963	Population of Freetown reaches 127,917.
1967	Siaka Stevens elected to power on a slim majority.
1972	President Siaka Stevens abolishes District Councils
1978	Siaka Stevens declares the country to be a one-party state
1980	Freetown hosts the OAU Summit, at enormous cost, constructing a huge conference centre and villas for heads of state, and purchasing a fleet of Mercedes Benz vehicles that almost bankrupts the country.
1991	War breaks out and an estimated 600,000 internally displaced people flee fighting and move to Freetown.
1994	Freetown Master Plan
1999	6 <sup>th</sup> January, rebel fighters enter the city.
2002	Peace treaty signed.
2014	November, Government declares state of emergency, introducing travel restrictions and curfews to tackle the spread of Ebola Virus Disease.
2015	September, Freetown experienced sustained heavy rainfall with widespread flooding.
2015	Population recorded in the census 1,055,964.
2016	March, WHO declares Sierra Leone Ebola-free.
2017	14 <sup>th</sup> August, Freetown sustained heavy rainfall leading to flash flooding and a huge landslide leaving an estimated 1141 dead, 600 unaccounted for, and over 3000 people homeless.
2019	24 <sup>th</sup> January, Mayor of Freetown launches the 'Transform Freetown' initiative.

Compiled from various sources: Clarke, 1972; Doherty, 1985; Edwards *et al*, 2015; Harvey and Dewdney, 1968; Maconachie *et al*, 2006; SLRA, 1997.



**Figure 1: Map of Sierra Leone.**





**Figure 2: Urban Growth in Freetown**

Freetown, has grown massively over the last 100 years, growing from less than 100,000 at the beginning of the 20th Century to over 1 million at the beginning of the 21<sup>st</sup> (see Table 2). The city's doubling rate from 1963 to 2015 was 24.7 years for the urban area (and only 8 years for the rural areas surrounding the city), with annual growth rates ranging from 2.6 to 7 per cent for the city in that period (Statistics Sierra Leone, 2017). Both during and since the country's civil war (1991-2002) some 500,000 farming families were displaced nationally, with large numbers moving to city. Many internally displaced persons (IDPs) from the provinces, who initially sought temporary refuge in the capital, have often remained and were subsequently joined by family members as discussed by Maconachie (2012), increasing population pressures in the city.

**Table 2 Freetown's population change 1901-2015 (various sources)**

Year	Population
1901	67,782
1963	195,023
1974	276,247
1985	469,776
2004	772,873
2015	1,055,964

Sources: Central Statistical Office, 1985; Republic of Sierra Leone, 2006; Statistics Sierra Leone, 2017; nantinpasadnathed.com, 2017.

In the 1960s, Harvey and Dewdney (1968) suggested that the key planning problems in Freetown were coping with the rapid expansion of the city, intra-city mobility, inadequacies of services and unemployment and crime. In the half-century that has elapsed since that analysis, the situation has been aggravated by corruption and neglect, together with a decade-long civil war and post-conflict humanitarian challenges, suggesting that very little has improved. Ogbonnaya (2015) argues that in the urban context of Sierra Leone there has been a link between levels of conflict, corruption and neglect on the one hand and the vulnerability to the Ebola virus disease (EVD) epidemic of 2014/15 on the other, which unusually in EVD outbreaks, focused on the urban settlements. The EVD resulted in 8,704 confirmed cases of infection in Sierra Leone, as well as several thousand suspected cases, leading to almost 3,589 deaths, amongst whom 221 were healthcare workers (WHO, 2015). The civil war lasted from 1991 to 2002 and resulted in an estimated 70,000 deaths and 2.5 million displaced people (UNDP, 2016) . Both events wrought havoc on the country's economic and social life.

These challenges are clearly a key concern locally, and in an attempt to significantly improve the urban environment and service provision, on the 24<sup>th</sup> January 2019, the Mayor of Freetown launched the 'Transform Freetown' initiative, commenting that "Our way of life is threatened by the lack of city planning, which has led to inefficient and sometimes dangerous land use" (Freetown City Council (FCC), 2019). Freetown City Council reported that the city was 'sprawling and fragmented,' and 'about 95% of the city's population does not have access to mains water' (FCC, 2019). Furthermore, in recent years Freetown has experienced some serious natural disasters such as flooding, landslides and the deadly 2014-15 Ebola virus epidemic, which have both encouraged further urbanization and aggravated already poor living conditions (Freetown City Council, 2014).

Drawing on the principles embodied in Sustainable Development Goal (SDG) 11, which seeks to make human settlements inclusive, safe and sustainable (UN, 2015), this paper focuses on Freetown as an example of the deeply-rooted challenges facing many poor, post-colonial cities in the Global South, both in terms of coping with their past, but also in preparing for the future. Within this context, the paper reviews the inherited colonial legacy and challenges which planners currently face, before considering priorities for future urban growth and development. As the paper indicates, colonial planning and policies created cities which are ill-prepared to address the challenges of the post-independence era, meaning that the roots of the current challenges lie partially in the failure to put in place appropriate legal and policy mechanisms, adequate service provision, housing and physical capacity during the colonial era. These challenges, as this paper will show, were aggravated by numerous post-independence crises and the failure of new governments to adopt more appropriate planning and urban management practices, creating the current urban crisis which requires urgent resolution. The paper draws primarily on published material, planning records and academic literature, and is supplemented where necessary with reference to a limited number of key informant interviews undertaken by the authors. The primary evidence will be analysed elsewhere in more detail in the context of a wider range of in-depth and key informant interviews.

## Colonial and post-colonial planning issues in Africa

The impact of European colonization on African social, economic and political systems was profound and has been well documented (see, for example, Goodfellow, 2013; Porter & Yiftachel, 2019). Many African cities were either established by colonial regimes to serve the administrative and economic needs of the mother country or, where cities already existed, European settlements were imposed adjacent to them. Colonial cities played a key role in the economic restructuring and exploitation of the newly created colonies and were vested with transport, trade and administrative systems to facilitate these processes. In many ways in the 19<sup>th</sup> and early 20<sup>th</sup> centuries, African cities were created or restructured to meet the needs of the European colonists and generally neglected the indigenous populations. Planning was anchored on a desire to escape the environmental challenges and congestion of European cities, and well-planned colonial centres often followed 'garden city' principles (Njoh, 2008). In so doing, however, little attention was paid to housing and providing services for indigenous people, and before independence such populations were often kept at low numbers by restrictive urban migration rules (Njoh, 2002; 2010). Njoh accurately sums up the situation for many African cities when he suggests that,

'urban planning is not the benign, objective and value-neutral tool for promoting the functioning of the built environment that it professes to be. Rather, it serves as a viable instrument for realizing the cultural imperialistic goals of Westerners' (Njoh, 2010: 369).

However, Goodfellow (2013) cautions that there were differences in the role and access to planning within the continent, contrasting southern Africa's stronger planning regimes with the experience elsewhere in the continent.

The net result of these policies was that, following independence, cities that were originally designed for small European elites, were incapable of coping with rapid growth. They struggled to provide resources, infrastructure, housing and economic and planning systems, in some cases leading to desperate situations where up to 80% of the population in some cities live in slum conditions (Davis, 2006). This has been aggravated by the common challenge of maintaining inappropriate western planning and building norms, which are frequently unsuited to the economic and social realities of African cities (Njoh, 2010). This situation is often perpetuated by the continued reliance on foreign planners and aid agencies seeking to implement western management and planning systems, where there is weak local development and planning capacity, and fragile economic systems which do not generate the funds required to effect meaningful change. While it would be incorrect to attribute all the current challenges to the failings of colonial urban policy and planning, the imposition of inappropriate standards, and the failure to provide for cities which have the capacity to meet the needs of local residents, have clearly created a legacy which has yet to be satisfactorily addressed.

In colonies where there were pre-existing urban centres, the neglect of indigenous centres by colonial authorities was a common practice, and urban planning created European enclaves which were physically separated from indigenous settlements. In these centres and newly created cities, colonial planning policies tended to have two foci, first, the creation of spacious and planned garden-city settlements for Europeans and, secondly, the physical separation of these settlements from areas where the indigenous population resided. As the

nineteenth century evolved, increasingly restrictive laws ensured that racial separation was enforced and that areas were physically separated, a reality often justified on the grounds of either military or health concerns (Beeckmans, 2013). The latter, known as the 'sanitation syndrome' sought to isolate and 'protect' the Europeans from the perceived health risks associated with indigenous areas. In Francophone Africa such separation was often enforced with strict boundaries known as '*cordons sanitaires*'. In South Africa in the early 20<sup>th</sup> Century, the white population increasingly came to associate the black urban presence with squalour, disease and crime in a parallel set of developments to those observed in colonial Freetown. There is plenty of evidence in South Africa to indicate strong links in the popular and political spheres between, on the one hand, perceived threats to white health and safety and, on the other, the drive to urban segregation in the planning process (Maylam, 1995). What became known as 'sanitation syndrome'. The spread of bubonic plague around South Africa between 1901 and 1904 was followed by white ratepayer demands for increased racial segregation. Within a few weeks of the outbreak, some six to seven thousand Africans were removed from central Cape Town to temporary accommodation at Ndabeni (Maylam, 1995).

Colonial planning in Freetown was profoundly influenced by the idea of creating separate areas for different elements of the urban population (Bockarie *et al.*, 1999; Beeckmans, 2013). As a result, urban planning came to manifest what Njoh (2008) refers to as the 'colonial project', with the projection of race-based control in which institutionalised racism became embedded in the planned landscape of the city, reflecting colonial prejudice (Nunes Silva, 2015).

In this context, Watson (2002; 2009a) points out the challenges of donor driven development and the need to adopt a 'Just City' approach which is anchored on local priorities and needs and which is also inclusive and pro-poor in its focus. The reality that many former colonies still have inappropriate and outdated colonial planning instruments in place is a sad reflection on local failure to adapt to contemporary realities (Rigon *et al.*, 2018; Watson, 2009b). At a broader level, one also needs to acknowledge that the development needs of the poor are often at odds with the technocratic, top-down and market-driven approaches to urban planning which have frequently developed as new alternatives in the former colonies. Future planning strategies in African cities need to address key issues such as informality, land rights, social exclusion, climate change and sustainable urbanization (Nunes Silva, 2015).

## **The establishment of Freetown**

As Christopher Fyfe comments, 'Freetown has always been a planned city' (Fyfe, 1968: 3). Established during a period of much debate about the emancipation of slaves in British territories, Freetown was a planned settlement from its earliest origins, set up by the Sierra Leone Company in 1787 to settle by 1792 some 1,600 freed slaves from the West Indies and Nova Scotia (Canada) (Goerg, 1998; Howard, 2006; Anderson, 2013). The location was a forested peninsula in the heart of a significant trading location focused around the estuary of the Sierra Leone River. The history and establishment of Freetown and its heritage as a 'tribal settlement in a Creole city' were examined in a detailed study by Banton (1957, p.3)

in the 1950s. The houses were laid out on a grid-iron street pattern determined by the settlers, and arranged in a series of 'villages' on the Freetown peninsula within the confines of the main settlement (Goerg, 1998). The dwellings were largely based on a Creole-style 'chattel house' typical of many Caribbean colonies, the construction of which was based on the skills and knowledge of the incoming freed slaves. The Creoles – as they became known in Sierra Leone - approached housing design in a very different way from the local indigenous Temne ethnic group, in that they made use of more permanent materials and the carpentry skills of the freed slaves, and emphasised a stronger sense of individual ownership of land and dwellings, with houses having direct entrances to the street and no open veranda to the front. Today in Freetown the remaining Creole houses (known to Sierra Leoneans in their Krio *lingua franca* as '*Dem ole bod ose*'), stand out in showing their origins in the West Indies (Jarrett, 1956) (Figure 3). In an attempt to separate the settler community from indigenous ethnic groups, Doherty (1985) reports that in 1807 the British declared that the local Temne tribe should be excluded from an eleven-mile radius around the settlement. The Crown Colony was established in 1808, both in and around the city of Freetown, whilst the Protectorate, established in 1896, included the remainder of the country (Munro & van der Horst, 2016).



Figure 3: Surviving Creole House in Central Freetown  
Source: T. Binns personal collection

Whilst there had initially been relatively low levels of racial segregation between black and white in Freetown, that situation changed in the 19<sup>th</sup> century, as the population grew and urban challenges emerged, particularly around health and sanitation. These concerns led to a desire on the part of the colonial authorities to formally separate residential areas along racial lines. The concept of the 'sanitation syndrome' was gaining currency in other colonies (Beeckmans, 2013) and justified the separation of Europeans from indigenous people

ostensibly on the grounds that disease was associated with the living areas of the latter. As a result, urban design gradually segregated the settlers from the indigenous population, as planning started to reflect racial bias in Freetown (Goerg, 1998).

After Dr Ronald Ross' important discovery in 1898 of the life-cycle of the mosquito and of the link with malaria (Bockarie *et al*, 1999), he levelled criticism at the British West Africa administration's woeful neglect of sanitation in the cities of the colonies (Bockarie *et al*, 1999; Nye & Gibson, 1997). Ross visited Freetown in 1899 and in 1902, and it was the work he did on his first visit that substantially advanced an understanding of the malarial virus. As a result of his observations, Ross made three main recommendations that were to have a significant impact on future urban planning in British colonies, including Sierra Leone:

"These are, (1) scrupulous drainage of the soil; (2) pending this, the persistent treatment of Anopheles' breeding-pools by *culicicides*; (3) the segregation of Europeans. We also recommended the protection of public buildings, such as barracks, gaols, hospitals, and rest-houses by wire gauze screens; the isolation of the sick; and the habitual employment of mosquito-nets and *punkahs* by individuals." (Ross, 1902: 92).

In 1900, rather than attempting to rid Freetown of mosquitoes, the colonial authorities reached the conclusion that 'segregation from the native is at present the only scheme for preventing malaria' (Goerg, 1998:10; see also Frenkel and Western, 1988). In 1902, the colonial service pursued segregation, with the construction of substantial two-storey dwellings for the exclusive occupancy of Europeans at Hill Station, out of the town and up the hill slopes to the south of the settlement. According to Goerg:

'the Hill Station in Sierra Leone was planned and designed as a fortress against the mosquito ... The township is intended for European residents only, and thus the principle of segregation is carried out as far as is practicable' (1998: 15).

The Hill Station dwellings were large and constructed on stilts, giving their residents spectacular views over the forest towards the sea. Hill Station was connected in 1904 to the central city and port area below by a narrow-gauge railway (2'6" gauge) that was intended for use by senior British colonial service personnel. Once motor vehicles arrived, and were made available to the colonial service, the railway, which ran through the suburbs of Brookfields, Tengbeh Town and Wilberforce, was discontinued in 1929 due to increasing competition from bus services and private cars. Since the closure of the Hill Station railway the line of track has in places been converted to roads, one section of which is called 'Old Railway Line'. The old two-storey houses can still be seen at Hill Station, and are now surrounded by exclusive neighbourhoods, hotels and diplomatic residences. This search for the elevated cooler margins of the city continues into the present day, though this is not exclusive to the elite, as it was in the colonial period, and this urban expansion is now encroaching on the forested areas of the Peninsula (Hoffman, 2007; Munro, 2008).

Between 1787 and 1893 the settlement of Freetown grew in size from 32 ha. to 12.4 sq. km, growing further to 68 sq. km in 1973, and in so doing absorbing many of the original 'villages' into the metropolitan area (Gleave, 1997). Correspondingly, the population grew to 33,000 in 1914, to 195,023 by 1963 (Doherty, 1985; natinpasadvantage, 2017), and then over 1 million by 2015, with 2 million in the greater municipal area (Cham and Kai-Banya,

20/1/2014). Given the relatively constrained physical site of the Freetown peninsula and the proximity of the surrounding hills, overcrowding and deteriorating living conditions were inevitable with such rapid growth. Figure 4 shows the congested nature of the CBD of Freetown, while Figure 5 shows one of the many cases of in-fill housing as city residents struggle to stake a space in the congested urban context.



Figure 4: Freetown CBD from Tower Hill  
Source: T. Binns personal collection



Figure 5: In-fill housing Freetown  
Source: T. Binns personal collection

In the late colonial period, urban planning and management largely took the form of trying to manage the existing challenges rather than planning for growth, while enforcement of what were often alien planning and building standards frequently led to people relocating and erecting slum dwellings elsewhere. In 1900, the City Improvement Act aimed to give legal sanction to the enforcement of public health standards, and to introduce physical planning and building code regulations. As the imposition of western planning standards was unaffordable for the majority of urban residents, demolitions simply shifted the problem elsewhere (Doherty, 1985).

The Slum Clearance Reports of 1939 and 1941 initiated a more pragmatic approach, in which a period of housing policy implementation tried to link enforcement of standards with the provision of accommodation for those displaced (Doherty, 1985). In practical terms, however, little was achieved as housing was not provided, although there were efforts to introduce town planning. Notably in 1945, the Fry and Farms Report sought to introduce comprehensive planning, urban upgrading and the implementation of class and racial divisions. The 1947, UK Town and Country Planning Act provided the necessary powers, and many of the principles and measures contained in this UK Act were introduced into many of the colonies. In Freetown, some planning of the city ensued, but little progress was made as financial constraints led to programmes of rehousing and redevelopment not being pursued (Doherty, 1985).

At the time of Sierra Leone's independence in 1961, the new city leaders and planners inherited a city in which urban interventions and planning since its establishment as a



settler-colonial township, focused on the initial racial segregation which the development of Hill Station had facilitated. Laws were generally derived from inappropriate Western legislation, and the scene was set for significant post-independence growth in a city which was seriously lacking the infrastructure, planning systems and resources to effectively manage the change which was about to happen.

In the optimism of the immediate post-independence period, new interventions were attempted. The Borys Plan of 1963 envisaged the redevelopment of the town centre, high-rise dwellings, neighbourhood units and shopping precincts (Borys, 1963). This bold vision was also articulated in Sierra Leone's Second Ten Year Plan which introduced 'grand proposals for extensive redevelopment' (Doherty, 1985:154). However, government funding constraints led to the shelving of a plan for the state to fund low-income housing and a suggestion that the private sector should take the lead in implementing the Borys Plan. But little materialised (SLRA, 1997), and as the housing situation deteriorated, the Hanson Report of 1969 advocated a policy shift from state housing provision to 'self-help' construction. By 1971 it was recognised that planning was essential as a result of 'years of neglect, lack of urban planning and development control', and the government expressed its intention, 'to restore Freetown to its former conditions of beauty, health and convenience' (SLRA, 1997:1-3). However, infrastructure deterioration, deprivation, weak institutional capacity and rapid population growth which had exceeded the capacity of the city to cope, led to a situation in which, 'housing and social infrastructure have not kept pace with the increase in the urban population. The physical infrastructure is inadequate and insufficient, resulting in environmental degradation' (SLRA, 1997: i).

By 1975, as was happening elsewhere in other struggling cities, 'site and service' housing schemes were proposed, but these never materialised due to financial constraints and the sheer scale of the development challenge (Doherty, 1985). In 1979, the Ministry of Housing reported that the lack of private sector capacity and the persistent reliance on western building and planning standards were major impediments (Doherty, 1985). The Ministry of Housing also drew attention to the lack of skilled staff, economic stagnation in the country, declining real incomes and the limited nature of the private sector, all of which conspired to prevent the large-scale provision of housing and effective urban planning and redevelopment.

Having abolished District Councils in 1972, President Siaka Stevens in 1978 declared the country to be a one-party state, and subsequent policies gradually neglected local democracy in the provinces, prompting further rural-to-urban migration, particularly to Freetown, despite the conditions there being little better than in the countryside. Following the declaration of a one-party state, and throughout the 1980s, the country was largely neglected by the elites, and increasing corruption limited the spread of benefits from economic development beyond that group. State corruption and growing inequality were rampant, with a focus on 'the welfare of Freetown and very little attention paid to the hinterland' (ADB, 2011: 15). Such neglect of the provincial areas of the country had serious consequences. As Fanthorpe observes, 'The policy literature on decentralization in Sierra Leone identifies the over-concentration of political, administrative and economic power in Freetown as the root cause of the civil war of the 1990's' (Fanthorpe *et al*, 2011: 12). This neglect of the provinces resulted in the progressive deterioration of the country's

infrastructure, including roads, water and telecommunications. Freetown's municipal council was abolished by Siaka Stevens in 1984, in favour of a management committee that was populated by allies of the president. In 1985, Stevens subsequently handed over power to his favoured successor, Joseph Momoh, but little progress was made in urban planning.

By 1986 the United Nations Development Programme (UNDP) started to advocate the need for planning and environmental improvements and it was argued that: 'the present narrow focus on building control, ignoring the land use implications of development, has also denied the establishment of a basis for determining the organised future' (SLRA, 1997: 3). By this time the key legal measures remained the 1900 City Improvement Act and the 1947 Town and Country Planning Act, neither of which was fit for purpose in relation to the economic and social realities of the city, and issues such as building standards and planning logistics. Subsequently, in 1994, a Master Plan for Freetown was produced, but never implemented, as the civil war had started in 1991, with instability and conflict lasting until the peace process in 2002 (SLRA, 1997).

## Upheaval and post-conflict reconstruction 1991-present

Civil war broke out in Sierra Leone in 1991, leading to an estimated 500,000 internally displaced persons (IDPs) seeking refuge, with many moving to Freetown and boosting its population (Maconachie *et al*, 2006; Maconachie, 2012). Local government was still limited by its narrow legislated mandate, despite the election of a Freetown mayor in 1995. The city remained separated from much of the conflict until late in the war, but on the 6<sup>th</sup> of January 1999 the war eventually reached Freetown when the rebel forces entered the city. These incursions into the city prompted people to flee into the forested hills of the Freetown peninsula, returning after external forces, including those of ECOWAS (Economic Community of West African States), the UK, and the UN peace-keeping force (UNAMSIL), arrived to defend the city and bring the conflict situation under control.

President Kabbah declared the end of the civil war in January 2002, since when Freetown and Sierra Leone have been engaged in a long period of reconstruction and development, with the Freetown City Council struggling to meet the needs of its large and growing population. The eleven-year civil war created a unique period of urban pressure in the capital, with internally displaced persons fleeing the rural areas for safety in the city, and the city at times being cut off from its hinterland. Although some IDPs subsequently returned to their rural homes, many did not. These additional numbers, when coupled with rapid population growth since 2002, have aggravated local conditions (Maconachie *et al*, 2006). Many younger people, including ex-combatants, have drifted to Freetown in the post-conflict period because of perceived difficulty in returning to their home areas.

International agencies have played an important role in supporting the reconstruction of the city and the nation, including the development of human capacity in areas such as legal and criminal justice, healthcare and education (ADB, 2004). However, the city expanded considerably both during and after the civil war, notably with formerly forested areas in the hill suburbs experiencing rapid unplanned development. A key reason for this is the city, as a result of naturally occurring growth, in-migration and the civil war, experienced dramatic

increases in population density. In 1985, the population density in Freetown and the surrounding rural areas was 796 people per square kilometre, rising to 1360 in 2004 and 2154 in 2015 (Statistics Sierra Leone, 2017). The extent and rapidity of growth is vividly depicted in Figure 2 which shows just how rapidly the city grew after independence in 1961, with the population increasing more than five-fold in parallel. While there has been some higher income housing developments to the west and south of the city (see Figure 6), the most significant growth has been in the higher density, low income slum areas such as a Kroo Bay (Guma Valley Water Company, 2008) (see Figure 7).



Figure 6: Upper income housing development on the urban periphery along Regent Road, western Freetown.

Source: T. Binns personal collection



Figure 7: Kroo Bay informal settlement  
Source: T. Binns personal collection

With the limited professional capacity available, urban planning has been largely omitted from this process of post-conflict reconstruction, and, as a result, the more recently built housing areas, both within and on the outskirts of Freetown, are largely informally constructed (Vasudevan, 2015). Researchers at the Sierra Leone Urban Research Centre (SLURC) in Freetown, report that there were only two fully qualified planners in 2014 in the city (Cham and Kai-Banya, 20/1/2014) compared, for example, with some 21,378 chartered town planners in the UK (RTPI, 2016). There seemed to be little knowledge about the capacity for planning in the country's other main cities, notably Bo, Kenema, Koidu and Makeni.

Whilst Freetown's historically formally planned areas still retain their boundaries, many of the newer areas of the city have been constructed informally, often with livelihoods and living areas existing in close proximity. These densely settled areas now house the majority of the city's population. As the Mayor of Freetown commented in January 2019, 'The result is a sprawling and fragmented city, with poor infrastructure, poor management of road space and inadequate public transport. We know from bitter experience that unabated deforestation, coastal and river bed constructions and land reclamation have created a perfect recipe for flooding and landslides' (FCC, 2019:5). An Infrastructure Structure Plan was produced for the city in 1997, advocating the development of a functional, efficient and attractive urban environment, which would encourage economic growth and efficiency and implement a nodal development scheme across the city (SLRA, 1997). However, due to the civil war and capacity constraints since peace was restored, the plan was never implemented (Cham and Kai-Banya, 20/1/2014).

A significant milestone was the passing of the Local Government Act in 2004, which re-established local councils across the country and required every council to formulate a development plan (GoSL, 2004, Edwards *et al*, 2015). In 2008, the EU recognised the need to provide more formal support to planning in Freetown (Minervini and Olieta-Josa, 2008), and in 2013 the European Union (EU) became involved in efforts to develop an effective planning system in the city (EU, 2014). The plan called for the revision of urban planning laws, a reliance on market forces and the development of Spatial Development Plans (FCC, 2015). Foci included developing links between the private and public sectors, encouraging growth poles and a holistic approach to planning (Dumbuya, 2013). A key challenge identified in the planning process is that, while post-war Sierra Leone had laws on decentralization and devolved urban management, Freetown lacked professional capacity to adopt the legal provisions (EU, n.d.), as mentioned above.

### **Moving forward – current challenges and local responses**

Just when it seemed that tangible progress was becoming visible in Freetown and the provinces, and only 12 years into the post-conflict period, the country was struck down by the West African Ebola Virus Disease (EVD) epidemic in 2014 and 2015. The first suspected case of Ebola was recorded in eastern Sierra Leone in March 2014, close to the border with Guinea, where the disease is thought to have originated. The first death occurred on 26 May 2014, while the declared eradication of the epidemic took place on the 17th March 2016 (DEG, 2015). With Sierra Leone's fragile health system and migration towards the main urban centres, Freetown became a major focus for treating those affected by Ebola. The impact of the epidemic was considerable, leading to a reduction in mobility, disrupted education, reduced remittances and trading, as well as a heightened sense of fear and suspicion. The post-conflict reconstruction and development programme was seriously interrupted due to the epidemic and Sierra Leone's dependence on overseas aid became further entrenched (DEG, 2015). At the urban level increased population and service needs have put further pressure on the already stressed system. There remains concern that the health service may still not have the capacity to manage a future epidemic.

It is likely that future challenges to urban planning in Freetown will be considerable, as a 2015 report from the Government of Sierra Leone (GoSL, 2015) observes. It is suggested that,

‘the capital city for several decades has had to cope with the challenges that come with growth rates that exceed the capacity of the geographical area of the city...Unfortunately, both governance and policy responses have not been able to cope, plan and manage the city's development to achieve sustainable urbanisation’ (GoSL, 2015: 35-36).

Urban growth has been rapid and generally uncontrolled, notably during and after the eleven-year civil war. Service provision is a major problem. Whilst there has been some improvement in the city's road infrastructure since the civil war, access to clean water and sewerage infrastructure is grossly inadequate (see Figure 8). An estimated 83% of Freetown's population has no water-borne sewerage, half of the city has no access to piped

water supplies and some three-quarters of the city's population has no on-site access to fresh water, which is one of the lowest levels in Africa, often relying on water supplied by vendors (see Figure 9). A survey undertaken in 2008 found that '70% of the urban population hardly reaches the dollar per day' (Minervini and Oliete-Josa, 2008: 5).



Figure 8: Open drain in central Freetown  
Source: T. Binns personal collection



Figure 9: Water vendor in Freetown  
Source: T. Binns personal collection

Furthermore, there is a serious housing shortage in Freetown and spontaneous settlements are developing across the city, sometimes on marginal land and beaches, and particularly in the peri-urban fringes where new construction is now stretching into the once isolated mountain villages, notably Gloucester, Leicester and Regent, which before the war were quite separate from the city (see Figure 2). Clearance of forest in this area has been widespread and houses have often been constructed on unstable hillsides which are prone to landslides, particularly during periods of heavy rainfall (Macarthy, 2012). On 14 August 2017, on the outskirts of Freetown, a large section of the Sugar Loaf mountain near the community of Regent collapsed with a mudslide that made over 3,000 people homeless and led to some 1,141 deaths and missing persons (Al Jazeera, 2018) (see Figure 10).



Figure 10: Landslip near Regent, August 2017

Source: T. Binns personal collection

City planners are faced with difficulties of providing infrastructure and services to these new communities as the city faces unprecedented expansion (GoSL, 2015). The large-scale migration of unskilled workers moving to Freetown has led to a growth in the informal sector and a high rate of youth unemployment, with many young people sitting around street corners or, for some lucky individuals, getting involved in the burgeoning motor cycle taxi business, known locally as *okadas*. Since the end of the civil war there has been much concern about levels of youth unemployment, since disaffection and dissatisfaction among Sierra Leone's youth were significant issues in leading to the civil war and there is concern that this could be a cause of possible future instability (UNDP, 2016).

A key challenge identified in the planning process is that while Sierra Leone has a decentralization law and devolved urban management, Freetown lacks the capacity to adopt the legal provisions and develop a planning infrastructure (EU, 2019), a fact borne out by the reality that the city only had the services of two town planners in 2014 (KI, Cham and Kai-Banya, 20/1/2014). This process did, however, culminate in the Freetown City Council, with EU International Aid support, developing a Structure Plan for the city in 2014, which, in addition to identifying social, economic and environmental challenges, also proposed spatial interventions to improve service provision, infrastructure and urban design (Kamara, 2014). The challenge, however, has been the lack of resources to implement changes, particularly as the Plan's release coincided with the devastating impact of Ebola in the country. Equally severe are major service backlogs resulting in water contamination, poor health and



inadequate sewerage provision in the city and in the slum areas in particular (Guma Valley Company, 2008).

Major urban development and planning challenges which currently face the city stem from its rapid growth rate and the city's inability to meet the population's needs and to prevent the population from being vulnerable to natural hazards such as landslides, epidemics and environmental health problems (Macarthy et al, 2018a). If greater Freetown is considered, the city now accounts for approximately a quarter of Sierra Leone's total population (EU, 2014; Minervini and Oliete-Josa, 2008).

In 2017, the Sierra Leone Urban Research Centre (SLURC) began to work with low-income communities in Freetown (Macarthy et al, 2018a; Macarthy et al, 2018b; Macarthy, et al, 2019). In recognition of the low levels of planning capacity and the failure of all levels of government to address the challenges of slum neighbourhoods, SLURC is working with communities to build participatory planning capacity as a viable alternative to the 'necessary but absent' urban planning and policy framework (Macarthy et al., 2019; Parnell & Simon, 2014). This is part of a shift to community area action planning that can include communities developing the capacity to gather evidence of conditions and experiences of living in cities, with a view to integrating this evidence into a city-wide scale that could involve the development of spatial data platforms for increasing resilience and development (Borie *et al*, 2019).

However, there have been some other notable improvements in Freetown since the end of the civil war in 2002. Some of the main roads in the city have been widened and re-surfaced, and a new road now bypasses the city centre. Whilst traffic congestion is still a serious problem, there has undoubtedly been some relief in recent years. But these are the first significant improvements to Freetown's traffic system for many decades, and by the end of the civil war, years of neglect meant that the road network in the city, and indeed throughout the country, was in desperate need of rehabilitation. In other areas, such as the provision of adequate water, sewerage, power and housing, there is still much work to be done in both a national and city context where there are severe shortages of funding and skilled personnel to implement such upgrading programmes.

In spite of the many plans and pronouncements from city authorities, there is in reality a very crowded agenda and priorities will need to be identified. The planning blueprint approach needs to be avoided. As Njoh rightly observes, 'planners must eschew a one-size-fits-all mentality, and recognize the need for contextualizing planning methodologies' (Njoh, 2010:375). Local solutions need to be found for complex and possibly contentious issues such as water provision (Gandy, 2006; Kallon, 2008; Njoh and Akiwumi, 2011; Seong-Kyu, 2001), slums and squatter settlements (Davis, 2006; Vasudevan, 2015), street trading (Spire and Choplin, 2018), and urban and peri-urban agriculture. Research on the latter in Freetown, for example, has revealed the significance of urban farming in providing household and community nutrition, employment generation and empowerment, particularly of women farmers (see, for example, Maconachie *et al*, 2012; Lynch *et al*, 2013; Cadzow and Binns, 2016). Also important, as shown in a study undertaken in two settlements some 20 km outside the city of Dar es Salaam (Tanzania) is the need to give attention to the relationships between poverty and urban growth in the transformation of

peri-urban bush land into housing and farming areas by poor households (Kombe, 2005). Kombe observes that there is close interdependence between the inner city and the peri-urban settlements, but the land development pattern that is developing in the peri-urban areas, 'neither complies with the conventional city form and spatial orderliness, nor reflects planners' visions about our cities of tomorrow' (Kombe, 2005: 128). There is a need for planners to have a city-wide and national perspective to avoid adverse conditions and enhance development, while communities develop their capacity to tackle urgent problems from the ground up.

## Conclusion

The record of urban planning in Freetown is somewhat lamentable, though it is probably very similar to many other former colonial towns and cities in sub-Saharan Africa, where cash-strapped national and local governments have launched a succession of impressive plans, but in reality have achieved very little in terms of tangible outcomes. In the case of Freetown, the city plan of the early 20<sup>th</sup> century was originally created to suit the needs and protect the health of resident Europeans and seemed to have been 'successful' for a racial elite only. Such a planning approach and applied solutions are unacceptable in the present day, but the authorities are different and our understanding of the science of environmental hazards and public health has greatly improved. However, the planning infrastructure has seemingly not progressed to cater for the needs of an increasingly diverse and rapidly growing population. In the case of Freetown, this paper has drawn attention to the racially biased urban planning and the neglect of indigenous people that has created an urban planning and development legacy which is proving intractable to the present day. The inherited legacy, coupled with lack of skilled staff and resources and a series of crises, have significantly aggravated the urban situation. Issues such as uncontrolled urban sprawl, inadequate and overburdened infrastructure, the housing shortage and inadequate capacity to cope with disaster management, are areas which urgently need attention – as has been comprehensively demonstrated by recent epidemics, landslides and flood incidents. More evidence is emerging of environmental and public hazards that are particularly prevalent in the lower income spontaneous settlements (Macarthy *et al.*, 2018a; Macarthy *et al.*, 2018b).

While the challenges and development backlogs currently facing African cities more generally and in Freetown in particular are enormous (Gandy, 2006), there is a clear need to tackle the situation in the most effective fashion, as argued in terms of the SDGs. This will, however, require significant capacity development, funding, international support, and critically, as Njoh (2010) argues, the application of new, relevant and appropriate planning norms and standards. Innovative mechanisms of land access and land use policies, together with appropriate building codes which are in harmony with socio-economic realities and development needs, are clearly needed (Njoh, 2002). This paper has contributed a historically nuanced conceptualisation of the evolution of urban planning in the case of Freetown that can provide useful context and analysis for those interested in tackling the contemporary situation. This context is important and the paper has indicated that although Freetown has some unique context, there are key themes that could inform modern democratic approaches to planning.

The work of SLURC with communities around the city is commendable, and is both empowering and building capacity within these communities. But a key priority must be to increase the number of trained planners, both in Freetown and in the country as a whole, and there is an urgent need for a training programme to be introduced at one of the universities or colleges (Minervini and Oliete-Josa, 2008). Such planning programmes, whilst dealing with the theory and practice of planning as taught internationally, can also include a significant focus on the local context and the importance of devising strategies which can develop capacities and meet the needs of the local populations. Whilst being aware of principles associated with service provision in rapidly growing urban areas, planners in Sierra Leone, and indeed elsewhere in Africa, need to be better attuned to local needs and aspirations, as well as able to engage with the communities in which they work (Borie et al., 2019). In the case of Freetown, the already developed Structure Plan needs resources to be implemented.

In the absence of any significant progress in addressing the planning issues associated with the rapid and uncontrolled growth of Freetown's urban area, there is a need for the city authorities to more tightly control land development and to reserve certain areas for specific uses, such as schools, clinics or parks. Valuable wetland areas within the city, some of which are currently used for urban agriculture, are in some cases shrinking as new building is encroaching on these areas with little apparent control of this process. But planners will need to work closely with communities to develop a more nuanced understanding of their needs. This is particularly important where communities in the city have to trade off acute needs for increased and improved housing, as well as basic infrastructure and services, such as waste management, employment, health, water and sanitation. Meanwhile, whilst Freetown is faced with these major challenges, the planning priorities in the provincial cities, such as Bo, Kenema, Koidu and Makeni, have received much less attention than in the capital city, yet their circumstances also demand urgent and appropriate planning.

Local responses and current external support are to be welcomed, but the scale of the urban challenges, current policy, staff and resource constraints, the local housing and service crisis and the failure to adopt more realistic planning and policy guidelines do not bode well for the future. Considerably more effort is required on all fronts if the ideals of the SDGs are to be attained, the colonial legacy of neglect, and the loss of progress during the civil war and the EVD epidemic are to be addressed. Progress on these, could create an urban environment which is both sustainable and conducive for the well-being of all Freetown's residents, as well as providing lessons for other cities in the region.

**8,394 words (excl references)**

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## REFERENCES

- ADB (2004) ADF Supports Post-War Reconstruction in Sierra Leone. The African Development Bank Group, Tunis. <https://www.afdb.org/en/news-and-events/adf-supports-post-war-reconstruction-in-sierra-leone-adf-grant-will-strengthen-public-finance-and-energy-sectors-3651/> [accessed 22/4/19].
- ADB (2011) *Infrastructure and growth in Sierra Leone*. The African Development Bank Group, Tunis. <http://www.afdb.org/fileadmin/uploads/afdb/Documents/Project-and-Operations/Infrastructure%20and%20Growth%20in%20Sierra%20Leone.pdf> [accessed: 21/12/18].
- Al Jazeera (2018) The day the mountain fell: Sierra Leone's mudslide, 24 Feb: <https://www.aljazeera.com/blogs/africa/2018/02/day-mountain-fell-sierra-leone-mudslide-180221122154473.html> [accessed 29/1/2019].
- Anderson, R. (2013) The diaspora of Sierra Leone's liberated Africans: enlistment, forced migration, and "liberation" at Freetown, 1808-1863. *African Economic History*, 41, 101-138.
- Banton, M. (1957) *West African City: A study of tribal life in Freetown*, Oxford University Press, London.
- Beeckmans, L. (2013) Editing the African city: reading colonial planning in Africa from a comparative perspective. *Planning Perspectives*, 28 (4), 615-627. doi:10.1080/02665433.2013.828447.
- Binns, T., Dixon, A. and Nel, E. (2012) *Africa: Diversity and Development*. Routledge, London.
- Binns, T., Lynch, K. and Nel, E. (eds.) (2018) *The Routledge Handbook of African Development*. Routledge, London.
- Bockarie, M.J., Gbakima, A.A. & Barnish, G. (1999) It all began with Ronald Ross: 100 years of malaria research and control in Sierra Leone (1899–1999), *Annals of Tropical Medicine & Parasitology* 93(3):213-224.
- Borie, M., Ziervogel, G., Taylor, F.E., Millington, J.D.A., Sitas, R. & Pelling, M. (2019) Mapping (for) resilience across city scales: An opportunity to open-up conversations for more inclusive resilience policy? *Environmental Science & Policy*. Vol. 99, Pp. 1-9.
- Borys, Z. (1963) *Preliminary Report: Freetown Comprehensive Redevelopment Plan*, Nickson, Borys and Partners, Freetown.
- Cadzow, H. and Binns, T. (2016) Empowering Freetown's women farmers, *Applied Geography*, 74, 1-11.

Central Statistics Office (1985) *Population and Housing Census: Sierra Leone*, Central Statistical Office, Freetown.

Cham, A. and Kai-Banya, A. (2014) Research and Development Office, Ministry of Lands, Country Planning and the Environment, Government of Sierra Leone, Freetown, Personal communication 20/1/2014.

Clarke, J.I. (Ed.) (1972) *Sierra Leone in Maps*. African Publishing Corporation, New York.

Cobbinah, P.B., Erdiaw-Kwasie, M.O. & Amoateng, P. (2015) Africa's urbanisation: Implications for sustainable development, *Cities*, 47, 62-72.

Davis, M. (2006) *Planet of Slums*, Verso, London.

DEG (Development Economics Group) (2015) *Civil society organisations in Liberia and Sierra Leone during the Ebola epidemic: A cross-section of changes and responses*, Wageningen University, Wageningen.

<https://www.partos.nl/documents/CSOs%20in%20Liberia%20and%20Sierra%20Leone%20during%20the%20Ebola%20Epidemic.pdf> [accessed 20/4/19].

Doherty, J. (1985) 'Housing and development in Freetown, Sierra Leone', *Cities*, 2(2), 149-164.

Dumbuya, I.K., (2013) Presenting the National Development Framework for a better Sierra Leone, *Standard Times* 16/12/2013:1.

Edwards, B., Yilmaz, S., & Boex, J. (2015) Decentralization as a Post-Conflict Strategy: Local Government Discretion and Accountability in Sierra Leone. *Public Administration & Development*, 35(1), 46-60. doi:10.1002/pad.1707.

Engels, F. (1845/1987) *The Condition of the Working Class in England*, Penguin, Harmondsworth.

EU (European Union) (n.d.) *The Freetown Development Plan*, [http://eeas.europa.eu/delegations/sierra\\_leone/eu\\_sierra\\_leone/tech\\_financial\\_cooperation/infrastructure/the\\_freetown\\_development\\_plan/index\\_en.htm](http://eeas.europa.eu/delegations/sierra_leone/eu_sierra_leone/tech_financial_cooperation/infrastructure/the_freetown_development_plan/index_en.htm) [accessed 13/2/2014].

EU (European Union) (2014) *A Spatial Development Strategy for Sierra Leone Preparatory Components and Studies of the Freetown Development Plan: Support to Freetown City Council and to the Urban Planning Authorities*, Urban Planning Project. GOPA- CES Consultants & 3BMD Consulting Engineers.

Fanthorpe, R., Lavali, A. & Sesay, M.G. (2011) *Decentralization in Sierra Leone: Impact, constraints and prospects*, Fanthorpe Consultancy, Surrey, UK.  
<https://assets.publishing.service.gov.uk/media/57a08ab340f0b652dd000868/DecentralizationResearchReportFINAL.pdf> [accessed 21/1/2019].

Freetown City Council (FCC)(2014) *Environmental Assessment and Evaluation of Natural Disaster Risk and Mitigation in Freetown*, FCC: Freetown.

Freetown City Council (FCC) (2015) *Freetown City Development Plan, 2016-2018*.  
[http://www.slurc.org/uploads/1/0/9/7/109761391/freetown\\_city\\_development\\_plan.pdf](http://www.slurc.org/uploads/1/0/9/7/109761391/freetown_city_development_plan.pdf)  
[accessed 22/4/19].

Freetown City Council (FCC) (2019), *Transform Freetown: An overview, 2019-2022*.  
Freetown, Sierra Leone, <http://fcc.gov.sl/transform-freetown/> [accessed 19/4/2019].

Frenkel, S., & Western, J. (1988) Pretext or Prophylaxis? Racial Segregation and Malarial Mosquitos in a British Tropical Colony: Sierra Leone. *Annals of the Association of American Geographers*, 78(2), 211-228.

Fyfe, C. (1968) The foundation of Freetown, pp.1-8 in C. Fyfe and E. Jones (eds.) *Freetown: A symposium*. Sierra Leone University Press, Freetown.

Gandy, M. (2006) Planning, anti-planning and the infrastructure crisis facing metropolitan Lagos, *Urban Studies*, 43 (2), 371-396.

Gleave M.B. (1997) Port activities and the spatial structure of cities: the case of Freetown, Sierra Leone, *Journal of Transport Geography*, 5 (4), 257-273.

Goerg, O. (1998) From Hill Station (Freetown) to Downtown Conakry (First Ward): Comparing French and British Approaches to Segregation in Colonial Cities at the Beginning of the Twentieth Century, *Canadian Journal of African Studies*, 32 (1), 1-31.

Goodfellow, T. (2013) Planning and development regulation amid rapid urban growth: explaining divergent trajectories in Africa. *Geoforum*, 48 . pp. 83-93.

GoSL (2004) The Local Government Act, 2004, Freetown. <http://www.sierra-leone.org/Laws/2004-1p.pdf> [accessed 22/4/19].

GoSL (2015) *Habitat III National Report*. Government of Sierra Leone, Ministry of Lands, Country Planning and the Environment in Collaboration with United Nations Human Settlements Programme (UN-Habitat) and the National Habitat Committee of Sierra Leone (NHCSL),  
[https://www.slurc.org/uploads/1/0/9/7/109761391/final\\_draft\\_gosl\\_habitat\\_iii\\_report\\_jan2016\\_signed.pdf](https://www.slurc.org/uploads/1/0/9/7/109761391/final_draft_gosl_habitat_iii_report_jan2016_signed.pdf) [accessed, 20/4/19].

Guma Valley Water Company (2008) *Strategic Water Supply and Sanitation Framework*, DFID, Freetown.

Harrison, P. (2006) On The edge of reason: Planning and urban futures in Africa, *Urban Studies*. 43(2), 319-335.

- Harvey, M. and Dewdney, J. (1968) Planning problems in Freetown, pp. 179-195 in C. Fyfe and E. Jones (eds.) *Freetown: A symposium*. Sierra Leone University Press, Freetown.
- Hoffman, D. (2007) The Disappeared: images of the environment at Freetown's urban margins, *Visual Studies*, 22, (2), 104-119.
- Howard, A. M. (2006) Nineteenth-Century Coastal Slave Trading and the British Abolition Campaign in Sierra Leone, *Slavery & Abolition*, 27(1): 23-49.
- Jarrett, H. R. (1956) Some Aspects of the Urban Geography of Freetown, Sierra Leone, *Geographical Review*, 46 (3), 334-354.
- Kallon, S. (2008) Pollution and sanitation problems as setbacks to sustainable water resources management in Freetown, *Journal of Environmental Health*, 71(5), 34-37.
- Kamara, S.M. (2014) Freetown Structure Plan: Presentation <https://www.theigc.org/wp-content/uploads/2014/08/Samuel-Kamara-Presentation-Delivered-by-Horatio-Gorvie.pdf>  
Accessed: 24 June 2019.
- Kombe, W.J. (2005) Land use dynamics in peri-urban areas and their implications on the urban growth and form: the case of Dar es Salaam, Tanzania, *Habitat International*, 29, 113-135.
- Lynch, K., Maconachie, R., Binns, T., Tengbe, P. and Bangura, K.S. (2013) Meeting the urban challenge? Urban agriculture and food security in post-conflict Freetown, Sierra Leone, *Applied Geography*, 36, 31-39.
- Macarthy, J. M. (2012) *Integrating Climate Change Considerations in Planning for Urban Development in Sierra Leone: The Case of Freetown*. PhD Thesis, Newcastle University, Newcastle, UK.
- Macarthy, J.M., Conteh, A., Sellu, S.A., Heinrich, L., (2018a) *Health Impacts of the Living Conditions of People Residing in Informal Settlements in Freetown*. SLURC Publication.
- Macarthy, J. M., Conteh, A., Sellu, S. A. & Doughty, T. (2018b) *Living conditions and health links in Freetown's informal settlements*. Sierra Leone Urban Research Centre Policy Brief No. 3. December.
- Macarthy, J. M., Frediani, A. A., Kamara, S. F., (2019) *Report on the role of Community Action Area Planning in expanding the participatory capabilities of the urban poor*. Sierra Leone Urban Research Centre Publication, Freetown.
- Maconachie, R. (2012) Diamond mining, urbanization and social transformation in Sierra Leone, *Journal of Contemporary African Studies*, 30(4), 705-723.
- Maconachie, R., Binns, T., Tengbe, P. and Johnson, R. (2006) Temporary labour migration and sustainable post-conflict return in Sierra Leone, *GeoJournal*, 67, 223-240.

Maconachie, R., Binns, T. and Tengbe, P. (2012) Urban farming associations, youth and food security in post-war Freetown, Sierra Leone, *Cities*, 29(3), 192-200.

Maylam, P. (1995) Explaining the Apartheid City: 20 Years of South African Urban Historiography, *Journal of Southern African Studies*, 21 (1), 19-38 (Special Issue: Urban Studies and Urban Change in Southern Africa).

Minervini, C. and Oliete-Josa, S. (2008) Can urban planning accelerate the achievement of the MDGs? The case of an urban planning exercise in Freetown (Sierra Leone) [http://n-aerus.net/web/sat/workshops/2008/Edinburgh/papers/NAERUS\\_2008\\_Minervini\\_Oliete\\_Josa.pdf](http://n-aerus.net/web/sat/workshops/2008/Edinburgh/papers/NAERUS_2008_Minervini_Oliete_Josa.pdf) [accessed 13/2/2014].

Munro, P. (2008) *The Politics of Deforestation on the Freetown Peninsula*. Master's Thesis, King's College, London.

Munro, P.G. and van der Horst, G. (2016) Contesting African landscapes: A critical reappraisal of Sierra Leone's competing forest cover histories, *Environment and Planning D: Society and Space*, 34(4), 706-724.

Myers, G. (2011) *African Cities: Alternative visions of urban theory and practise*. ZED, London.

Myers, G. (2018) The future and Africa's cities. In T. Binns, K. Lynch & E. Nel (eds.) *The Routledge Handbook of African Development*. Routledge, London, 465-473.

Nantinpasadvantage.com (2017) *Freetown population increase: 1901-2015* [http://www.nantinpasadvantage.com/Sierra\\_Leone\\_Politics/Freetown\\_Population\\_Increase\\_1901-2015.html](http://www.nantinpasadvantage.com/Sierra_Leone_Politics/Freetown_Population_Increase_1901-2015.html) , accessed 24 June 2019.

Njoh, A.J. (1998) The political economy of urban land reforms in post-colonial state, *International Journal of Urban and Regional Research*, 22, pp 408-424.

Njoh, A.J. (2002) Development implications of colonial land and human settlement schemes in Cameroon, *Habitat International*, 26, 399-415.

Njoh, A.J. (2008) Colonial philosophies, urban space, and racial segregation in British and French Colonial Africa, *Journal of Black Studies*, 38, 4, 579-599.

Njoh A.J. (2010) Europeans, modern urban planning and the acculturation of 'racial others', *Planning Theory*, 9, 4, 369-378.

Njoh, A.J. and Akiwumi, F.A. (2011) The impact of colonization on access to improved water and sanitation facilities in African cities, *Cities*, 28, 452-460.

Nunes Silva, C. (2015) *Urban Planning in Sub-Saharan Africa: Colonial and Post-Colonial Planning Cultures*, Routledge: New York.



- Nye, E. & Gibson, M. (1997) *Ronald Ross: Malariologist and Polymath: A Biography*. Macmillan Press Ltd, Basingstoke.
- Ogbonnaya, U. M. (2015) Political Conflicts, State Collapse and Ebola Virus Disease - Prevalence in West Africa Examining the Nexus. *Africa Insight*, 45(1), pp. 30–51.
- Parnell, S. & Simon, D. (2014) National urbanization and urban strategies: necessary but absent policy instruments in Africa. In *Africa's Urban Revolution*, S. Parnell & E. Pieterse (eds). London: Zed Books, pp. 237-256.
- Porter, L. & Yiftachel, O. (2019) Urbanizing settler-colonial studies: introduction to the special issue, *Settler Colonial Studies*, 9:2, 177-186.
- Rakodi, C., (2001) Forget planning, put politics first? Priorities for urban management in developing countries, *Journal of Applied Earth Observation and Geoinformation*, 3 (3).
- Republic of Sierra Leone (2006) *2004 Population and Housing Census*, Republics of Sierra Leone, Freetown.
- Rigon, A., Macarthy, J. M., Koroma, B. & Frediani, A. A. (2018) The politics of urban management and planning in Africa cities. In T. Binns, K. Lynch & E. Nel (Eds) *The Routledge Handbook of African Development*. Routledge, London, 415-425.
- Ross, R. (1902) *Researches on malaria*. Nobel Lecture, December, 12, 1902 available at: <http://www.nobelprize.org/nobelprizes/medicine/laureates/1902/ross-lecture.pdf> [accessed 9/5/16].
- RTPI (UK) (2016) *Spatial planning for development planners in Sierra Leone*. Royal Town Planning Institute, London. Retrieved from <https://www.rtpi.org.uk/briefing-room/rtpi-blog/spatial-planning-for-development-planners-in-sierra-leone/> [accessed 20/4/19].
- Seong-Kyu H. (2001) Developing a community-based approach to urban redevelopment. *GeoJournal*, 53(1), 39-45. Retrieved from <https://search-proquest-com.glos.idm.oclc.org/docview/223669752?accountid=27114> [accessed 19/4/19].
- SLRA (1997): *Report on the Final Structure Plan: Freetown Infrastructure Rehabilitation Project*, Sierra Leone Road Authority & Alexander Gibb and Partners, Freetown, Sierra Leone.
- Spire, A. and Choplin, A. (2018) Street vendors facing urban beautification in Accra (Ghana): Eviction, relocation and formalization, *Articulo- Journal of Urban Research*, 17-18, 1-18.
- Statistics Sierra Leone (2017) *Sierra Leone 2015: Population and Housing Census*, Statistics Sierra Leone, Freetown.
- UN (2015) *Sustainable Development Goals*. United Nations, New York. <https://www.un.org/sustainabledevelopment/cities/> [accessed 7/1/19].

UNDP (2016) *Sierra Leone: Tackling youth unemployment*. United Nations Development Programme, <http://www.undp.org/content/undp/en/home/ourwork/ourstories/Tackling-youth-unemployment.html> [accessed 26/1/19].

UNDP (2019) *Human Development Report, 2019*, United Nations Development Programme New York, USA.

UN-HABITAT (2017) *New urban agenda*, United Nations Programme for Human Settlements, New York, United Nations.

Vasudevan, A. (2015) The makeshift city: Towards a global geography of squatting, *Progress in Human Geography*, 39(3), 338-359.

Watson V. (2002) The usefulness of normative planning theories in the context of sub-Saharan Africa, *Planning Theory*, 1 (1), 27-52.

Watson, V. (2009a) Seeing from the south: refocusing urban planning on the globe's central urban issues. *Urban Studies*, 46(1), 2259-2275.

Watson, V. (2009b) 'The planned city sweeps the poor away...': Urban planning and 21<sup>st</sup> century urbanisation, *Progress in Planning*, 72, 151-193.