URBAN PLANNING PROCESSES IN LAGOS

Policies, Laws, Planning Instruments, Strategies and Actors of Urban Projects, Urban Development, and Urban Services in Africa's Largest City Second, Revised Edition 2018





FABULOUS URBAN

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CONTENTS

FOREWORD Monika Umunna	5
WHICH WAY, LAGOS? INTRODUCTION, BACKGROUND AND METHODS Fabienne Hoelzel	7
HOUSING, SLUMS, AND INFORMAL SETTLEMENTS Lookman Oshodi with Adetonwa Rafiat and Michael Ogunwale	11
URBAN MOBILITY AND TRANSPORTATION Lookman Oshodi, Talao Salau, and Olamide Udoma-Ejorh with Olatoye Seun and Richard Unuigboje	43
FLOOD AND WETLAND MANAGEMENT Toyin Oshaniwa and Olusola Adeoye	111
SOLID WASTE MANAGEMENT Kofo Adeleke and Temilade Sesan with Damilola Keshinro and Olabisi Sheyi	145
STRATEGIC PLANNING AND URBAN MEGA PROJECTS Aro Ismaila and Taibat Lawanson with Solabomi Alabi, Ebere Akwuebu, Soji Apampa, Olugbenga Asaolu, Kayode Ashamu, Damilola Oluwo, Lisa Dautel, Antonia Dürig, and Richard Unuigboje	187
GOVERNING TODAY'S LAGOS: THE URGENT NEED TO RECONCILE CONFLICTING RATIONALITIES. OUTLOOK Taibat Lawanson	239

Monika Umunna

Imagine a Lagos with 52 kilometres off-road bicycle lanes along the numerous drainage canals and small rivers which can be used by young and old, rich and poor to relax or to go to work without the usual stress in traffic jams. Imagine clean drainage canals the banks of which would be used by women from neighbouring communities for farming and income generation. Small biogas plants converting organic waste into cooking gas and fertiliser would supply natural fertilisers for their farms. Imagine business owners – hairdressers, grinders, carpenters, printers – enjoying uninterrupted power supply throughout the day from their own solar panels, giving them a chance to increase their business activities and plan ahead. Gradually they would be encouraged to invest and employ more staff. Imagine urban slum dwellers enjoying security of tenure and starting to improve and develop their environment at their own cost. Imagine grassroots organisations like CDAs and residents' associations having more women in their decision taking bodies and as spokespersons, allowing women to make their own choices about their economic development.

Such options for a climate resilient and inclusive city development are the results of the engagement by the Heinrich Böll Foundation with civil society, academics and government representatives over the past years. But how can we push such ideas when Lagos actually lacks a coherent and integrated urban development approach: ministries are working in isolation, sometimes even contradicting each other's policies. Also the rights and responsibilities of the different political entities - federal, state and local government levels - are often conflicting and their competing bureaucracies suffocate innovative ideas at once.

This research project was initiated to study the legal and administrative framework guiding current urban planning processes in Lagos. It is intended to provide the Heinrich Böll Foundation, its partners and government representatives with the necessary data and insights about the relation between urban policies, urban interventions, the role of governance and the different actors in Lagos and to finally serve as an inspiration towards a more constructive and sustainable engagement amongst all stakeholders.

The extensive findings of the different chapters illustrated in numerous tables and graphics underline the need for a more participatory approach channeled through the revival of vibrant and powerful local governments. Supported by professional, religious and social associations well anchored in the communities, innovative and transparent local governments could compete in developing the most livable environment combining green and public spaces, safe housing and growing economic opportunities. Like in many other cities in the world, urban planning in Lagos, especially when it comes to so-called mega projects, is often guided by unilateral decisions taken by politicians who want to make their city more attractive for foreign investors. The study shows that politicians need to refrain from always overriding or side-lining the technical knowledge, competence and commitment of their technocrats and civil servants from the different ministries and agencies. Rather than suppressing efficient management structures by constantly creating competing agencies and institutions, all civil servants and professionals should be encouraged to embrace an integrated and equitable approach. Last but not least, the majority of Lagos' population - the urban slum dwellers - need to be integrated into the overall development plan and to get a fair share of participation: currently, they are not only living in precarious situations without employment and tenure security, but they also lack most basic infrastructural services which should be provided by a caring government.

The findings of this research are certainly not peculiar to Lagos; they might also apply to many African cities, which are trying to cope with an increasing population, inadequate infrastructure and lacking income opportunities. More research on the visions, policies and strategies guiding the urban development of African cities and alternative options for a sustainable and inclusive development is needed. We hope this book will encourage Nigerian, African and international practitioners and scholars to continue the research and engage in an intense debate across borders.

The Heinrich Böll Foundation's Nigeria Office has been supporting projects and initiatives in Lagos since 1995 and sees its role as a facilitator of public dialogue around truly sustainable development options.

Heinrich Böll Foundation Nigeria, Lagos Liaison Office

Monika Umunna

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WHICH WAY, LAGOS? INTRODUCTION, BACKGROUND, AND METHODS

Fabienne Hoelzel

"Africa's first city" was the title of a National Geographic article in January 2015, enthusiastically describing the economic development of Lagos since 1990 and its push effect for the entire country.¹ Outside observers tend to acknowledge the terms in office of Bola Tinubu (1999-2007) and his successor, Babatunde Fashola (2007-2015), as a period of improvement and progress in the development of the city.² On the other hand, it appears as if state government's actions were mainly directed towards making the city more attractive to investors, business travellers and tourists from abroad.³ This is also reflected in the fact that the Ministry of Economic Planning and Budget edited the main strategic planning document, the Lagos State Development Plan 2012-2015, and giant developments like the Lekki Free Zone were developed under the leadership of the Ministry of Commerce and Industry. In the interest of a well balanced city development, the Ministry of Physical Planning and Urban Development should have played an equally significant role. Attracting (foreign) investment seems to be a promising strategy - if it creates local jobs and the increased revenues will be reinvested locally in urban infrastructure, education and health, benefitting everybody - and has become a mainstream "recipe" in many African city regions to trigger urban development.⁴ UN Habitat warns that promoting economic prosperity through such an entrepreneurial view of the city often happens at the expense of the habitat and livelihoods of the poor.⁵ However, "good governance" - in this context explicitly not referring to the definition of the World Bank that is often linked to privatisation of public services - implies to guarantee the well being of all the individuals in a society. This was exactly the aim of the present study report: to gain a better understanding of the current urban governance strategies, instruments and practices in the field of urban planning and in the provision of urban services - and to understand who does really benefit from the measures the state government is putting into place.

Lagos stands for rapid urbanisation and urban growth; the city is growing so fast that censuses can't keep up. The data on the current population size range from 13 million to 20 million or even more, depending on the source. That alone makes planning difficult. It is quite a difference whether urban infrastructure needs to serve 6 million people more or less; the same applies to the enormous housing shortage, especially in the lower income classes.

Lagos represents the hopes we associate with cities. They are the places of renewal and progress; they are the places where people can exchange and share information, knowledge and goods in large amounts and high concentration. In a nutshell: Cities are seen as the engines of development. Steering the urban development of a city like Lagos is an enormous task. How does the Lagos State government tackle this? For whom does it plan? How can it secure the funding, and what are the regulations and obligations that come with it? Is the Lagos State government accountable? Are the planning and implementation processes fair and transparent, allowing for participation and opposition? What is the overall vision that guides the implementation of new urban projects?

A group of seven local and international researchers, supported by eight final-year bachelor's

- Robert Draper, "Africa's First City. Bursting with a get-rich spirit that has made Nigeria's economy the continent's largest, Lagos is Africa's first city," National Geographic, January 2015, accessed January 28, 2016, http://ngm.nationalgeographic.com/2015/01/lagos/draper-text.
- 2 Draper, ibid. // Seth D. Kaplan, "What Makes Lagos a Model City," in The New York Times, January 7, 2014, accessed September 15, 2015, http://www.nytimes.com/2014/01/08/opinion/what- makes-lagosa-model-city.html?_r=0.
- 3 Tim Cocks, "Insight The struggle to tame Africa's beast of a megacity," Reuters, October 23, 2013, accessed on January 28, 2016, http://uk.reuters.com/article/uk-lagos-megacity-idUKBRE99M04620131023.
- 4 Vanessa Watson, "African urban fantasies: dreams or nightmares?" Environment and Urbanisation 26 (2014) (1): 215-231.
- 5 United Nations Human Settlements Programme, State of the World's Cities 2012/2013. Prosperity of cities (2013; Nairobi/ New York: Routledge), 129.

students of the Urban and Regional Planning Department of the University of Lagos analysed in a case-study approach four topics that are relevant for the urban development of Lagos. In a first step, official planning documents, policies, laws and responsible governmental bodies were identified, classified and compared, and completed with expert interviews. In a second step, field studies were performed through mapping of neighbourhoods and surveys of involved people and affected residents to reflect the theoretical planning framework on the ground. Finally, a set of findings allowed drawing conclusions and formulating recommendations. Throughout the one-year project, a series of workshops and meetings was held, in part with external reviewers from practice, academia and government to discuss the results of the research. The report presents each of the investigated topics in a different chapter, followed by a general conclusion and outlook.

The chapter "Housing, slums and informal settlements" gives an overview and assessment of current policies, laws and institutions that are linked to housing delivery. Within the latter, slums represent the biggest challenge since they lack not only housing but also infrastructure and job opportunities. Roughly 70percent of Lagos' population struggles to participate in the formal structures of the society. The list includes unequal access to affordable and efficient mobility, education, jobs, land titles, mortgages, and electricity. Millions of young people live in poverty with little perspective for their future. What are the approaches Lagos State government is putting in place? The chapter looks into the government-led regeneration process in Olaleye-Iponri since 1988, an old shantytown, centrally located on the mainland. The overall findings from this case study are critical. 31 years after the commencement of the slum-upgrading process the community is still ranked as a slum and the income situation of the majority of the dwellers is desperate. Furthermore, the state-led regeneration process was not based on the principles of inclusion and integration, despite the partial involvement by the World Bank. The new houses that were delivered in the second regeneration phase were not meant to accommodate the slum dwellers but a new set of residents. 31 years without any significant and systematic improvement in the life conditions of these people - this equals the loss of an entire generation that otherwise could have contributed to the development of the city by earning money in good jobs, paying off their mortgages, paying taxes and sending their kids to school.

Without doubt, one of the most pressing issues in Lagos is transportation. In 2003, the Lagos State government established the Lagos Metropolitan Area Transport Authority (LAMATA) with the support of the World Bank, the agency being subordinated to the Ministry of Transportation. Since then, the Lagos State government has embarked on a series of largescale infrastructure projects, among them the introduction of a Bus Rapid Transit (BRT) system and the commencement of construction works for a light rail network. Both projects are part of a new transport master plan. Another milestone was the introduction of the Lagos Road Traffic Law in 2012 which seems to aim at controlling and managing the vehicular rather than trying to resolve structural transport problems. Unfortunately, many of the law's provisions portray Lagos as a city under emergency rule where citizens are in extreme disagreement with the government institutions. It seems emblematic for many of Lagos State government's policies: The main goal does not seem to be the empowerment of residents but rather to curb the informal sector. While it is true that many of the informal operators run badly maintained vehicles and that security is a constant issue, it is also obvious that a large percentage of the population depends on the current informal public transport system. The necessary transformation of the system needs to be inclusive. Whenever something is being banned, new opportunities should be made accessible. In 2006, Francisco Bolaji Abosede, the then-Commissioner for Town Planning and Urbanisation, was quoted that "by 2015 Lagos will be the third largest city in the world but it has less infrastructure than any of the world's other largest cities."6 Luckily, the 25-million inhabitant prediction and the consequent third place in the worldwide city size ranking hasn't become true yet, the observation concerning the lack of infrastructure in relation to the population is certainly

"Nigeria: Lagos, the mega-city of slums", IRIN, Humanitarian news ana analysis, accessed January 29, 2016, http://www.irinnews.org/report/60811/nigeria-lagos-the-mega-city-of-slums.

6

correct. Against this backdrop, one may wonder why the Lagos State government decided to invest in a light rail system that requires not only the evacuation of informal structures but is complex and cost-intensive to plan and build, let alone the operation and maintenance costs in the harsh tropical climate. By contrast, BRT systems are easy to implement, to expand and to maintain. Additionally, informal danfo drivers can be trained as BRT drivers. The chapter "Urban mobility and transportation" reviews in detail all the relevant policies, laws and projects and concludes with a set of recommendations, mainly pleading for a more decentralised planning approach and more inclusive, less penalising approaches in the transformation of the urban transportation and mobility system.

Nigerian cities are not administered by mayors as State Governors head all cities, even the biggest like Lagos, Ibadan, Benin City and Kano. The Governor of Lagos State oversees 20 local government areas, which have little power and budgetary autonomy. This leads to extremely hierarchical and centralised government politics. As a result, all the state-led provision, policies, and initiatives have to go through the bottleneck of state government institutions. A good example is the introduction of the Lagos Waste Management Authority Law in 2007 that banned all the informal activities in the waste sector. Without denying the difficulties that informal waste management activities may cause such as the occurrence of informal dumpsites, efforts to integrate people is more sustainable than a ban with prosecution that may deprive people of their income sources. The chapter "Solid Waste Management" does not only give an overview of the history of waste management and current policies in Lagos, it especially presents the results of the two field researches in Amuwo Odofin and Kosofe. In each local government area, three settlements different in use, historical origin and income situation were investigated with regard to the efficiency of the daily or weekly waste services by Lagos State government through LAWMA and the official private sector participants. The findings reveal a rather dysfunctional waste management system that is not recognizing enough the potentials of integrating informal and small-scale private initiatives and the participation of the civil society - despite of the huge challenges faced with regard to the population increase, the environmental degradation and youth unemployment. Establishing a constitutional reform to install mayors and city governments may rather be a long-term approach; in contrast, the legal and financial empowerment of local governments is a step that could relatively easily be implemented. Nevertheless, it is a little strange that in the "urban age" - the century in which more people live in cities than on the countryside and cities are recognised as the engines of development and prosperity - Lagos as one of the twenty largest cities on the planet has no mayor. Naturally, state governors have other agendas than city mayors. This may be one of the reasons why cities like Lagos struggle with issues that are related to urbanisation and urban growth: the policies may simply not be "urban enough."

Since 2000, Lagos State government has started to re-plan large parts of the existing city. One such example is the Lekki Free Zone in the far west of the city and subject of the last chapter "Strategic Planning and Urban Mega Projects". It scrutinizes how the current city leadership is being transformed and implemented in giant projects that are usually the result of careful strategic planning. Lagos State government wants to leapfrog from a development city into the "globally leading city". According to that vision, Lagos wants to play in the league of global cities, become an investment hub in Africa and represent a model for fast-urbanising African nations. International examples for such an approach are Singapore, Shenzhen or Dubai. At first glance, the planning of the Lekki Free Zone seems to be the logical outcome of the government's approach to attract massive foreign investment. A closer look reveals though that the implementation of this project, absurdly enough, deprives local communities from their livelihoods, whereas the main foundation of the project is the creation of new jobs for locals. The Lekki Free Zone is part of an emerging trend in today's globally connected business environment. It is commissioned by the Lagos State government and delivered by private contractors that are again financed and supervised by a highly complex construct of private and state actors. However, what is striking is the dominant role of Chinese building contractors, consultants and planning offices. At this stage, there are two big uncertainties: What does the Lekki Free Zone imply for Lagos' future, in terms of the promised local jobs and the stimulus for the local economy, and in terms

of the ever-increasing interdependency with Chinese investors. The seven strategies of the Lagos Development Plan 2012-2025 include people and poverty alleviation, functionality and productivity, managing the growth and spread of the Lagos metropolitan area, democracy and governance, safety and security, transformation, and national growth and global influence. As one of the key projects of the last 15 years, the Lekki Free Zone should comply with all these seven points. As it is, the Chinese investors benefit the most: They can sell their knowledge and plans and even bring their workforce. It is no secret that China is looking for production sites outside of the country as the Chinese economy is undergoing a major transformation towards a service-oriented society. Lagos' local economy is yet to benefit from the Lekki project. The big question remains: Would it not be better to invest equally in planning implementation strategies like the provision of low-cost housing, of urban infrastructure like water, sewage and electricity, and the creation of a favourable business environment for locals to easily and legally set up their own firms? Wouldn't it be better to put Lagosians at the centre of the development policies instead of solely aiming at a rather nebulous status of "global city"? Is it not equally to invest in the development of a city with good urban infrastructure, continuous power supply, good public spaces, affordable housing and good health systems and then, consequently, attract investors and firms, be they from Nigeria or abroad, to invest in a livable city with skilled and well qualified citizens? The present report suggests that some strategic adjustments in the overall politics and policies of Lagos State would benefit the majority of Lagosians, and the overall economy of the city. We probably have to accept that today's urban development strategies are largely driven and implemented by the private sector, with all the implications that come with it. However, this does not release the state and its democratically elected representatives from their responsibility to ensure that also the weakest in society also have the chance to live in dignity.

Editor and Lead Researcher

Fabienne Hoelzel

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HOUSING, SLUMS, AND INFORMAL SETTLEMENTS



1 Housing, Slums, and Informal Settlements

Research Lookman Oshodi with Adetonwa Rafiat and Michael Ogunwale

Research management and editing **Fabienne Hoelzel**

1.1	
Introduction	15
1.2	
Housing Regulatory and Institutional Framework	19
1.3	
Institutions for Housing Delivery	27
1.4	
Current Housing Programmes	35
1.5	
Findings and Recommendations	41

1.1 Introduction

1

Housing in Lagos, in the last few years, has experienced policy adjustments and new programme plans, with Lagos State government (LASG) adopting different initiatives to address the housing need of the city. Despite the efforts of the state governent, the city is still visibly dominated by inadequacy of housing as evidenced in the spread of substandard, unplanned and informal settlements. The unabated migration to Lagos from other states in Nigeria and other West African countries has apparently continued to push the need of housing beyond the responsive mechanism of the city.

A major feature of Lagos' landscape is the proliferation of slums and informal settlements. They evolved for a series of reasons, on certainly is the government's inability to provide adequate housing for the teeming population. These slums and informal settlements provide accomodation for the majority of the people and are usually the first point ofcall for new migrants.

Quantifying the challenges in the sector, recent statistics from the Lagos State Ministry of Housing revealed that there are about three million housing units deficit.¹ Developing a delivery process that will match the challenge remains a critical issue for the policy makers and broad stakeholders in the housing sector in Lagos State.

This chapter analyses housing policies, strategies, institutional frameworks, stakeholders and housing delivery mechanisms. This includes state government programmes such as Lagos HOMS and gives also recommendations on financial instruments for affordable housing not yet considered by government, for instances cooperatives financing, social housing development funds and taxation of unused land in private hands for speculation – and policies enabling investement in affordable housing like mixed use, inclusionary housing and rent freezing among others.

Lagos State Ministry of Housing 2017, Presentation on Lagos HOMS and Jubilee housing by Balogun Murtala A. (deputy director, physical planning and surveying department, ministry of housing) and discussion at LAGDEL 2017.

1	6

Table 1.1 Indicators and thresholds for defining slum households Features of acceptable conditions Indicator Definition A household is considered to have Piped connection to house or plot Access to improved access to improved drinking water if it has at least Public stand pipe serving no more than 5 households 20 litres/person/day for family use, at an affordable Bore hole water price of less than 10percent of total household Protected dug well income Protected spring water Rain water collection Access to A household is considered to have Direct connection to public sewer access to improved sanitation if an excreta disposal Direct connection to septic tank improved sanitation system, either in the form of a private toilet or public Pour flush latrine toilet is shared with a reasonable number of people, Ventilated improved pit latrine (with slab) is available to the household A house is considered durable if it is built on a Structural Permanent building materials are used for walls, roof and floor non-hazardous location and has a permanent strucquality/ Compliance with building codes **Durability of** ture adequate enough to protect its occupants from Dwelling is not in a dilapidated state extremes of climatic conditions such as rain, heat, Dwelling is not in need of major repairs housing cold and humidity Dwelling is not located on or near toxic waste Dwelling is not located on flood plain Dwelling is not located on steep slope Dwelling is not located on flood plain Dwelling is not located on in a dangerous right of way (railway, highway, power line, airport etc.) A dwelling unit is considered to provide sufficient Not more than two persons per room Sufficient living space living area for household members if there are fewer The alternative is to set a minimum standard for floor area (not overthan three persons per habitable room per person (e.g. 5 m2). crowded) Security of tenure is the right of all individuals and Evidence of documentation that can be used as proof of Security of groups to effective protection by the state against secure tenure status, as indicated by: tenure arbitrary unlawful evictions Households with formal title deeds to both land and residence Households with formal title deeds to either land or residence Households with enforceable agreements or any document as proof of a tenure arrangement De facto or perceived protection from forced evictions

(Source: Adapted from: UN Habitat 2003a, 12, ibid. // United Nations Center for Human Settlement, 2003b, ibid, 19. // Ben C. Arimah, "Slums as expressions of social exclusion: Explaining the prevalence of slums in African countries", 2010. http://www.oecd.org/dev/pgd/46837274.pdf, accessed on May 23, 2015.)

Table 1.2

Indicators of settlements and urban services in Lagos State

Indicator		
Total population in 2012	22,583,305	
No. of persons per household (average) in 2012	5	
Total no. of households in the state in 2012	4,376,610	
Indicator	Percentage of households affected (statewide) in 2012	Percentage of households affected (statewide) in 2014
Lack of access to adequate housing	70 percent	-
Urban poverty	54 percent	-
Lack of access to water	84 percent	88 percent
Lack of access to sanitation	69 percent	67 percent
Lack of access to solid waste collection	28 percent	28 percent
Lack of access to transportation	52 percent	-
Lack of access to sustainable electricity	88 percent	76 percent
Lack of rights of occupancy	37 percent	40 percent

(Source: Lagos Bureau of Statistics, 2013 and 2014)

The shape, quantity, quality and locations of housing in any city will largely be determined by the depth and vibrancy of its regulatory and institutional framework. Housing policy is a written document which usually comprises specific objectives, strategies and programmes aimed at solving the housing problems or meeting with the ever increasing housing needs and demand of a country.¹

The major thrust of housing policy is to achieve some housing goals which universally translate to adequate housing for everybody in a good environment and at an affordable cost. Often, housing policies and housing programmes are interwoven as one is dependent upon the another; housing policy is to achieve a housing goal which is realizable through housing programmes.

A. Nigeria national housing policy

In Nigeria, there is an operating National Housing Policy since December 2011 which purpose is to ensure that all Nigerians own or have access to decent, safe and sanitary housing in a healthy environment with infrastructural services and secure tenure at affordable cost. This positions the housing sector as one of the prime drivers of socio-economic development, including job creation and employment, as well as accelerated national transformation.

The policy thrusts as applicable to the state governments in Nigeria including Lagos are:

- Encouragement of the active participation of the three tiers of government and other stakeholders, in housing delivery;
- Establishment of a national housing data bank, with data generated at three tiers of government, to adequately capture the trends, characteristics and other defining features of the housing sector in order to assist in making informed decisions on housing supply and demand planning;
- Harmonisation and standardisation of land administration processes nationwide;
- Collaboration and partnership with states and local governments to produce a unified and integrated infrastructure development policy for housing so as to open new layouts and private sites and services for the private sector to develop affordable and decent mass housing facilitated by Government;
- Promotion of social Housing as well as cooperative housing as social responsibilities of governments for ensuring poverty reduction towards a just and equitable society.

One of the policy's objective relating to the state governments and other tiers is to develop and sustain the political will of governments for the provision of housing. The strategies for attaining the policy thrusts and the objectives are to:

- Encourage the states to review their landlord and tenant laws so as to engender harmonious
 relationship between tenants and landlords and to reduce defaults in rent payments and
 thereby encourage investments in private rental residential housing;
- Encourage the state and local governments to enact laws and make regulations to prevent and control avoidable losses from building collapse and fire incidents;
- Implement federal, state and local governments environmental policies, programmes and regulations in the housing sector.
- 1 Virginia C. Ezenagu: *Fundamentals of housing* (2000; Awka: Fountain Publishers).

Since the institutionalisation of the policy, much of its provisions is yet to be implemented in Lagos save for the Lagos Tenancy Law of June 2011 which predates the policy. Also, the law that controls, regulates and prevents building collapse has been enacted in 2010 long before the National Housing Policy. The policy is yet to make any appreciable impact in the Lagos housing market.

B. Lagos State housing policy

There is no substantive housing policy in Lagos State. However, chapter 7.7 of the Lagos State Development Plan 2012-2025 provides a clear direction of government in housing provision²:

- Citizens have access to their desired choice of housing;
- Good quality housing development obtains in urban and rural communities;
- New housing developments are built in a sustainable manner:
- Access, ownership and transfer of land is clarified and simplified;
- Land utilization is optimized across Lagos State.

Policy targets:

- 100percent of citizens will have access to decent housing;
- At least 25percent of citizenry will own their home by improving access to affordable mortgages;
- Annual house building rates to be progressively accelerated over the plan period to achieve 20,000 units p.a. by 2015, 50,000 units by 2020 and 80,000 units by 2025;
- New housing to be built in the ratio of 70: 20: 10 (for low, medium and high income brackets, respectively);
- 5percent annual reduction of slums;
- Enforcement of >70percent compliance in building design & housing standards law;
- Housing development that preserves land to ensure the long-term viability of the city;
- Reduction of rent to meet the household affordability threshold;
- Simplified process of ownership and transfer of land;
- Reduction of building costs through championing the use of alternative materials and technology.

Policies and strategies:

- Planning framework: The state will develop a long term housing plan and implementation framework. They will also ensure that housing units have access to required infrastructure, utilities and services;
- Multiple housing approaches: The state will pursue housing development in the state through a combination of different models, involving all sectors;
- Affordable housing: The state will maintain and expand state housing programmes as far as
 possible, especially in the high and medium density categories. They will maintain and extend
 housing initiatives such as HOMS and CHOIS. A PPP approach to housing development in
 the state, especially in low cost social housing, will be encouraged by providing incentives
 to the private sector. Further opportunities for the development of affordable housing will be
 made through land subsidies and shared equity schemes;
- Social housing needs: The state will accommodate diverse housing needs of the citizenry within Lagos State by ensuring provision is made for an ageing population as well as for single households, the young and disabled. The state will seek to reduce or eliminate homelessness;
- Land: The state will ensure that sufficient land is allocated for housing in suitable locations and will promote competitive rates and levies on land transactions and development in

20

Lagos State government, Lagos State Development Plan 2012-2025. Main Document (2013), 146-148.

Lagos State. The state will facilitate real estate investment in Lagos State through land attractiveness, availability, ownership and ease of transfer;

- Housing standards: The state will establish relevant "housing quality standards" (building, maintenance, aesthetics and living) and ensure compliance;
- Rural housing: The state will facilitate new and improved housing development in the rural communities;
- Innovation: The state will promote innovation in housing development so as to facilitate the reduction in housing costs;
- Information: The state will improve housing data to identify housing needs, locations and other key baseline requirements.

The built environment (slum eradication)

In Chapter 10.6 of the Lagos State Development Plan 2012-2025, the plan recognised the challenges posed to orderly physical growth and sustainable urban development by over 2,600 communities and over 100 slums that characterised Lagos State's physical landscape. The plan, therefore, outlined its objectives, targets and strategies as follows;

Policy objectives/ outcomes:

- A beautiful and aesthetic Lagos State;
- A fully functional and effective urban and rural planning and development system;
- Cultural diversity in urban and rural development activities;
- Dynamic linkages between the rural communities and urban centres.

Policy targets:

- To commission and complete a new regional master plan for Lagos State by 2015;
- To have district master plans in place by 2015;
- To have a complete coverage of neighbourhood plans in place by 2020;
- Access to basic infrastructure, utilities and services to be 15 minutes walking distance;
- A 20percent reduction in population density;
- Promote15 new growth poles/corridors to accommodate the future expansion of the city.

Policies and strategies:

- Hierarchy of physical plans: The state shall establish a hierarchy of physical plans for the whole state, with a regional master plan at the apex, district master plans and neighbourhood development plans. Specific areas shall also have statutory layout plans.
- Growth poles and corridors: The state will utilize the growth pole and corridor concepts in the future expansion of the city.
- Slum clearance: The state will plan for the clearance of the worst slum areas and upgrading
 of the remaining older housing areas in neighbourhood plans.

Box 1.3 Assessment of the impacts on housing in Lagos State

The Lagos State Development Plan 2012-2025 provides a schematic framework for housing in Lagos State, but is not ambitious enough to resolve the housing and slum proliferation in the state. The policy envisaged to deliver 20,000 housing units by 2015 out of which only 4,355 units (or 22 percent) were completed. The term "affordable housing" is confusing as Lagos HOMS and CHOIS deliver rather overpriced housing beyond the reach of most of the residents. The new houses to be built are expected in the ratio of 70:20:10 (for low, medium and high income brackets, respectively). However, the realities of housing delivered under Lagos HOMS and the new Rent to Own Scheme have not shown strong bias for the low income groups who were earmarked as majority captured segment.

Box 1.3 (continued) Assessment of the impacts on housing in Lagos State

The mentioning of social housing through a PPP in the plan is passive compared to pronounced attention given to housing initiatives such as HOMS and CHOIS which are market oriented PPP housing delivery models. The role of the private sector is very crucial in the delivery of affordable housing, but outright surrendering of social housing to the private sector market dictates without holistic state priority and funding is a recipe for inadequate realisation of the development plan's objectives. Lagos HOMS has since been rebranded as Rent to Own model.

Significant achievements have been recorded in the preparation of district master plans as eight (8) plans named "Model City Plans" have been completed while four (4) are on-going within the period under review. The completed plans are:

- a. Agege Model City Plan
- b. Alimosho Model City Plan
- c. Apapa Model City Plan
- d. Badagry Master Plan
- e. Ikeja Model City Plan
- f. Ikoyi Victoria Island Model City Plan
- g. Lagos Mainland Central Model City Plan
- h. Lekki Master Plan

The on-going plans are:

- a. Epe Master Plan
- b. Ikorodu Model City Plan
- a. Kosofe Model City Plan
- a. Oshodi-Isolo Model City Plan

The new regional master plan for Lagos State scheduled for completion in 2015 is yet to be accomplished as it will be prepared after completion of all the on-going model city plans.

C. Lagos State Tenancy Law 2011

The Tenancy Law was promulgated on 24th day of August 2011 to regulate rights and obligations under tenancy agreements and the relationship between the landlord and the tenant including the procedure for the recovery of premises and for connected purposes such as rent revision, service charge management and payment of professional fees among others. The law is applicable to business and residential premises in Lagos State with few exceptions for social residence premises and high brow residential areas of Apapa, Ikeja GRA, Ikoyi and Victoria Island. The major highlight of the law is to control the rent payable on business and residential premises. The law places restriction on property owners from taking more than six (6) months and one (1) year rent from a monthly tenant and a yearly tenant, respectively.

The impact of the law on housing delivery is not clear cut, but considerable level of compliance to rent restriction seems to have raised the demand for housing in the city. In a situation of low supply to high demand, the deficit of housing within the city will continue to rise.

D. Lagos State Urban and Regional Planning and Development Law 2010

The law was adopted in 2010 to provide for the administration of physical planning, urban development, urban regeneration and building control in Lagos State and for connected purposes. Since housing constitutes a major part of urban development in the state and many residential settlements required substantial regeneration investment, it is expedient to understand the impacts of the law on the housing dynamics in the city. The sections of the law provide for

the following:

- Administration of physical planning, urban development and building control;
- Upgrading;
- Enforcement;
- The planning permit authority;
- The building control agency;
- Urban renewal, improved areas rehabilitation and acquisition of land and compensation;
- Appeals and other matters;
- Upgrading.
- Institutions:

The administration section of the law outlined the development agencies namely: The Lagos State Physical Planning Permit Authority, the Lagos State Building Control Agency and the Lagos State Urban Renewal Agency to implement the policies of the Ministry of Physical Planning and Urban Development, which will act in a supervisory role.

Responsibilities of the Ministry of Physical Planning and Urban Development:

The ministry shall be responsible for all physical planning, urban development, urban regeneration and building control policies of the state. It shall be responsible for initiation, formulation of policies, coordination of programmes and review of all aspects of physical planning, urban development, urban regeneration and building control in the state. It shall be responsible for preparation and approval of hierarchies of physical development plans including urban regeneration plans, and be responsible for the formulation of guidelines for fostering interministerial, inter-governmental, bilateral and multi-lateral cooperation on physical planning, urban development, urban regeneration and building control.

Preparation of the plan:

In the preparation of the plan under section 5(2), the ministry or relevant agency shall from time to time, for the purpose of preparing development plans in the state, invite relevant stakeholders including ministries, agencies, non-governmental organisations, professional bodies and individuals for the purpose of considering any matter relating to physical planning and urban development.

Urban renewal:

Part IV of the law covered urban renewal, improved areas, rehabilitation and upgrading. It acknowledged Lagos State Urban Renewal Agency (LASURA) as the institution responsible for monitoring and identifying areas qualified for upgrading and advising the State government on redevelopment or renewal programmes accordingly; and preparing and implementing approved state urban upgrading and urban redevelopment projects among other functions.

Section 52 empowered the agency to assist in the implementation of approved development plans and to declare any part of the area for which such plan has been made to be an "improvement area" for the purpose of rehabilitating, renovating, and upgrading the physical environment, social facilities and infrastructure of the area. The rehabilitation, renovation and upgrading may be brought about through the combined efforts of the residents of the area concerned and the renewal agency as contained in section 53 (2).

In section 54, the agency is mandated to use its best endeavor, before declaring any part of an area to be an improvement area, to inform the residents of the proposed improvement area by such means as it deems fit of the: purposes and intents of the proposed improvement; powers vested in the renewal agency; and facilities which would be made available and benefits to be derived by the areas. The agency is also expected to consult the local government or any other associations in the area to ascertain the views of the residents and to set up consultative committees between the agency and representatives of the residents to monitor the progress of improvement. Section 54 (2) (a) required the agency to assist or join other persons in assisting a

resident or group of residents within the area to draw up and implement plans for the improvement of the neighbourhood.

The agency, under section 55 (1) (a), is empowered to prepare an improvement area plan showing what ways and over what period of time the area is to be improved and may, where necessary include a plan for the redistribution of rights of occupancy of parts of land within the area or part of it; grant, guarantee or otherwise facilitate the granting of loans to a person or group of persons with a view to assisting in the improvement, repair or renovation of houses within the area as may be directed by the renewal agency or to improving social and communal facilities within the area.

Section 56 outlined the power of the agency to demolish a building that falls below the standard of other buildings in the area, constitute danger to public safety and cannot be repaired at a reasonable cost or required for the provision of infrastructural facilities.

Before ordering the repair, demolition or renovation of a building or part of it, section 57 mandated the agency to undertake a series of steps, including appointing a committee of members to hear, consider and report on any representation or objection which may be made orally and in writing by the owner or occupier or his duly authorised representative. Where the renewal agency, after consideration of the report of the committee appointed confirms the proposed order with or without modifications or alterations, it shall serve a notice of the order and the reasons for it in such form as may be prescribed by regulations on the owner, occupier or representative. An aggrieved owner, occupier or interested party of a building which is the subject of a demolition order, may appeal against the order as provided under part VII of the law.

Box 1.4 Assessment of the impacts in housing in Lagos State

The law is comprehensive and covered many aspects of urban planning and development in Lagos. It made provisions for new agencies and strengthened the existing ones with a view to sanitising development activities, regenerating the built environment and reducing the incidence of building non-standardisation, collapse and degradation. It empowered the Lagos State Urban Renewal Agency (LASURA) to undertake urban renewal, regeneration or upgrading of blighted communities. While the processes of demolishing a building were clear and engaging save for the appeal process which compromised the principle of fair hearing, compensation is still rooted in access to formal title by property owners. Despite the comprehensiveness of the law, it still maintains the administrative deconcentration approach to planning in Lagos which is different from devolution approach to planning. Deconcentration will continue to put local planning officials at the discretion of state's directive and decisions leading to continuous isolation of people from their environment and overall participation in planning decision that affects them. All plans are still expected to be initiated by the government. The elaborate outline of responsibilities for LASURA has not significantly changed the housing dynamics in Lagos State. While various government agencies responsible for housing construction seem to be enjoying speedy planning permit approval rate, private sector especially in the low-income group remained isolated from the process. Formal land title and high official and unofficial costs of building permit have continued to keep away the private developers, especially in the slum settlements from large scale participation.

E. Lagos Mortgage and Property Law 2010

The law which repealed the Conveyancing Act, 1881 was amended in February 2015 to regulate mortgage activities in Lagos State. Among the key provisions of the law is the establishment of Lagos State Mortgage Board to monitor and regulate mortgage transactions. The six-member board will have the following functions, among others:

- Generate a conducive environment for citizens of Lagos State to secure affordable mortgages or charges to enable them purchase their own homes;
- Advise the Governor on the funding, administration and structure of the state's mortgage finance programme or policy, and articulate any mortgage scheme or policy which the government has or may put in place from time to time in connection with mortgage lending;
- Protect residents of the state and the stability of the state's economy from unconscionable practices of mortgage brokers, lenders and persons who hold themselves out as offering funds on security by way of mortgage or charge of any property;
- Implement and honor on behalf of the state government all obligations in agreements between the state and parties with respect to provision of funds for land ownership or development of estates in the state;
- Advise government on the adoption of standards and policies under which property-secured credit should be provided;
- Maintain a central statistical database of mortgages and transactions secured on properties in the state.

The board is empowered to ensure that the mortgage industry is operated fairly, honestly, efficiently and free from deception or non-competitive practices. With the approval of the commissioner for finance and the State House of Assembly, the board may make regulations for the purpose of implementing the provisions of the law. The law further provides that the only estates capable of subsisting of a mortgage under the law are a right of occupancy absolute in possession evidenced in writing by a statutory or customary right of occupancy issued under the Land Use Act or any other state land law.

Box 1.5 Assessment of the impacts in housing in Lagos State

The law is contemporary and innovative in repealing the 1881 Conveyancing Act, but it is not prepared within the overall goal of reducing the huge housing deficit in Lagos. If the provisions that the assets for mortgage must have a statutory or customary right of occupancy or registered land will work, then there is need to embark on rigorous land reform that can increase formal land title from less than 10percent to significant level. In reality, the focus of the mortgage system is on the real estate built by the Lagos State government, under Lagos HOMS, restricting access to other private holdings. It is designed for the administration of the state's mortgage finance programme or policy, which in this case is Lagos HOMS.

Table 1.6 Summary of laws and policies affecting housing delivery in Lagos State	Table 1.6	Summar	y of laws and	policies affecting	housing deliver	y in Lagos State
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S/N	Policy or law	Focus	Application
1	Nigeria National Housing Policy	Housing	Nigeria
2	Lagos State Development Plan 2012 – 2025	Overall development	General applicability
3	Lagos Tenancy Law 2011	Housing and business premises	General applicability
4	Lagos State Urban and Regional Planning and Development Law 2010	Building, urban development and slum regeneration	General applicability
5	Lagos Mortgage and Property Law 2010	General applicability	Restricted to government owned properties

(Source: Housing Research Group, Heinrich Böll Stiftung, 2015)

In Lagos State, there are nine institutions with direct relationship to housing delivery. This report will, however, review five institutions with direct mandate to provide housing in the city-state. Figure 1.9 provides an overview of all institutions linked with housing delivery in Lagos State, their mandates and apparent target beneficiaries: it shows the priority of the Lagos State government in providing housing for high income earners in Lagos State. Two institutions focuse on the high income group, three on high and medium income groups, and one on low-income group. With the enormity of challenges in the low-income sector where the majority of the residents belong, it is clear that a solution to the housing crisis bedeviling Lagos State may not be available soon.

A. Lagos State Ministry of Housing

The Lagos State Ministry of Housing was established in 1999 with a mission to provide good quality and affordable homes for the teeming population of Lagos State and the vision of a 'model city' with a high quality of life for the citizenry through adequate provision of shelter which is a basic human need.



Figure 1.7 Hierarchy of institutions for housing delivery in Lagos State

(Source: Housing Research Group, Heinrich Böll Stiftung, 2015/2018)

It has the following responsibilities:

- Facilitation of housing finance service through an enduring mortgage system by providing easy access to the National Housing Fund (NHF) and facilitating support from international agencies;
- Encouraging private sector participation in housing delivery programmes through public-private-partnership strategy;
- Encouraging manpower development in the housing sector;
- Research into local and alternative materials to bring down the cost of houses;
- Consultancy services;

Figure 1.8 Overview of all institutions that are linked to housing delivery

Name of institution	Class of mandate	Roles	Target beneficiaries
1. Lagos State Ministry of Housing	Direct	Policies, facilitations, development and management of housing	High/ medium income groups
2. Lagos State Development and Property Corporation	Direct	Commercial or market oriented housing	High income groups
3. New Towns Development Authority	Direct	Site and services within government estates	High income groups
4. Lagos Building Investment Company	Direct	Mortgage provision	High/ medium income groups
5. Lagos State Urban Renewal Agency	Direct	Slum regeneration	Low income groups
6. Lagos State Building Control Agency	Supportive	Safety and performance of buildings	All groups
7. Lagos State Physical Planning Permit Authority	Supportive	Building permit	All groups
8. Lagos State Ministry of Physical Planning and Urban Development	Supportive	Urban development policy	All groups
9. Lagos State Land Bureau	Supportive	Land allocation	All groups

(Source: Housing Research Group, Heinrich Böll Stiftung, 2015/2018)

- Identification of abandoned properties and maintenance of housing estates;
- Addressing the housing needs of the under privileged e.g. widows (with the assistance of non-governmental organisations);
- Housing development and provision of physical facilities to make the estates habitable in conjunction with the NTDA, the Ministry of Physical Planning and Urban Renewal, and office of the surveyor general;
- Resettlement;
- Valuation of all types of interest in properties;
- To determine compensation for acquired properties;
- Allocation of houses;
- Matters relating to forfeiture of properties amongst others.

Box 1.9 Assessment of the impacts on housing in Lagos State

In fulfilling some of the above responsibilities, the ministry has adopted the direct con- struction of housing, private-public-partnerships (PPP) and the Lagos Homes Ownership Mortgage Scheme (Lagos HOMS) as housing delivery strategies. As at 2011, the direct construction method had yielded 19 completed estates with 4 undergoing construction. The PPP framework has equally yielded 19 estate development as at 2010. The ministry had confirmed, on April 29, 2015, that the state had built over 10,000 housing units since 2007 translating to 1,250 housing units per year. Other current efforts are detailed in Section 1.4.

Since establishment in 1999, the ministry has not demonstrated full capacity to resolve the housing crisis in Lagos State. Its direct housing provision has not translated to large scale housing delivery to the residents. Rather than evolving strategies of improving housing conditions for the low-income groups in the state, the ministry has played prominent roles in depleting the housing stock through forced evictions and demolitions without compensation or any form of resettlement. Some of the classical examples are the February 2013 demolition of Ijora-Badia community, the March 2013 demolition in Odoragushin community or the April 2017 complete erradication of the Otodo Gbame community.

B. Lagos State Development and Property Corporation

The Lagos State Development and Property Corporation (LSDPC) was established in 1972 as a result of the amalgamation of three existing agencies; the Lagos Executive Development Board (LEDB), Ikeja Area Planning Authority (IAPA) and Epe Town Planning Authority (ETPA). With the promulgation of the LSDPC Edict No.1 of 1972, the agency becomes a unified institution for the provision of movable and immovable property in Lagos since the creation of the state in 1967. Among the functions of the LSDPC as outlined in the edict are:

- To acquire, develop, hold, manage, sell, lease or let any property movable or immovable within the State;
- To provide and maintain roads, footways, bridges, drains and sewers on its estates until a local authority takes over;
- To establish a home-ownership saving scheme in respect of any housing estate or building owned, constructed and managed by the corporation;
- Subject to the provision of the edict, to carry on all activities, which are necessary, advantageous or convenient for the purposes of carrying out its functions under the said edict.

Since the formation of LSDPC in 1972, the most ambitious project was between 1979 and 1983 when a low income housing strategy was used to deliver almost 10,000 housing units in

multiple locations across the state. Since then, LSDPC priorities have shifted from the provision of affordable housing to commercial housing. As at June 2012, LSDPC's total housing stock is 22,659 housing units in 65 estates, translating to 12,659 housing units from 1983 to 2012 (29 years). This is an average of 437 housing units per year. All the houses provided within this period are for private rental or ownership markets. They do not fit into the government supported housing which may make them affordable to the citizens since the vision of the agency has been directed towards the provisioning of market oriented housing.

C. New Towns Development Authority

The New Towns Development Authority (NTDA) was established in April 1981 through the Lagos State government Official Gazette Extra-Ordinary No.19 Volume 16 to effectively implement the planned growth of Lagos State, in order to decongest the metropolitan centre and ensure even development of Lagos State towards the north west, south-west and Lekki axis. The responsibilities of the authority include the establishment of new towns and the development of sites and services schemes, provision of infrastructures in government estates, promotion of large scale physical development, site selection for other government ministries, agencies, and private developments within government estates in liaison with the Ministry of Physical Planning and Urban Development. The authority is currently active in eleven (11) locations in Sangotedo, lbeju both in Lekki, Ikorodu, Epe, and Badagry axes of the state.

Box 1.10 Assessment of the impacts on housing in Lagos State

As at the year 2010, the authority facilitated the development of 122 housing estates in different locations across the state, mainly through site and services approach. Since the mandate of the authority is to serve the housing need of the affluent Lagos residents, its activities are not connected to delivering housing in the most needed sector, low-income groups.

D. Lagos Urban Renewal Agency (LASURA)

In 1991, the Lagos State government established the Lagos State Urban Renewal Board to implement the slum upgrading programme of the government in the identified 42 slum communities. In 2005 the board was renamed Lagos State Urban Renewal Authority to upgrade the slum and blighted communities. In the Lagos State Urban and Regional Planning and Development Law 2010, the authority has been renamed Lagos State Urban Renewal Agency with focus on urban regeneration and slum upgrading. The last restructuring activity was in January 2014 when functions of the Lagos Metropolitan Development and Governance Project (LMDGP) were dissolved into LASURA. Since the transformation in 2005, the agency had intervened in the Agege slum community with the upgrading of 4 houses, the delivery of 24 housing units at Iponri and the redevelopment of the Oluwole shopping facility in Lagos Island in collaboration with the Lagos State Development and Property Corporation. Efforts to regenerate Isale-Gangan I and II in Lagos Island to deliver 54 and 33 housing units, respectively and the Adeniji-Adele redevelopment, Lagos Island that will produce 96 housing units are ongoing. Also, the redevelopment of Anikantamo Plank Market and the regeneration of Ojogiwa/Okoya Streets and Jankara Market, all on Lagos Island are underway. Since 2015, the Agency has engaged in robust discussions with different categories of low income groups with a view to implementing various upgrading and redevelopment strategies. As a follow up to LMDGP, the Agency is saddled with the responsibility of implementing EKO-UP, an urban development project with focus on infrastructure delivery in two slum communities, Amukoko and Bariga.

Box 1.11 Assessment of the impacts on housing in Lagos State

The analysis of the agency's achievements revealed strong concentration of project implementation on Lagos Island in comparison to other blighted communities across the state. In the 24 years history of the agency, significant improvement has not been made in the transformation of the city from informal landscape to a livable city, rather slum communities have increased from 42 in 1983 to more than 100 till date. Efforts of the agency in delivering adequate housing have remained infinitesimal to the needs of the city. Recently, the agency has been undergoing roles and orientation restructuring process which results will manifest in the years to come. For now, challenges are mounting for priority resolutions.

E. Lagos metropolitan development and governance project (LMDGP)

The Lagos metropolitan development and governance project was a World Bank assisted project approved on July 6, 2006 with commencement in 2007. The project was conceived to intervene in nine slum communities with focus on housing supporting infrastructure. The interventions did not include housing but consisted of social and economic infrastructure such as road, health care, education, electricity, water, sanitation and environment. The nine targeted slums are Agege, Ajegunle, Badia, Amukoko, Makoko, Iwaya, Ilaje, Bariga, and Itire-Ijeshatedo. LMDGP was closed in 2013. Its functions were dissolved into LASURA, as mentioned above. Table 1.13 provides a summary overview of the project.

Box 1.12 Assessment of the impacts on housing in Lagos State

As noted by the World Bank project assessment report, the performance of the project is unsatisfactory. During the implementation, safeguard measures to protect the beneficiaries, the urban poor, were ignored while water delivery and other projects failed to make considerable impact on the lives of the beneficiaries. Rather than bringing succor and bridging spatial inequality in the targeted communities, the project has led to widening gap, displacement, forced evictions, demolitions and deaths of some beneficiaries.

F. EKO Urban Development Project (EKO-UP)

The EKO Urban Development Project (EKO-UP) was designed to span three core areas of intervention in two slum communities deemed by the Lagos State government to be among those in greatest need: Amukoko (Ifelodun LCDA) and Bariga (Bariga LCDA). The two communities are some of the succeeding nine communities from the previous World Bank financed Lagos Metropolitan Development and Governance Project (LMDGP) which ended in September 2013. The three components of the proposed intervention are:

- The upgrading of public infrastructure (roads, drainage, streetlights, schools, hospitals) in slum communities with the greatest need;
- The upgrading of solid waste management facilities in project communities specifically and in Lagos State more broadly, and;
- The strengthening of project-specific and overall technical capacity in the state institutions (DPD, LASURA, LAWMA) responsible for the implementation and maintenance of the resulting public works.¹

EKO-UP's goal is to improve the living conditions of the most vulnerable among the urban

1 Lagos State government (2015), Eko Up Project Operational Manual, November 2015

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S/N	Description of activity	Details
1	Approval	July 6, 2006
2	Project focus areas	Housing supporting infrastructure (road, health care, education, electricity, water, sanitation and environment)
3	Project coverage areas	Nine slums in Lagos (Agege, Ajegunle, Badia, Amukoko, Makoko, Iwaya, Ilaje, Bariga and Itire-Ijeshatedo)
4	Project funding body	The World Bank through International Development Association (IDA)
5	Borrower	Federal Government of Nigeria
	Implementing against	Lagas State government

Figure 1.13	Overview of the LMDGP	in Lagos State

5	Borrower	Federal Government of Nigeria
6	Implementing agency	Lagos State government
7	Total project cost	US\$ 205,690,000
8	Commitment amount (IDA)	US\$ 200,000,000
9	Borrower	US\$ 5,690,000
10	Interests, charges and fees	8.93percent
11	Disbursement as at September 30, 2013	US\$ 139,970,000
12	Closing date	September 30, 2013
13	Project life span	7 years
14	Overall implementation progress	Moderately unsatisfactory
15	Projects outcomes span	Moderately unsatisfactory

(Source: World Bank, "Lagos metropolitan development and governance project", http://projects.worldbank.org/P071340/lagos-metropolitan-development-governance-project?lang=en&tab=ratings, accessed April 22, 2018. // see also: Olamide Udo-Udoma, World Bank Public Participation Policies and Processes in Relation to the lives of beneficiaries in Slum upgrading projects: Case study Makoko, Lagos, Nigeria (M. Phil in Urban Infrastructure Design and Management), University of Cape Town, 2014.)
population of Lagos City, through projects fostering urban renewal and the improvement of solid waste management.

The overall goal is divided into three main objectives that form the basis of the project:

- Support LASURA for upgrading two among the largest and oldest slums in Lagos: Amukoko and Bariga communities, located respectively in Ifelodun and Bariga LCDAs; even though focusing primarily on these two communities, the perimeter of intervention of EKO-UP has been extended to the LCDA scale;
- 2. Support the LAWMA for the construction of solid waste management facilities within the Lagos State and for the improvement of solid waste management in Amukoko and Bariga communities, where the public service is impeded by lack of accessibility;
- 3. Support the programme management activities by the Development Partnership Department (DPD) of the Lagos State Ministry of Economic Planning and Budget, and operational implementation by LASURA, LAWMA, and Ifelodun and Bariga LCDAs.

The EKO-UP project took up with a loan of USD 100 million issued by French Development Agency (AFD), lent to the Federal Government of Nigeria and onlent to the Lagos State government. The estimated period of disbursement is 5 years.² Documentation and feasibility studies started in 2015 until November 2017 when Lagos State government decided to withdraw from the loan. Unconfirmed reports said that it is most likely that the government may fund the project from direct budgetary provisions but with reduction in scope.

Box 1.14 Assessment of the impacts on housing in Lagos State

Since the project is yet to assume full implementation, it is early to determine its impact on housing. Nonetheless, the conditions of housing in the two target communities, Amukoko and Bariga remaine precarious. EKO-UP could have been a vibrant accelerator to attract investment in housing and infrastructure upgrading.

A. Lagos Home Ownership Mortgage Scheme (Lagos HOMS)

Lagos Home Ownership Mortgage Scheme (Lagos HOMS) was a programme of Lagos State government aimed at financing housing delivery on the supply side and allowing funding flexibility on the demand side. The programme, formally launched in March 2014, was run by Lagos State Mortgage Board. Under the scheme, the government provided the housing and allowed beneficiaries to pay on installmental basis through the accredited participating banks. The beneficiaries, first home buyers, were expected to make payment on incremental basis, 30 percent down payment before the allocation of the unit and 70 percent balance payment spread over 10 years (on monthly basis) at 9.5 percent interest rate. In this scheme, the government provides the land, builds, allocates and manages the houses. Until April 2015¹ government has confirmed 603 uits were built. In May 2015 when the new administration assumed office, the scheme was technically halted until December 2016.

B. Rent to Own and Rental Housing Scheme

The new government launched the Rent to Own and the Rental Housing scheme utilizing the housing units already constructed under Lagos HOMS. Although, the costs of housing units remained the same, beneficiaries are now expected to make 5 percent down payment instead of 30 percent. The remaining 95 percent will be paid over a period of 10 years in monthly installments of not more than 30 percent of their income.² 12 residential estates with 4,355 housing units are run under the programme, however, only one estate with 132 housing units is located in central Lagos while the remaining 11 are located in peri-urban areas of Lagos as shown in Table 1.16. The details of the "Rental Housing Scheme" are yet to be developed.

Box 1.15 Assessment of the impacts on housing in Lagos State

The comparison between Lagos HOMS and Rent to Own reveals some fundamental issues on public policy and accessibility to public housing in Lagos.

- 1. The discarding of Lagos HOMS in only 14 months after kick off shows a gross public policy inconsistency. The participating stakeholders have to bear unexpected cost due to the change of the programme and the already allotted beneficiaries are left in the dark while the investors' confidence in the public policies and processes will vanish.
- Lagos HOMS represents a policy that does not work for members of the public. It took about seven years – before launching in March 2014 – to plan Lagos HOMS only for the programme to be set aside after 14 months. This is a wastage of public resources.
- 3. Considering the huge deficit of housing of about three million units, the monthly average allocation to 50 people under the Rent to Own Scheme is considerably low. If this trend continues, it would take about 5,000 years to ensure the need of residents are met through public housing.
- 4. The fixed rate repayment of not more than 30 percent of the monthly income is commendable, if linked to the minimum wage. However, there is a need to review the amortisation period of 10 years which is not feasible.
- 5. It is not clear what income benchmark is being used in determining income and monthly repayment.

¹ Lagos Home Ownership Mortgage Scheme (2015), www.lagoshomsgov.org accessed on March 10, 2015

² Lagos State Ministry of Housing 2017, Presentation on Lagos HOMS and jubilee housing by Balogun Murtala A. (deputy director, physical planning and surveying department, ministry of housing) and discussion at LAGDEL 2017.

S/N	Estate	Units	Location
1	Sir Micheal Otedola Estate, Odoragushin, Epe	336	Peri-urban
2	CHOIS City Agbowa	400	Peri-urban
3	Alhaja Adetoun Mustapha Estate, Ojokoro	32	Peri-urban
4	Hon. Olaitan Mustapha Estate, Ojokoro	48	General applicability
5	Oba Adeboruwa Estate, Igbogbo, Ikorodu	256	Peri-urban
6	Egan-Igando Housing Estate, Alimosho	684	Peri-urban
7	Igando Gardens, Igando, Alimosho	492	Peri-urban
8	Igbogbo IIB Housing Estate, Igbogbo, Ikorodu	360	Peri-urban
9	Odo-Onasa, Agbowa	661	Peri-urban
10	Iponri Estate, Iponri, Surulere	132	Central
11	Sangotedo Estate, Sangotedo, Lekki	594	Peri-urban
12	Ajara Estate, Badagry	360	Peri-urban
13	Total	4,355	

 Table 1.16
 Housing units for allocation under Rent to Own Scheme

(Source: Lagos State Ministry of Housing, 2017)

C. On-going Private Public Partnership (PPP) in the housing sector: Lagos Affordable Public Housing (LAPH)

The Lagos Affordable Public Housing (LAPH) will construct 20,000 housing units within 5 years (2017–2022) under a partnership of the Lagos State government with private developers.³ The government will provide land as its equity while the private sector will provide funding and develop the land. It is not clear how residents will have access to the housing.

In April 2017, the state government confirmed that six developers had already been mobilized to sites for the housing units which will be named Jubilee Housing Estates in commemorating the 50th anniversary of the Lagos State. Among the locations confirmed are the Jubilee Housing Estates in Ijora-Badia, Imota, Ayobo, Idale (Badagry), Ilamoye-Isolo, Abijo, Tolu (Ajegunle), Abule-Ado, Ikota, Ibeshe, Owutu and Igbogbo.⁴

In support of its PPP policy the Lagos State government, in October 2017, signed a Memorandum of Understanding with the Nigeria Mortgage Refinance Company (NMRC) and private developers. Primary Mortgage Institutions (PMI) and the NMRC are expected to facilitate the creation of mortgages for potential buyers. According to the Commissioner for Housing, "the State Government is a subscriber to NMRC by virtue of registration of Lagos Building Investment Corporation (LBIC) with the Company and therefore qualified to benefit from the mortgage loan refinancing roles of NMRC."⁵ The Commissioner further confirmed that "the refinancing agreement will assist the supply side as well as the demand side of the value chain as it will set in motion a revolving pool of funds for mortgage origination which will assist developers and provide them access to construction finance and help scale up housing delivery."

In December 2017, the Lagos State government executed a Memorandum of Understanding with a United States based real estate developer, Echostone Housing Limited, to build the required 20,000 housing units within four years (2018–2021) where Lagos State government will provide the land as its equity contribution, while Echostone would finance, construct and provide technical expertise for the project.⁶ The company will start with 2,000 housing units in three locations within the state, namely, Idale in Badagry, Ayobo in Alimosho and Imota in Ikorodu. The project is expected to provide 6,000 jobs for residents of Lagos.⁷

³ G Lawal, "Housing deficit: Lagos constructs 20,000 new housing units," press conference on April 24, 2017. oline https://lagosstate.gov.ng/blog/2017/04/24/housing-deficit-lagos-constructs-20000-new-housing-units/, accessed on December 30, 2017.

⁴ ibid.

⁵ K Ugbodaga, "Lagos, NMRC, developer sign MoU to deliver 20,000 housing units," online https://www. pmnewsnigeria.com/2017/10/23/lagos-nmrc-developer-sign-mou-to-deliver-20000-housing-units/, accessed on December 30, 2017

⁶ Vanguard, "Lagos State, Echostone Limited to develop 20,000 housing units," online https://www pmnewsnigeria.com/2017/12/14/lagos-partners-echostone-limited-develop-20000-housing-units/, accessed on December 15, 2016.

⁷ ibid.

S/N	Indicator	Lagos HOMS	Rent to Own
1	Location of Units	Central and peri-urban areas	Peri-urban
2	Cost of typical room and parlour at Epe (as at April, 2017)	NGN 4,340,000	NGN 4,340,000
3	Amortization period	10 years	10 years
4	Down payment by beneficiary	NGN 1,302,000 (30 percent)	NGN 217,000 (5 percent)
5	Balance payable for 10 years NGN 3,038,000		NGN 4,123,000
6	True monthly repayment	NGN 39, 310 (at 9.5 percent)	NGN 34,358 (interest n/a)
7	Median income	NGN 40,000	NGN 40,000
8	Expected monthly repayment	NGN 39,310 (at 9.5 percent)	NGN 12,000 (30percent of incor
9	No. of beneficiaries and period	603 (14 months)	500 (10 months)
10	Average beneficiaries (allocation)/month	43 people	50 people

Table 1.17 Indicator comparison between Lagos HOMS and Rent to Own Scheme

(Source: Housing Research Group, Heinrich Böll Stiftung, 2018)

Figure 1.18 Timeline of the MoU on the PPP model

Lagos State Ministry of Housing (Public Private Partnership (PPP) Model) First Investment Development Com-Lagos Affordable Public Housing (LAPH) \rightarrow pany Deliverables: 20,000 units Delivery Timeline: 5 years (2017-2022) Time of MoU: January 2017 Deliverables: 600 units at Ilubirin Delivery Timeline: Not available 6 Developers Achievements: Not available \rightarrow Time of MoU: Not available **Brains and Hammers Nigeria Limited Deliverables:** 456 + 5,196 = 5,652 housing units \rightarrow (Jubilee Housing) Delivery timeline: June and December 2017 Achievements: Not available Time of MoU: June 2017 Deliverables: 700 units at Ijora-Badia Delivery Timeline: Not available ightarrow Nigeria Mortgage Refinance Company (NMRC) Achievements: Not available and 2 Developers Time of MoU: October 2017 Deliverables: Mortgage Refinancing and 20.000 units Delivery timeline: Not available Achievements: Not available > Echostone Housing Limited Time of MoU: December 2017 Deliverables: 2,000-20,000 housing units Delivery timeline: 4 years (2018-2021) Achievements: Starting in 2018

(Source: Housing Research Group, Heinrich Böll Stiftung, 2018)

38

Box 1.19 Assessment of the on-going Private Public Partnership (PPP) in the housing sector: Lagos Affordable Public Housing (LAPH)

- LAPH is expected to deliver 20,000 housing units between 2017 and 2022, but the nexus of how the 20,000 units will be accessible to Lagos residents is not clear. Since the units will be delivered within five years, it would have been ideal to have a clear accessibility framework for all stakeholders, more importantly that the delivery will be private sector driven. More clarity on the difference between the Rent to Own, Rental Housing Scheme or any other PPP framework is necessary.
- 2. At the end of 2017, it was expected that 5,196 housing units would have been completed leaving a balance of 14,804 units for delivery on or before 2022. In addition to verifiable deliverables for 2017, the remaining years need to have annual milestones for the unit delivery.
- 3. In the last two years, the Ministry of Housing is gradually taking the lead role in converging housing policies and programmes under one platform compared to previous administrations where housing roles and responsibilities were dispersed among numerous ministries, departments and agencies.
- 4. In 2017, not less than four Memorandum of Understanding (MoU) were signed between the Ministry of Housing and different private organisations. However, the scope of delivery by each private entity is either not known or shrouded in confusion. The total units expected under the LAPH for which the private sector is being engaged is 20,000 housing units. Meanwhile, the MoU signed with the Nigeria Mortgage Refinance Company (NMRC) and other developers is targeting these 20,000 housing units delivery. Another MoU signed with Echostone Housing Limited is targeting as well 20,000 housing units delivery. There is a need to have clarity on what is expected from each private organisation and for a timeline of implementations under LAPH.
- 5. It strongly appears that there is no specific template of engagement for prospective private sector players. Hence, the adoption of proposals and the participation of the private sector may not be based on creating a level playing platform, rather the successful relationship will still be driven by a patronage system. A template that articulates the scope of the project, the product's uniqueness, the financing model, the alignment to the city's vision and most importantly the benefits of the project to the residents of Lagos is required to attract a considerable number of the private sector and drive the PPP process in the housing sector.

The housing situation in Lagos is a critical challenge for the city and its residents, but in the same breadth presents good opportunities and potentials. The challenge may not necessarily be in the current status of housing, but rather in the inability to fully explore the embedded opportunities and potentials for the benefits of the residents. Policy makers should take into consideration that the success of delivering adequate housing for all income categories lies in the timely adoption of diverse models but not in confinement to one or two models. In approaching housing delivery in a large city like Lagos, especially where slums and informal settlements are the dominant features of the landscape, multiple housing delivery outlets are required. There are two official channels, Rent to Own and Rental Housing Scheme created by the Lagos State government for residents to access housing. However, other models of housing delivery could and should be considered.

Inclusionary housing

Inclusionary housing or mixed income housing is a system of delivering housing to the low-income groups in a particular neighbourhood by incentivising the developers to provide a percentage of the new residential projects as "Below Market Rate" (BMR) units at a price that is affordable to low or middle income households.¹ Inclusionary housing programs vary in their structure; they can be mandatory or voluntary and have different set-aside requirements, affordability levels, and control periods. Most inclusionary zoning programmes offer developers incentives, such as density bonuses, expedited approval, and fee waivers.² The PPP models already applied by the Lagos State government could present a concrete platform for the introduction of on-site inclusionary housing programmes.

Cooperative housing

A cooperative housing society is a legally incorporated group of persons where membership is voluntary and control is democratic, members make an approximately equal contribution to the capital required through an initial deposit and agreed monthly membership rates.³ A cooperative housing society purchases land, develops it and constructs houses or flats and allots the same to members. Some societies also provide loans at low rate of interest to members to construct their own houses. Its principal objective is to eliminate economic exploitation as it is controlled by members only. Contrary to public housing, cooperative housing provides opportunities to its members to control the house designs at the planning stages. The maintenance of the estate is calculated into the monthly membership fee. In Lagos, cooperative housing systems could incorporate savings groups existing in informal communities and could become relevant in the regeneration and redevelopment of many slums and informal settlements dominating the city's landscape. A process of government land and financial incentives would be required to strengthen the existing actors and bring potential members into the system.

Alternative funding systems for housing

In Lagos, it is very clear that the existing conventional banking system which dominates the financial market for funding the housing projects in the city is not reliable at an interest rate of more than 25 percent. Hence, it is expedient that the city needs to be creative, innovative and vibrant in looking beyond the commercial banking system to fund housing redevelopment and green site construction. Multi year rolling investment funds could target both the demand and supply sides of housing. It would support qualifying households (income criteria) through the creation of mortgage system to be managed by existing Primary Mortgage Institutions (PMIs). On the supply side, the fund would target developers whose focus are the low to medium

City and County of San Francisco, "What is the inclusionary housing program?," online http://sf-planning. org/inclusionary-affordable-housing-program, accessed on January 12, 2018.

² Office of Policy Development and Research (PD&R), U.S. Department of Housing and Urban Development, "Inclusionary zoning and mixed-income communities," online http://www.huduser.gov/portal/periodicals/em/ spring13/highlight3.html#title, accessed on January 12, 2018.

³ Nemi Verma, "Co-operative housing society," online http://www.slideshare.net/imfully/co-operative-hous ing-society, accessed on January 12, 2018.

income groups in the city, especially in the slum and informal communities. Cooperative models could drive affordable housing, for instance through dedicated cooperative housing societies, with not less than 500 members could be supported through land grant and funding incentives. Housing tax relief programmes could be another platform to leverage on private capital to deliver affordable housing for low-income groups in the redevelopment of slum communities. A type of land sale taxation (unused plot) finance tool could help to reduce the speculative holding of land assests, though it should not be misconstrued as capital gains tax. The former focuses on current market value of unused plot while the latter focuses on profit made on all classes of assets. The success of this approach, however, depends on the maturity of the city's land administration and management system including data sustainability and technological application. Another alternative financing model could be a land value capture financing for housing. This is a mechanism whereby existing and new buildings are deriving value increment from a new urban development project in the district. The value increase is shared between property owners and the government on an agreed formula. The majority of the government shares from such proceeds should be utilized for the affordable housing delivery. For this model to be successful, data update on existing development along the transport corridors, a series of engagements with property owners and users, and a clear structure for the value fund mobilisation and utilisation would be key factors.

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URBAN MOBILITY AND TRANSPORTATION



Research

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2.1 Introduction	47
2.2 Current Status of Transportation	51
2.3 Challenges in the Transportation Sector	55
2.4 Transport Policies and Regulatory Framework	61
2.5 Transport Institutional Framework	87
2.6 Schematic Affordability Evaluation for the Transport System	101
2.7 The Case of the Blue Line (LURN)	103
2.8 Recommendations	115

2.1 Introduction

47

Access to people, goods, services and information is the basis of economic development in cities. The better and more efficient this access, the greater the economic benefits through economies of scale, agglomeration effects and networking advantages.¹

In the past few decades, African cities have been experiencing huge population increases. It is estimated that by 2020 some 55 percent of the African population will be living in urban areas.² Fast growing cities face enormous challenges in terms of infrastructure provision and the need to cope with the increasing demand for transport. This is especially acute as much of the existing road infrastructure in African cities is far from being appropriate for the actual transport demand. In addition, apart from a few remaining companies, almost all publicly owned and managed public transport enterprises in Africa ceased to exist during the 1990s, often as a consequence of structural adjustment policies required to comply with aid programmes associated with international agencies. Therefore, the public transport sector has suffered more than 15 years of neglect and this, combined with escalating urban populations, has resulted in chaotic, unsustainable, time and money wasting transport systems in most African cities.³

Today throughout Africa, public transport is dominated by the operations of the 'disorganised' informal sector. The dominance of these services hampers economic development and reduces the quality of life for citizens as the large number of vehicles required to meet demand causes congestion and parking issues and, in the main, citizens suffer with high levels of associated pollution and low levels of security and safety.⁴

The foregoing situation is not totally different from the system in Lagos State. The poor condition of the road network and of the public transport system affects severely the development of the city and the working and living conditions of the population, particularly the most vulnerable. Rapid growth of the private vehicle fleet, combined with reliance on informal vehicles and motorcycles, such as danfos, shared taxis, okadas, and keke marwas has resulted in extreme traffic congestion throughout the city, and poor quality public transport outlook. Before 2007 when the new BRT-Lite commenced, public transport in Lagos could largely and best be described as unregulated, chaotic, inefficient, expensive, low quality and dangerous, both in terms of road traffic accidents and robberies. There are about 2,600 km of roads in Lagos that are frequently congested, with over two million vehicles plying the roads on a daily basis. The density of bus public transport in Lagos is about 6 buses per kilometre.⁵

In order to provide consistent planning and efficient implementation of the policies and address some of the issues previously mentioned, the Lagos State government established with the support of the World Bank the Lagos Metropolitn Area Transport Authority (LAMATA) in 2003, mandated with executing the Lagos Urban Transport Project (LUTP) which was initially started in 1994/95. LAMATA has the overall role of coordinating the transport policies, programmes and actions of all transport related agencies. It implements and manages public transport services in Lagos State. The "BRT Lite scheme" as part of Lagos Urban Transport Project (LUTP) 1 is one of its flagship programmes. The follow up of LUTP 1, LUTP 2 saw the expansion of the BRT corridor and the launch of more buses in 2015. In 2018 the extension is focused on the Oshodi-

2 International Association of Public Transport and African Association of Public Transport: *Report on statistical indicators of public transport performance in Africa*, 2010.

Philipp Rode et al, "Accessibility in Cities: Transport and Urban form" in NCE Cities Paper 03 (2014; London School of Economics and Political Science, LSE Cities, for the Global Commission on the Economy and Climate and its New Climate Economy Programme).

³ ibid.

⁴ ibid.

⁵ International Association of Public Transport and African Association of Public Transport, ibid. // Lagos Metropolitan Area Transport Authority, *Presentation by LAMATA MD/CEO at the National Conference of the Nigerian Institute of Town Planners 2014*, Lagos, Nigeria.



Map 2.1 The BRT Lite corridor in Lagos stretches 35 km from CMS to lkorodu and carries an estimated 120,000 passengers per day.

(Source: LAMATA, 2018)

Picture 2.2 Ikeja Bus Terminal



(Source: Lagos Urban Network, 2017)

Abule Egba Corridor. Rail and water transport are other modes LAMATA are pushing forward. The agency's most recent addition to improving mobility in the state is the Ikeja bus terminal. The aim of the terminal is to stop the haphazardness of busses and have the twenty bus parks in the area relocate to one location. The Ikeja Bus Terminal is one of thirteen terminals that will be located across the state. This is all under the Strategic Transport Master Plan. In addition, 5,000 new commercial buses⁶, as part of the Lagos Bus Reform Initiative, will be introduced in to the transport system over the next three years to replace danfo buses. The reform will be done in phases starting with 820 buses.

Non-Motorised Transport (NMT) is another transport agenda that LAMATA has pushed in 2017 as part of a transportation solution to work hand in hand with public transport as a sustainable transport solution. As well as curbing traffic congestion, NMT can reduce environmental pollution, promote good healthy living through exercise as well as contribute to curbing the effects of climate change. After several events and discussions held in the past two years a draft policy has been proposed to relevant stakeholders to make comments and encourage buy-in from Federal and Lagos State transport ministries, agencies and departments as well as external organisations with an interest (see: Transport Policies And Regulatory Framework: D. Draft Non-Motorised Transport Policy).

In spite of considerable improvements in certain areas, challenges remain undaunted. The petroleum tanker drivers have repeatedly shut down access to Apapa, the Nigerian port complex, and other neighbouring roads due to disagreement with the Lagos State government while buses under the Bus Rapid Transit (BRT) and LAGBUS systems have become target of attacks during any urban crisis involving government officials, members of transport union and steet boys.

6

Lagos State government, 2017, LAGOS TO ROLL OUT FIRST SET OF 5,000 NEW COMMERCIAL BUSES IN SIX MONTHS, http://lagosstate.gov.ng/blog/2017/08/10/well-roll-out-5000-new-commercial-buses-in-six-months-ambode, accessed October 30, 2017

Residents who lost their homes without compensation to the transport infrastructure expansion took to various platforms to criticize the transformation while some arrested crime suspects used to have attributed their involvement in crime activities to the loss of their livelihoods as a result of property demolitions for road infrastructure expansion or renewal. The various misunderstanding emanating from the implementation of the new transportation framework for Lagos, and the rising population, increasing population density and over 70 percent of Lagos in the form of slums or informal settlements (refer to chapter **Housing, Slums, and Informal Settlements**) will impose additional demand on the transportation system in the city. The transportation system reeds to be strongly linked to the land use planning and to integrated mobility systems in order to achieve the envisaged significant transformation of the city (refer to the chapter **Strategic Planning And Urban Mega Projects** for detailed information on the vision, mission and development pillars of the Lagos State Development Plan 2012-2025).

In 2007, Lagos State government adopted a 10-point development agenda as strategic guide for transforming the city. The ten point agenda are roads, transportation, power and water supply, environment and physical planning, health, education, empowerment, food security, shelter and employment.¹ In 2000, the 30 years Strategic Transport Master Plan (STMP) was developed and it aims to transform the Lagos transport sector by identifying possible transport infrastructure and services required to meet the growing travel demand in the state.

When the current Governor was sworn in in 2015 he made some bold promises around security, infrastructure and job creation. Under infrastructure came the promise to construct and rehabilitate 114 roads and the Light Up Lagos project. The Light Up Lagos project also sits under security as well as infrastructure, because a well lit street means a safer environment. In 2016 it was reported that lights had been provided to 365 streets in Lagos.² To achieve the construction of 114 roads in six months the aim was to construct two roads in each local government and this was to happen not just in 2016 but annually. The execution of the roads were left to the local government while the State Ministry of Local Government and Community Affairs and Ministry of Works and Infrastructure played supervisory roles. Each local government was to chose two roads in need of state intervention and propose them to the supervisory ministries. Between September 17 and 24, 2016, the roads were inaugurated. The directive from the Governor during the inaugurations was for each local government to submit four additional roads for construction consideration from 2017. In addition, Governor Ambode mentioned that at least 456 inner city roads will have been commissioned by the end of his administration in 2019.

The PR around the construction of the 114 roads was positive. However, Tracka, a community of active citizens tracking the implementation of government projects, after visiting the completed and uncompleted roads during implementation, found that some of the roads were not done to a good standard.³ Inferior materials, inadequate drainage systems and poor implementation were a common observation by the Tracka team. It is therefore not a surprise the some of the roads are already in need of maintenance and some communities face flooding.

Road construction between 2015 and 2016 has been reported via news channels to be a success as the aims and objectives were achieved. Riding on the success the administration have chosen three priorities for the next two years (2017-2019); Power, Environment and Transportation. They see these three sectors as the pillars that will drive development in the state. On October 10, 2017, at the fourth quarter town hall meeting Governor Ambode promised that 224 roads will be constructed in six months.⁴ 181 will be local roads and 43 will be major link roads.

Other transport infrastructure that has taken precedence during this administration are lay-bys and slip roads, the signing of an MOU for the construction of the Fourth Mainland bridge and the construction of the Lagos International Airport Road.

The Lagos International Airport Road is a federal road therefore the appeals from the State Government to upgrade the road went through the Federal Ministry of Power, Works and Housing to the Federal Executive Council via a Memorandum to give Lagos State the approval to reconstruct the road. Due to the length of time the approval was taking, Governor Ambode appealed to the acting President, Yemi Osinbajo, causing tension between the State administration

4 The Guardian, "Ambode promises to construct 224 roads in six months", http://odili.net/news/ source/2017/oct/11/6.html, accessed December 20, 2017.

¹ Lagos State government, "Report on review of high level policy documents", (sections three and seven (2010).

² B. Ezeamalu, "10 achievements, failures of Lagos Governor Akinwunmi Ambode in 2016", http://www. premiumtimesng.com/news/headlines/219251-10-achievements-failures-lagos-governor-akinwunmi-am bode-2016.html, accessed December 20, 2017.

³ Budgit / Tracka (2016) Lagos State Road Projects (114 Roads)

and the Federal Ministry of Power, Works and Housing. In May 2017, acting President, Yemi Osinbajo gave permission to Lagos State government to embark on the reconstruction of the International Airport Road from Oshodi.⁵ The construction of the Lagos International Airport Road was included in the 2017 budget but the Lagos State government have appealed to the Federal Ministry of Power, Works and Housing to reimburse them with the N2 billion appropriated for the Airport Road in the 2017 national budget. At a stakeholders' meeting for the reconstruction of the road held in the last quarter of 2017, Governor Ambode said that the project is being financed by Internally Generated Revenue and will be toll free. Road based transport has and continues to be the predominant network in Lagos State has natural waterways for ferry services and a federal rail network which will be complemented by the emerging state rail network the development of these modes are slow and are yet to take priority though there is a clear need to diversify how people travel through the city because of the high demand of transportation.

Table 2.3 Level of road infrastructure in Lagos State

S/N	Mode	Length (km)	Percentage
1	Federal roads	468	6
2	State roads	1,287	17
3	Local government roads	5,843	77
4	Total road network	7,598	100
5	Rail network	30	

(Source: Lagos Metropolitan Area Transport Authority, 2015)

The demand for trips in the Lagos megacity region by all modes (including walking) was estimated at 22 million per day with walk trips accounting for 40percent of total trips in metropolitan Lagos. With 2.2 km of road per 10,000 populations, Lagos has one of the lowest road provisions in the West African sub-region while the total passenger traffic per day is over 20 million.⁶ The rapid increase in population and standard of living will bring the daily demand for trips to about 40 million per day by 2032.⁷ At the Lagos Chamber of Commerce and Industry award ceremony in 2017, the Managing Director of LAMATA, Mr Abiodun Dabiri, stated that the BRT had transported over 60 million passengers between 2015 and 2017.⁸ The daily passenger traffic in Lagos State is summarised in table 2.5 below.

B. Ezeamalu, "Osinbajo gives Ambode permission to reconstruct Lagos International Airport Road," https://www.premiumtimesng.com/regional/ssouth-west/232687-osinbajo-gives-ambode-permission-to-re construct-lagos-international-airport-road.html, accessed December 20, 2017.
Lagos State Ministry of Transportation, "An overview of the transformation of Lagos State transport sector" (2012).
Lagos Metropolitan Area Transport Authority, Presentation by LAMATA MD/CEO at the National Conference of the Nigerian Institute of Town Planners 2014, Lagos, Nigeria.
O. Akoni, "SMART transportation spreads to Ikeja", https://www.vanguardngr.com/2017/08/smart-transpor tation-spreads-ikeja, accessed October 30, 2017.

Table 2.4	Passenger traffic per day in Lagos State in Lagos State			
S/N	Mode	Number	Remark	
1	Number of vehicles on the road	Approx 2,000,000	(Rep. 20percent of Nigeria total)	
2	Vehicle annual rate of increase	100,000 vehicles per annum		
3	Vehicular density	264 vehicles/ km of roadway	Estimated at 30 vehicles/ km National average	
4	High capacity buses	Approx 1,034 BRT Old: 100; BRT since Nov 2015: 434; LAGBUS: 500.	Over 23,000 required at 1 bus/1,000 population	
5	Semi-formal mini buses (danfos)	Over 145,000 registered		
6	High capacity buses (molues)	Less than 150	Being phased out	
7	Taxis	Estimated at around 7,000		
8	Other vehicles	Estimated at around 5,000		
9	Motorcycles	Now estimated around 100,000		

(Source: Lagos Metropolitan Area Transport Authority, 2015)

Table 2.5	Passenger traffic per day in I	Lagos State
S/N	Mode	No. of passengers/ day
1	Walking	8,800,000
2	Bus Rapid Transit	90,000
3	Regulated bus (LAGBUS)	120.000

2	Bus Rapid Transit	90,000	0.41 percent
3	Regulated bus (LAGBUS)	120,000	1 percent
4	Private cars	2,508,000	11 percent
5	Semi-formal mini uses (danfos)	9,982,000	45 percent
6	Federal mass transit train	132,000	0.6 percent
7	Water transportation system	74,000	0.34 percent
8	Other non-data modes (including motorcycle, tricycle, bicycle, taxis, articulated vehicles, mini-vans and boats)	264,000	1 percent
9	Total passengers	22,000,000	100 percent

Percentage to total passengers

40 percent

(Source: Lagos Metropolitan Area Transport Authority, 2015)

The challenges in the transportation sector are multifaceted ranging from inadequacy of infrastructure, lack of coherence among coordinating agencies, non-standardization of operations and poor management and technical capacities. The problems in the sector can be summarized in a statement extracted from the Lagos Development Plan 2012-2015¹:

Box 2.6 Problems in the transportation sector in Lagos State

"Today, the transport system is inadequate for the growing urban population in the state. All modes of transport have challenges. The bus public transport operation suffers from high levels of fragmentation and inadequate regulation. The rail transport has few existing rail corridors and the existing corridors are grossly under-utilised. In the water transport, there is no coherence amongst water transport regulatory agencies (LASWA, NIMASA and NIWA). In the non-motorised transport, infrastructure facilities are extremely limited throughout the state. Finally in the paratransit mode of transportation (okadas) there is indiscipline and regulations are not effectively enforced."

Inadequacy of formal modes

With the formal public transportation contributing only 2.75percent² of the daily mobility in the city, it is clear that these modes cannot meet the demand of the Lagos residents, hence semiformal and informal operators such as mini buses (danfos), motorcycles (okadas), tricycles (keke marwas) and informal boats (example of the Makoko community) sectors will continue to fill the gap. Underlying the need to fill this mobility gap by the informal operators are unemployment and a high poverty rate in the city and not necessarily as a choice career or grounded profession. The incursion into the transportation sector by the unemployed youth and other categories of the population who seek means of livelihood have contributed to traffic chaos and unethical behavior among the informal operators. Regular attempts have been made to formalise the semiformal and informal operators via registration of vehicles and drivers, however this has not been successful because enforcement is lax. In 2016, Lagos State government announced its intent to regulate taxi operators using a franchise system. The regulation stated that all taxi operators must register with the state and get a franchise license. The franchise must include at least 50 cars at a cost of N100,000 per car. The registration of taxis in Lagos is yet to be fully implemented as there are still unregistered taxi drivers in Lagos. In 2016, Lagos State Drivers' Institute held a training day for danfo bus conductors. The aim of the training was to not just train and certify conductors but to also register them. Though these announcements have taken place and training completed there is no further information on the progress and there continues to be traffic chaos and unethical behaviour.

Inadequacy of infrastructure

The road infrastructure is grossly inadequate to meet the trips demand of the residents. The road network density, put at 0.6 kilometres per 1,000 people³, is low. Alternatively, Lagos State has 80 cars per 1,000 people⁴, with a high car density of 264 vehicles per kilometre of roadway.⁵ The network's efficiency is similarly low, with a limited number of primary corridors carrying the bulk of the traffic. Inadequately designed interchanges, where they exist at all, provide only partial

4 ibid.

5 ibid.

¹ Lagos State government, *Lagos State Development Plan 2012-2015* (2013; Lagos State Ministry of Economic Planning & Budget), 161.

^{2 &}quot;Strategic Transport Master Plan Propositions," Lagos Metropolitan Area Transport Authority, accessed January 5, 2016, http://www.lamata-ng.com/stmp.php.

³ Lagos State Ministry of Transportation, "An overview of the transformation of Lagos State transport sector" (sectoral explanatory document, 2012).

Table 2.7 Comparative analysis of road network between Lagos State and other large cities

S/N	City	Population	Length (km)	Density (persons/ km)
1	Lagos State	over 20,000,0001	7 ,598 ²	3,067 ³
2	Токуо	13,282,2714	24,4315	544 ⁶
3	Seoul Special City ⁷	10,290,000 ^s	7,689.2 ⁹	1,33810

Table 2.8 Comparative analysis of rail network between Lagos State and other large cities

S/N	City ¹¹	Population ¹²	System length ¹³ km)	Density ¹⁴ (persons/ km2)	No of stations ¹⁵	No of lines ¹⁶	Daily ridership ¹⁷
1	Lagos State	over 20,000,000	30 (220 proposed by 2032)	776,867	11 (ongoing)	(7 proposed)	132,000 (10,213,984 by 2032)
2	Seoul Capital Area	25,800,000	940	27,447		19	6,898,630
3	Shangai	24,151,500	468 (877 proposed)	51,606	303	12 (22 proposed)	6,235,616

- 1 Lagos State government, Lagos State Development Plan 2012-2015 (2013; Lagos State Ministry of Economic Planning & Budget), 1.
- 2 "Strategic Transport Master Plan Propositions," Lagos Metropolitan Area Transport Authority, accessed January 5, 2016, http://www.lamata-ng.com/stmp.php.
- 3 Urban Mobility Research Group, Heinrich Böll Stiftung, 2015: Derivation from ratio of population to length of road in Lagos
- 4 "Tokyo's History, Geography, and Population," Tokyo Metropolitan Government, accessed January 5, 2016, http://www.metro.tokyojp/ ENGLISH/ABOUT/HISTORY/history03.htm.
- 5 "Road management," Bureau of Construction, Tokyo Metropolitan Government, accessed January 5, 2016, http://www.kensetsu.metro.tokyo.jp/ english/douro/gaiyo/06.html.
- 6 Urban Mobility Research Group, Heinrich Böll Stiftung, 2015: Derivation from ratio of population to length of road in Tokyo
- 7 data on the road network covers Seoul Special City only while data on rail network cover Seoul Capital Area
- 8 "Seoul Population 2015," World Population Review, accessed on January 5, 2016, http://worldpopulationreview.com/world-cities/ seoul-population/).
- 9 E Y Shon, "Developments in road pricing and traffic restraint, Seoul case. World Bank's urban transport strategy review, Asian consultation workshop", accessed January 5, 2016, http://siteresources.worldbank.org/INTURBANTRANSPORT/Resources/shon2.pdf. *Note: Data and figure from 1998.*
- 10 Urban Mobility Research Group, Heinrich Böll Stiftung, 2015: Derivation from ratio of population to length of road in Seoul Special City.
- 11 All data, except for Lagos State: "The world's longest metro and subway systems,"railway-technology.com, accessed on January 5, 2016, http://www.railway-technology.com/features/featurethe-worlds-longest-metro-and-subway-systems-4144725/

12 ibid. // "City Populations 2015," World Population Review, accessed on January 5, 2016, http://worldpopulationreview.com/world-cities/

13 "The world's longest metro and subway systems," *ibid.*

14 ibid.

- 15 ibid.
- 16 ibid.
- 17 ibid.

S/N City Population System length Denisty No of stations No of lines Daily (km) (persons/ km) ridership 21,148,000 456 270 6,739,726 4 Beijing 46,377 17 Munici-(1,000 proposed by pality 2020) 270 11 5 Greater 8,615,246 402 (54 21,430 3,205,479 percent surface and 46 London percent subsurface) New 19,746,227 368 53,658 468 4,561,643 6 24 York (40 percent surface Metro and 60 percent subsurface) 7 Moscow 12,197,596 317.5 38,418 190 12 6,545,205 (Expanding to 467.5 by 2020) Tokyo 13,282,271 310 42,632 290 13 8,498,630 8 9 Madrid 6,500,000 317 22,184 300 13 1,720,547 Metro 300 10 Paris 2,249,975 218 10,320 16 4,175,342

Table 2.8 (continued) Comparative analysis of rail network between Lagos State and other large cities

access to the primary network. Many tertiary roads play the roles of secondary ones. So far few junctions have been signalized while transport stations, where available, are in a disorganised state. To understand the level of inadequacy in the transport infrastructure in the state, tables 2.7 and 2.8 provide a comparative analysis for the road and rail networks in comparably large cities across the world.

Road safety, environmental and social concerns

Poor driver behavior, public transport operators' indiscipline, unsafe vehicle conditions, uneven road conditions, poor street lighting, lack of pedestrian facilities and poor traffic enforcement all combine to produce an accident rate that is probably among the highest in the world, let alone environmental concerns like vehicle emissions, improper waste oil disposal and high traffic noise level. Expensive transport fares, unreliability of the transport system and forced evictions due to expansion of transport infrastructure constitute other major social issues.

Inefficient land use pattern

Since over 70 percent of the development in Lagos is in the form of slum and informal settlements⁶, the land use pattern is also a reflection of informalities. Self allocated land system and self built housing system are predominant in the city with large scale consequential compromise of road infrastructure standard and delivery. Detailed observation of the city architecture revealed that the navigation in many communities can be most possible through low occupancy transport

equipment and this explaines the proliferation of informal mini buses (danfos), motorcycles (okadas), tricycles (keke marwas) as major components of transportation in Lagos. The scenario leaves about 52 percent (in numbers: 2,275,837) of the households in Lagos with a lack of access to adequate transportation.⁷ Correction of land use pattern in many communities to accommodate expanded transport infrastructure often go along with forced evictions.

Lack of robust platform to attract organised transport companies

Organised private transport companies are still grossly underrepresented within the city of Lagos. There is no vibrant local or statewide transport policy or evidence of political will that could stimulate, encourage or support organised private transport companies to operate and participate in the intra-city market despite the large population and huge daily mobility demand. The existing organised private transport companies operate intercity journeys with take-off points from individually owned transport stations. Lara.ng is an example of a private initiative that is supporting the transportation system in Lagos. It is an online journey planner that gives information for both informal and formal modes of public transport, for example keke marwa, danfo bus, and okada as the informal and BRT or LAGBUS as the formal. It also includes walking times. The developers have mentioned that collecting data is a large challenge because they rely on crowdsourced information. A joint effort with Lagos State transport agencies would make this online platform more accurate and accessible to more people. Another private company that should benefit from Lagos State government support is Shuttlers. Shuttlers is a company that provides mass transit for office workers from their place of work to their homes. Shuttlers works through an app. People or companies can book seats via the app. Shuttlers is a business solution that has similar objectives to Lagos State transport policies, which promotes mass transit as a sustainable solution for transportation in Lagos. Despite the similar aims and objectives it has been difficult for the company to work with Ministry of Transport. Shuttlers founder, Damilola Olokesusi, explained that it would be beneficial to be able to work with the Ministry of Transport especially around using BRT dedicated lanes and bus stops but they have not been forthcoming to even take a meeting. Lara.ng and Shuttlers are examples of private companies using technology to provide transport solutions for Lagos, however they are not recognised by Lagos State government. Further they are not supported, even though the solutions provide better accessibility and ease of travel for the large demand in Lagos State.

Weak modal integration

The current transport modal network is not proportionally integrated. At the existing rail stations, there is lack of cohesiveness, orderliness and timeliness on the receptacle road transportation, where available. Rather than imposing signage that should provide guidance to the land transport station, arriving visitors and passengers at the city airport are greeted by multitude of individuals struggling to get passengers for their parked vehicles. There is an obvious disconnection among all the modes within the city save for Ikorodu water transport terminal that offers a parkd-and-ride system.

Non-standardisation of fares

Within the city, the transport fare depends on certain factors such as the bargaining power of the passenger, the weather condition in the city, period of the day, condition of the vehicle, and the mood of the operator. There is no fare standardization within the system except for the recently introduced BRT and LAGBUS systems which currently accommodates less than 3 percent of daily mobility in the city.

Low coverage of petroleum pipe network

The city of Lagos hosts petroleum product depots and provides warehouses for different organisations operating in the downstream sector of Nigeria's oil and gas industry. Apart from the large concentration of petroleum depot facilities in the city, especially in the Apapa axis,

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Lagos Bureau of Statistics, *Household Survey Report* (2012; Ministry of Economic Planning and Budget).

Picture 2.9 Lagos-Badagry railtrack at Odunlade

Picture 2.10 Adeleye St. Off Badagry expressway, Apapa Iganmu



(Source pictures 2.9-2.12: Urban Mobility Research Group, Heinrich Böll Stiftung, 2015)





Picture 2.13 Ojota pedestrian bridge







(Source: Lagos Urban Network, 2017)

there is a low pipe network coverage connecting the city to other parts of the country leaving the transportation of petroleum products to petroleum tankers. For most parts of the year, the massive concentration of trucks and tankers in Apapa contributed to the rapid deterioration of roads and the de facto shut down of the Apapa transport axis from other parts of Lagos. This leads regularly to the diversion of traffic to arterial roads in the city including the three bridges over Lagos lagoon that are already congested. The Lagos lagoon has 3 bridges to serve more than 23 million people while Thames River in Greater London has 34 bridges serving more than 8 million people.⁸ Different models have been used for road development in Nigeria and recently a new chapter was opened with the Federal Government signing an agreement with the private company Dangote Group to reconstruct the Apapa-Oshodi-Oworonshoki expressway and three ancillary routes. The Federal Government announced in September 2017 it would be granting a 10-year tax incentive to the Dangote Group after the company agreed to rehabilitate the Apapa-Oworonshoki Expressway. However, this was debunked by the Group Executive Director, Strategy, Portfolio Development and Capital Projects, by saying that with the government not paying for the road the firm will use its tax to offset the payment over a period of three years. 50 per cent of the total cost of the road will be removed from the company's proposed tax on the first year after completion, and 25 percent of the cost for two years.⁹ After designs were agreed with the Federal Government, Dangote announced that start of construction in November 2017 and the opening of the refurbished road was promised for end of September 2018. The tax incentive given to the Dangote Group has caused some controversy with stakeholders raising questions around transparency.

Lack of maintenance strategy and capacity

In the intra-city transport market operations, there is one common factor both in the formal and informal sectors, which is the lack of maintenance. This is clearly reflected in the infrastructure and mobility equipment. This often compromises the passengers' safety and security, and contributes to the aesthetic depletion of the city.

Inefficient use of overhead pedestrian bridges

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New pedestrian bridges have been constructed, namely at Ojota and Berger. The pedestrian bridge at Berger is part of a larger transport hub that includes, lay-bys and a bus park. Despite the continued improvements and building of pedestrian bridges in the state there is a long standing disconnect between pedestrians and overhead pedestrian bridges. As the inadequacy of the bridges in different parts of Lagos State, the available ones are rarely utilised. In many cases, pedestrians have to be compelled by different law enforcement agencies to use the bridges. The crossings of highways by the pedestrians reduce the free flow of traffic on major roads and increases the risk of traffic induced accidents.

"London's population hits 8.6m record high", BBC News, http://www.bbc.com/news/uk-england-lon don-31082941, accessed on January 5, 2016.

Alade. B (2017) "Dangote Group explains tax concessions on infrastructure projects from government", The Guardian, https://guardian.ng/business-services/dangote-group-explains-tax-concessions-oninfrastructure-projects-from-government/, accessed on January 14, 2018. The 2000 European Commission (EC) communication on the transport sector in sub-Saharan Africa considered that governance is a prerequisite to sustainable development of the sector and analyzed governance in the transport sector through the lens of the three dimensions:

- The first dimension of governance is about rules, interests, resources and power and how power is used and how institutions function;
- The second dimension is about key principles such as participation, inclusion, transparency and accountability;
- The third dimension is that governance encompasses several themes that impact on the state's ability to serve its citizens: democratization, human rights, rule of law and administration of justice, role of civil society, public administration reform and decentralisation.¹

Note: All the policies impacts' assessments are the inferences by the researchers.

A. Lagos State Development Plan 2012-2025

There are different types of instruments governing transportation in Lagos, but they are yet to be coalesced into a single transport policy. Notwithstanding, the Lagos State Development Plan 2012-2025² provides a clear direction of government in the transport sector. Chapter 8.3 of the plan outlined the state's aim, objectives and targets for the transportation as follows³:

i. Aim of the policy

The aim of the development plan is to create a safe, reliable and efficient integrated and multimodal transportation system for sustainable socio-economic development of Lagos State. The strategy will ensure efficient and affordable movement of people and goods, link people to jobs and markets leading to economic competitiveness of the state, lowering of the cost of production, increased productivity, improved health and time efficiency.

ii. Policy objectives and outcomes

- There is increased productivity through the provision of standard and ecofriendly transport services in Lagos State;
- There is reduced average commuting time and cost of transportation leading to overall economic growth of the state and social well-being of the citizenry;
- There is increased access to basic social services (education, health, housing, etc) due to improved access to transport infrastructure;
- There is increased participation of all stakeholders in the transport sector;
- There is capacity in the transport sector to enable it deliver on its mandate.

iii. Policy targets

• Access and affordability

- By 2025, 90 percent of population lives within 15mins walking distance to public transportation;
- The capacity of the public transport sector increases from handling 7 million passenger trips per day to 12 million passenger trips per day by 2025.
- 1 A Christie *et al*, "Transport governance indicators in Sub-Saharan Africa" in *Sub-Saharan Africa Transport Policy Program (SSATP)*, working paper, (2013): 95.
- 2 Lagos State government, *Lagos State Development Plan 2012-2015* (2013; Lagos State Ministry of Economic Planning & Budget).
- 3 *ibid*, 161-166.

Efficiency

- The average travel time to any part of the state is cut down by 50 percent by 2025;
- The bus public transport network density increase from 0.6km/1000 population to 1.5km/1,000 population by 2025;
- There is a 10 percent fall in the number of private cars on the road year-on-year;
- There is by 2025, a 50 percent drop in accident rate on roads;
- There is by 2025, a 70 percent reduction in noise pollution especially from unnecessary use of the horn;
- There is a 10 percent reduction per annum on negative emissions from vehicles especially buses.

Integration

 A 60percent road, 20 percent rail and 20percent water public transport modal split achieved by 2025.

Management

- There is by 2025, a 50 percent fall in the numbers of unroadworthy on the Lagos State registered vehicles on the roads;
- There is by 2025 a 70 percent increase in Traffic System Management awareness by the public;
- There is by 2025, a 40 percent fall in traffic offences;
- There is by 2025, a 100percent registration of public transport operators;
- By 2025, there is a well-articulated and adopted transport policy and strategic management framework.

Policy and programmes

iv.

Access and affordability

- Rehabilitate and repair existing transport infrastructure before embarking on new infrastructure;
- Review transport network maintenance regulations and policies to identify potential barriers to implementation and areas which require

Map 2.14 Proposed integrated transport system for Lagos State



(Source: Lagos State Ministry of Transportation, "Strategic Transport Master Plan" (2015))

reinforcement of regulatory framework;

- Entrench a culture of maintenance and improvement of transport systems among all the transportation agencies;
- Identify and respond to training requirements for maintenance from local authorities and contractors.
- Efficiency and impact
 - To improve safety, retrain drivers involved in public transport.
 - Continuously engage and educate the public on transport network usage safety e.g. driving behavior and attitudes especially at road junctions;
 - Publish and make easily available to the public safety and security transport standards;
 - Improve road markings and signage as well as installation of crash prevention guidance (CPG) and intelligent transport systems solutions;
 - Develop and implement a program for campaigns raising public awareness on the need to reduce the adverse environmental impacts of car use and to demonstrate to businesses, operators, schools, communities and individuals the part they can all play in meeting this challenge;
 - Create and implement mechanism enforcing strict adherence to environmental standards and benchmarks.
- Integration
 - Implement an integrated transport system where the various modes of transport (buses, trains, ferries) are brought together in terms of location, timetabling, ticketing and information. The integrated plan builds on from the existing initiatives which have proved successful;
 - Write new policies that will make transportation friendly, convenient and



Map 2.15 Water routes Lagos State

(Source: Lagos State Ministry of Transportation, "Strategic Transport Master Plan" (2015))

affordable to the commuters. This will be accompanied by improved traffic management and road safety through, among other things, construction of median barriers, provision of road signs, installation of intelligent road studs, rehabilitation and upgrading of traffic signal lights and improved road junctions;

 Develop an integrated transport policy and a fully autonomous publicprivate agency for the regulation and management of the transportation sector.

Features of the policy will include:

- Enhanced connectivity across the state to leverage the concentration of people and goods;
- Increased choice of travel for all stakeholders;
- Rules that govern the transportation system and ensure that all transport system designs and construction meet safety and security standards and facilitate the development of effective and efficient interventions to improve safety;
- Standardization of transport systems to reduce adverse environmental impacts e.g. inclusion of aesthetic transport systems that preserve the natural environment and cultural heritage;
- Creation of appropriate mechanisms to ensure participation of the transport stakeholders in the state infrastructure planning and development process.

v. Policy and management

Review and prepare a new transportation master plan. The review and planning exercise will:

- Identify limitations in the existing strategies to meet current and future state transport needs;
- Coordinate land use and transport plan making bodies, and transport operators for participation in planning meetings;
- Create a framework for a co-coordinated approach between land use and transport;
- Standardise transport systems to improve efficiency and reduce the adverse environmental impacts.





(Source: Lagos State Ministry of Transportation, "Strategic Transport Master Plan" (2015))

vi. Training and capacity development

LASG will encourage the development of transportation-related expertise and research in the public, private and academic sectors. It will create an institute for transport system research and development planning. The institute will complement the outputs from the universities and technical colleges by providing on the job in-service training.

vii. Financing

The financial demands of the sector are far in excess of the state's planned commitments or capacity to commit to the sector. The challenge is to find innovative ways of engaging other stakeholders in bridging the gap. LASG needs to develop strategies to encourage investment across transport modes in an integrated way to achieve better coordination. One of the strategies that are gaining momentum is developing strategic partnerships through private-public-partnerships (PPPs).

Some of the potential projects that are possible through this approach are:

- The rapid rail transit system (Red and Blue Line networks) which can be built through a Design, Build, Operate and Transfer (DBOT) model. LASG could inject capital on building the tracks, bridges and stations and the private sector can focus on rolling stock, depot equipment, communication and control equipment;
- Bus rapid transit where the public sector can concentrate on depots, roads rehabilitation, bus shelters, lay byes, street lighting and fencing terminals. The private sector can then concentrate on rolling stock and working capital;
- Water transport systems where the public sector can concentrate on the construction of jetties, access routes, safety regulation and security. The private sector can build terminals, purchase boats and operate the scheme;
- Roads and highways where the private sector can recover its investment through toll gates.

Box 2.17 Assessment of the impacts on transportation in Lagos State

The Lagos State Development Plan 2012-2025 formulated in 2012 (with term commencement in 2013) provides clear aim, objectives and targets for the transportation sector in Lagos State, but is not explicit on the modalities for the achievement and settlments of some of the major and fundamental problems. Data is important to measure the year on year achievements in getting to the goals laid out in the plan, therefore it is important to have an agency (public or private) that is collating all the data in to reports year on year for all transport related agencies. This report should also be made public for accountability and transparency purposes. Considering the fact that Lagos State has over 70 percent of informal settlements, achieving a target of 90 percent of the population to live within a 15 minutes walking distance to public transportation suggests massive infrastructure delivery and consequential demolition of homes, businesses and displacement of families. The strategies for the achievement of this target remain imprecise in the absence of the resettlement policy or any support mechanism for the potentials victims of transportation improvement. Aside the current confiscation of motorcycles (okadas), there is no clear exit model for the operators. Similarly, the plan is conspicuously silent on the future of minibuses (danfos), that constitute about 72 percent of the road mobility and three-wheelers (keke marwa). With the recent announcement of introducing 5000 new commercial buses to replace mini-buses (danfos) it is clear that the exit modal for existing informal public transport modes are reactionary to transport projects being implemented. This does not allow for good planning or enough notice to the stakeholders affected. In reducing the emission and noise pollution and in checking the vehicles' road worthiness, types, specifications operating standard, maintenance and consumer protection among other industry procedures, there is a need for a transport

Box 2.17 (continued) Assessment of the impacts on transportation in Lagos State

regulatory institution as identified in the plan. Unfortunately, the establishment and operation of this institution, which ought to prescribe standards and rules before projects are commissioned and become operational, is not given priority. The training and capacity development outlined in the plan appears to be a top cadre approach ignoring informal operators in the sector who may play significant roles in the formal sector if properly engaged and trained.

B. Lagos State Strategic Transport Master Plan

The plan developed by the Lagos Metropolitan Area Transport Authority (LAMATA) is a strategic long-term path aimed at transforming the Lagos transport sector beyond its current challenges. The plan identifies possible transport infrastructure and services required for meeting travel demand by 2032, 7 years above the projections of Lagos State Development Plan 2012-2025.⁴

i. Vision and aim of the policy

The vision for transport in Lagos as envisaged in the plan is one which supports the establishment of a modern integrated multimode transportation system that matches standards of a world class megacity. The plan also aims to improve the operations of the Lagos freight transportation system. The implementation of the plan hinges on major reforms based on 25 strategic decisions under the following objectives:

ii. Plan objectives

Increasing transport choices for all users:

- Developing a comprehensive Mass Rapid Transit (MRT) systems covering the whole metropolitan area.
- Developing the waterways network in full integration with land-based MRT systems.
- Improving road network efficiency by removing impediments such as bus parks and markets from right of way (ROW) and installing modern Intelligent Transport System (ITS); and
- Introducing walking and cycling facilities to promote Non-Motorised Transport (NMT).

Introducing an integrated transport system:

- Integrated fare and ticketing system: Installing modern electronic ticketing systems;
- Integrated information and communication system: Introducing a unified passenger information system for all modes of transport;
- Transport authority: Designating a single authority to design, contract and enforce operations of the integrated transit system, and;
- Coordinated services and timetables: Contracting qualified private sector firms to operate various multimode routes within the integrated transit network with strict adherence to service coordination policies.
- Making the transit system attractive, convenient, affordable and accessible:
 - Introducing variety of seasonal tickets that can be used on all modes,
 - Providing dedicated transit routes to reduce travel time and operating costs;

- Eliminating competition between buses heading for same destination (called in-the-market competition along same corridor);
- Improving passenger waiting facilities at bus parks, bus stops and transfer points.

- Reducing urban transportation induced emissions:

- Gradual introduction of modern rail, bus and boat vehicles that will replace existing moribund fleet;
- Promoting NMT and creating public awareness about the benefits of this unutilised mode;
- Improving vehicle emission standards and enforcing air pollution regulations.

Optimising usage of current road network:

- Removing bus parks, street traders, markets and other hindrances from all transit corridors;
- Constructing and managing the major road network to improve movement of passengers and goods including the construction of a high standard full ring road system around in Lagos State;
- Introducing traffic signals at most at-grade intersections and establishing a modern traffic control centre as hub for managing flows at these intersections. On-street parking on the Islands must also be regulated and enforced with introduction of paid parking system, equipped with modern payment technologies;
- Installing state-of-the-art Intelligent Transport System (ITS) along the arterial system to detect and manage real time events efficiently.

Integration of land use development (urban physical planning) and urban transport planning:

- Introducing mandatory traffic impact assessment for major land use development projects;
- Focusing future developments along main transit corridors;
- Promoting NMT especially inside communities through the development of pedestrian and bicycle master plans, and;
- Developing alternative activity centres that will reduce need for longdistanced motorised trips.

Securing long term financing of investment plan:

- Developing an economically viable investment plan based on a robust cost-benefit analysis procedure;
- Actively procuring private sector financing through PPP schemes.

• The master plan recommends the following transport infrastructure:

- 6 rail lines;
 - 1 monorail line;
- 14 BRT routes;
- 26 water transport routes;
- 3 cable car lines;
- Several road improvements and traffic management initiatives to improve passenger and goods flow movement in the city.

Box 2.18 Assessment of the impacts on transportation in Lagos State

The strategic plan appears to be action oriented, detailed and tailored to resolve the transportation problems in Lagos. It focuses more on the infrastructure delivery, the quality of services and the funding mechanism. Its implementation has led to the emergence of three (4) Bus Rapid Transit (BRT) corridors (TBS-Ikorodu, Berger-TBS, Oshodi-Abule Egba and Lekki axis) and the construction of one (1) rail (Blue Line; Ojo-Marina). In 2013, the United Nations environment program named Lagos BRT as one of the 30 innovative and visionary approaches to sustainable infrastructure development in the cities across the world.

New water routes such as Bayeku-Ajah, Ikorodu-Lekki have been charted and are operational while road sector has equally received attention in terms of improvement and extension. New infrastructure projects include the Oshodi Transport Interchange and the Ikeja Bus Terminal. Both will be built to replace the bus parks scattered in their surrounding areas respectively and are part of a larger transit plan that links the state through a bus network. The Oshodi interchange is a 70,000 square metres project that includes a shopping mall, three multi-floor bus terminals, accessible walkways, and parks. To build the project, in January 2016, two large markets (Mosafejo and Owonifari Markets) and homes were demolished affecting residents, home owners, traders and businesses. Vanguard Newspaper reported that traders at Owonifari Market were in negotiations with Lagos State government for several years about relocating to Isopakodowo market, a newly built market also within Oshodi Local Government Area and that a stall would cost NGN 5000 per month.⁵ However, the market's Public Relations Officer didn't expect the demolition and stated that due to a court injunction the market should not have been demolished and that market executives had not met with government officials before the demolition. Some displaced traders refused the move because they believed the new market was not big enough to accommodate them. The traders at Mosafejo Market confirm that they have been compensated, however they declined declaring the monetary amount.

Thes infrastructure projects go hand in hand with the Bus Reform Initiative, a 3-year plan (2017-2019) aimed at improving public transport in the state. The buses will have two capacities, 70 seater and 30 seater. The initiative will be partly public funded. Buses will also be available for franchise with a minimum of 50 buses. The danfo drivers are to be absorbed in to the new system.⁶ Lagos State government, through press releases have proffered options of how this can be done to ensure drivers will not be rendered jobless. The options proffered are for danfo drivers to gain skills and loans through the Lagos Employment Fund and for the Nigeria Union of Road Transport Workers to apply for a franchise of the new bus system through loans given by the Lagos State government.7 It is hard to identify how this will be achieved as all the information on the Bus Reform Initiative is via media and press releases as official documents or plans are yet to be made public. The lack of communication has caused speculation, fear and agitation from danfo drivers in Lagos. When speaking to Daniel Sunday, who has been a danfo driver for 10 years and owns his bus, he mentioned that he was made aware of the removal of danfo buses via his community chairman of Oshodi/Isolo Local Council Development Area but is unaware of how and when this will affect him. He was asked to submit his telephone number and name to be considered as a driver of the new buses, which he did. He drives the Oshodi-Apapa/ Mile 2 route

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⁵ Akoni. O (2016) "Why We demolished Oshodi Market – LASG" Vanguard, https://www.vanguardngr. com/2016/01/we-demolished-oshodi-market-because-arms-ammunition-were-recovered-in-the-marketlasg/ accessed April24, 2018

⁶ Lagos State government, "DANFO: WE'LL KICK-START BUS REFORM INITIATIVE WITH N30BN- AM BODE," https://lagosstate.gov.ng/blog/2017/03/12/danfo-well-kick-start-bus-reform-initiative-with-n30bn-ambode, accessed October 30, 2017.

T Ogunbiyi, "LAGOS AND THE DANFO QUAGMIRE, https://lagosstate.gov.ng/blog/2017/03/03/lagosand-the-danfo-quagmire, accessed January 12, 2018.
Box 2.18 (continued) Assessment of the impacts on transportation in Lagos State

and is concerned and wishes for more information so the change is not a shock to him and his family. Technology and smart systems are mentioned in the Lagos State Strategic Transport Master Plan and in September 2017 the Lagos BRT App was launched. The app allows to plan trips via the BRT in real time, gives up to the minute information on bus arrival and departure times and allows to bookmark the riders most important journeys. The app is available on android and iOS, however it is not rated, showing that not many people are using it. This may be because it has not been publicised efficiently, people have not prioritised this as something to use or the majority of people who use the BRT do not have smart phones. In 2015 the former Executive Vice Chairman (EVC) of the Nigerian Communications Commission (NCC), Dr. Eugene Juwah, claimed that smartphone penetration in Nigeria was 12 per cent. Experts say that this is likely to be true because there was significant growth in smartphone sales in 2014 and 2015. There are no figures for the percentage of men and women or age group that use smartphones in Lagos or Nigeria, however there are statistics on Facebook users in Nigeria. This can help to understand who is online. Of the total users on Facebook, 36 per cent are female and 64 per cent are male. The largest group of users are between the ages of 25 and 34. It is likely that the percentage of users in Lagos is higher than that of Nigeria, however this is still a small number of the total population and will usually exclude the lower income group who may not be able to afford a smartphone and/or data.

Despite of the robust provisions and milestone achievements of the Lagos State Strategic Transport Master Plan, there are gaps which the plan did not cover. For example, under the emission reduction strategy, the plan specified the gradual introduction of modern rail, bus and boat vehicles that will replace the existing moribund fleet, but it was conspicuously silent on how this will be achieved and how it will affect, influence or absorb the operations of the informal sector operators such as danfos, keke marwas, okadas and informal boats. Further, the plan did not recognise petroleum pipeline network planning, development and management as a strategic factor for success of transportation in Lagos; hence the fundamental problems with the traffic bottleneck in Apapa may not be resolved any time soon. Depot relocation will relocate the problems if the pipeline network inadequacy is not addressed. Also, the slow rate of project implementation under the plan may reduce significantly the level of successes to be recorded at the end of the plan period in 2032.



Map 2.19 Bus Rapid Transit routes with proposed extensions in Lagos State

(Source: Lagos State Ministry of Transportation, "Strategic Transport Master Plan" (2015))

C. Lagos Road Traffic And Administration Law 2012

The law cited as Lagos Road Traffic Law 2012 expanded the responsibility of the Lagos State Traffic Management Authority (LASTMA) on control and management of vehicular traffic in the state to include:

- (a) Prohibition or restriction of the use of any specified highway by vehicles of specified class or description;
- (b) Prohibition of driving or propelling of vehicles on any specified highway otherwise than in a specified direction;
- (c) Prohibition of vehicles parking or waiting on any specified highway;
- Prohibition or restriction of the use of sirens, and the sounding of horns or other similar appliances either in general or during specified hours or in respect of specified areas;
- (e) Regulation of the conduct of persons driving, propelling, being in charge of or riding any vehicle or animal on a highway;
- (f) Application of breath testing, blood and urine specimen testing devices on any driver to detect whether he is driving under the influence of alcohol, or drugs;
- (g) Demand of a psychiatric evaluation of any person who drives against the normal flow of traffic or who fails to comply with any of the provisions of this law, if in the opinion of any officer of the authority such an evaluation is necessary for the purpose of determining the person's ability to operate a motor vehicle provided that such shall be at the driver's cost; and
- (h) General regulation of traffic on public highways.



Picture 2.20 Suru Alaba rail station, Ojo Road, Amuwo Odofin

(Source: Urban Mobility Research Group, Heinrich Böll Stiftung, 2015/ 2017)

Picture 2.21 Oshodi Market demolished



(Source: Deji Akinpelu, 2016)



Picture 2.22 Oshodi Transport Interchange under construction

(Source: Lagos Urban Network, 2017)

Table 2.23

Prominent provisions in the Lagos Road Traffic Law 2012

		Provision
3 (Control of motorcycles and tricycles)	(1)	No person shall ride, drive or propel a cart, wheel barrow, motorcycle or tricycle on any of the routes specified in schedule II to this law.
	(2)	No person shall operate a motorcycle or tricycle without a rider's card issued by the Lagos State Motor Vehicle Administration Agency.
	(3)	No person shall operate a motorcycle or tricycle either as a rider or a passen- ger without wearing a standard protective crash helmet as may be prescribed under the regulations to this law.
	(4)	No motorcycle operator shall carry more than one (1) passenger at a time, provided that a pregnant woman, a child below the age of twelve (12) years, or an adult with a baby or heavy/large load placed on the head or which obstruct normal sitting on the motorcycle shall not be carried as passenger.
	(5)	Any person who fails to comply with any of the provisions of this section com-
	(i)	mits an offence and shall be liable on conviction to – imprisonment for a term of three (3) years or render community service in accordance with the provisions of section 347 of the administration of the criminal justice law of Lagos State; and
	(ii)	have his vehicle forfeited to the state.
	(6)	Where a rider is convicted of an offence under subsections (1), (3) and (4) of this section, the passenger shall also be liable to the same penalty, provided the passenger is not a child.
	(7)	As from the commencement of this law commercial motorcycles shall only operate between the hours of 6.00 a.m - 8.00 p.m within the state.
7 (Penalties for neglect of traffic directions)		Where an officer of the authority is for the time being engaged in the regulation of traffic on a highway, or where any traffic sign being a sign for regulating the movement of traffic or indicating the route to be followed by vehicle has been lawfully placed on or near a highway in accordance with the provisions of this law, any person driving or propelling any vehicle, who –
	(a)	neglects or refuses to stop the vehicle or to make it proceed or to keep to a particular lane or direction of traffic when directed to do so by the officer in the execution of his duty; or
	(b)	drives his vehicle against oncoming traffic or fails to conform to the direction or indication given by the traffic sign, shall be guilty of an offence, and shall be liable on conviction for:
	(i)	1st offender one (1) year imprisonment and forfeiture of the vehicle to the State; 2nd and subsequent offender three (3) years imprisonment and forfeiture of the
	(ii)	vehicle to the State.
	(c)	all offenders shall have their data and biometrics captured.
8 (Removal of Abandoned Vehicles from Highway and Sides of Private Bromises)	(1)	Where a motor vehicle is stationary or abandoned on a highway or street or near private premises, any police officer, member of the task force or officer of the authority may cause the vehicle to be removed to a vehicle park if –
Premises)	(a)	the officer has reasonable grounds for believing that the location of the vehicle is in contravention of the provisions of any enactment or Regulation relating to the parking of vehicles; and

City high risk provision

Table 2.23 (continued) F		minent provisions in the Lagos Road Traffic Law 2012
		Provision
	(b)	he has reasonable grounds for believing either -
	(i)	that the vehicle is not in a condition in which it can be moved under its own power; or
	(ii)	that no person authorised to drive the vehicle is in the immediate vicinity of the vehicle.
	(2)	The owner or occupier of the premises adjoining the highway or private premises where the vehicle is stationary or abandoned shall lodge a report of such vehicle to the nearest office of the authority or to the nearest police station.
	(3)	Where the owner or occupier of premises adjoining the highway or private premises fails to make a report of a stationary or an abandoned vehicle to the office of the authority or the nearest police station within 48 hours, the owner or occupier of such premises shall be guilty of an offence and on conviction be liable to a fine of twenty-five thousand naira (25,000 NGN).
	(4)	Where the vehicle was found not to have been abandoned but left on the highway for an unreasonably long time, the owner shall bear the cost of towing the vehicle to a vehicle park as prescribed in schedule I to this law and shall be guilty of an offence and on conviction shall be liable to a fine of fifty thousand naira (50,000 NGN) or to a term of imprisonment for three (3) months or both.
	(5)	Where the owner of an abandoned or removed vehicle fails to claim the vehicle for a period of one (1) month, the ministry shall publish a notice of its intention to dispose the abandoned or removed vehicle at the end of one (1) calendar month from the date of such publication in the state official gazette and one national newspaper.
	(6)	The ministry shall, at the end of one (1) month's notice, dispose such vehicle.
9 (Provision of vehicles parks by the state)	(2)	The authority shall not be under any duty to protect removed vehicles otherwise than as mentioned in paragraph (c) of subsection (1) above and in particular shall not be under a duty to protect removed vehicles from damage attributable to sun, rain, wind or other physical conditions.
17 (Disposal of removed vehicle, etc.)	(1)	Where any removed vehicle is not claimed in accordance with section 16 within a period of one (1) month, the removed vehicle shall be vested to the state government.
	(4)	The state government shall not be under any duty to protect any removed vehicle and, in particular, shall not be under a duty to protect a removed vehicle from damage attributable to sun, rain, wind or other physical conditions.
30 (Owner of commercial vehicle liable in certain cases of overloading and exceed- ing speed limit)		Where a person is convicted of an offence in respect of the overloading of a commercial vehicle or trailer or of driving a commercial vehicle at a speed exceeding that provided by law, then in addition to the person driving the vehicle at the time of the commission of the offence, if such person not being the owner of the vehicle, the owner of such vehicle shall also be liable, and may be charged accordingly. Provided that such owner shall not be convicted of the offence if he can prove to the satisfaction of the court that no act or omission on his part was contributory to the commission of the offence.
36 (General penalty)	(1)	Any person who fails to comply with any of the provisions of this law for which no specific penalty is provided commits an offence and shall be liable on conviction as follows –
	(a)	as a first offender to a fine of twenty thousand Naira (20,000 NGN);
	(b)	as a subsequent offender to a fine of thirty thousand Naira (30,000 NGN) or to imprisonment for a term of three (3) years or both.

Table 2.23 (continued)	Prominent provisions in the Lagos Road Traffic Law 2012
(2)	In addition to any penalty that may be provided for failure to comply with any provision of this law or the Lagos State Traffic Management Authority law, where such failure occurs, the vehicle may, upon conviction, be forfeited to the state.
(1)	The commissioner may in accordance with the Regulations Approval Law Cap. R5 Vol. 6 Laws of Lagos State 2003 make regulations to-
(m)	empower any authority to –
(i)	fix time table for stage carriages on any route;
(ii)	determine stopping times at stands and stopping places;
(iii)	determine the days and hours during which stage carriages may ply for hire on any specified route;
(iv)	require the fitting to hackney carriages of meters or other similar devices to indicate authorised fares;
(v)	provide for the additional examination of hackney and stage carriage drivers before the issue of a badge.

(Source: Lagos Road Traffic Law, 2012)

Picture 2.24 Oshodi, Lagos State



(Source: Urban Mobility Research Group, Heinrich Böll Stiftung, 2015)

Box 2.25 Assessment of the impacts on transportation in Lagos State

The Lagos Road Traffic Law 2012 has the intention of controlling and managing the vehicular traffic in Lagos State but rather than being a measure towards resolving the transport problems it remains a stop gap. Many of the provisions of the law portray Lagos as a city under emergency rule where citizens are in extreme disagreement with government institutions. The provisions that offenders will forfeit their vehicles to the state which will in turn dispose the vehicle, after one month, failed to take into consideration the precarious poverty index of the residents of the city. In the process of using the law to outlaw the operations of motorcycle taxis (okadas) and tricycles (keke marwa), the situation became a keen struggle between the policy's declared illegality and the livelihood of the citizens.

Since the commencement of the implementation in August 2012, it has set a situation whereby the city and its residents are in regular combat mode on transportation with high level of mutual suspicion rather than increase the level of mutual collaboration. The law has continued to provoke variance between the state and the residents. Its implementation led to a protest by members of the Nigerian Bar Association, Ikeja Branch, over the incarceration of a member at Badagry prison in May 2013, on allegation of traffic offence. The protest led to the withdrawal of the case against the charged member by the state, as a Guardian article reported on May 15, 2013, 7. The other alleged traffic rules violators were not so provident.

Section 38 of the law provided that the commissioner may empower any authority to fix the time table for stage carriages on any route, determine the stopping times at stands and stopping places; and determine the days and hours during which stage carriages may ply for hire on any specified route among other responsibilities. This provision shows the introduction of the confusion into transportation in the city where any agency can be called upon to deal with the sensitive and intelligence part of transportation.

Despite the enormous demand from the residents on compliance, the law does not recognise the transport infrastructure especially the adequacy, the conditions and the quality of the roads as part of the traffic control and management problems as it completely exonerates the state and its officials from any compulsion to make this available to the residents. The law missed an opportunity to empower residents to demand accountability on damaged roads for long period of time. It seeks to curb the excesses of the informal operators and other classes of vehicles by prescribing jail term and exorbitant fine as penalty for traffic offence; however, it presented Lagos to any discerning investor as a potential conflict point between the city and its residents.

If the city wants to imbibe the principles of contemporary urban planning and inclusive governance, there is need to urgently amend the Lagos Road Traffic Law 2012.

D. Draft Non-Motorised Transport (NMT) Policy

Over the years Lagos State has seen a growth in private motorised transport while trying to improve public transport availability through the BRT, the construction of the LURT and expansion of water transport. The public transport growth efforts are yet to cater for the majority of the population. The number of registered motor vehicle have more than tripled from 2002 to 2012.

The growth in private motorised transport is potentially dangerous to the most vulnerable population as well as the environment. The rise in motor vehicles increases the risk of traffic accidents and deaths, especially to pedestrians and cyclists. It also impacts on public health by discouraging physical activity as well as the increasing noise and air pollution. The concentration of road based transport also reduces safe public spaces for children and adults alike.

In an attempt to improve mobility, accessibility for all and improve safety and reduce pollution Lagos State government recognises that it is necessary to develop programs and infrastructure designed to support and grow walking, cycling and the use of public transport. The draft Non-motorised Transport Policy focuses on NMT design, NMT management and making optimal use of resources by:

- Making walking and cycling safe and attractive
- Providing high quality public transport
- Stabilising and/or reducing the use of Private Motorised Vehicles

NMT Policy

The draft policy document is divided in to eight sections. The first five sections detail the issue with transport in Lagos and how a focus on NMT can help to improve safety, accessibility, congestion and pollution. Section six details the policy, as explained below. Section seven details design standards and the last section is a list of definitions.

The policy identifies Lagos State government as the leader to push a paradigm shift from current urban transport planning to focus on NMT and sustainable urban transport by issuing policy guidelines and instructions to LSG engineers, administrators, and elected officials. Working with enforcement agencies Lagos State government will carry out a public information campaign. Lagos State government will also offer financial incentives to businesses or organisation that encourage employees, customers, or the general public to travel by NMT modes (or public transport) by providing soft and hard infrastructure.



Vision

The NMT vision states:

"Lagos will be a city with a general sense of well-being through the development of quality and dignified environment where people are free to walk and cycle; equitable allocation of public space and infrastructure; and access to opportunities and mobility for all residents."

This will be done by:

- Enabling equitable access for all by providing non-motorised transport (NMT) and public transport facilities that will promote a changed culture that accepts the use of walking, cycling, and public transport;
- Optimise the use of resources such as space, funds, time, and energy, pushing investment to NMT and public transport by encouraging dense, compact, and mixed-use development that contributes to shorter trips;
- Improve road safety and personal security;
- Reduce local and global environmental impacts of Lagos's transport system;
- Enable community participation by involving local residents, businesses, and other stakeholders.

Goals

By creating a safe and pleasant network of footpaths, cycle tracks, greenways, and other facilities, Lagos State government aims to increase the use of walking, cycling, and public transport. There are 5, 10 and 15 year outcomes that relate directly to the vision and goals.

Outcomes	5-year horizon	10-year horizon	15-year horizon			
Increased share of sustainable modes (walking, cycling, and public transport)	At least 25 percent of the final goal	At least 75 percent of the final goal.	The mode share of walking and cycling will increase to at least 50 percent of all trips, and remain at or above this level. Publi c transport and paratransit trips will constitute 90 percent of all motorised trips.			
Reduction in private vehicle kilometres travelled (VKT)	VKT by PMVs are no more than 20percent above baseline levels.	VKT by PMVs are no more than 10percent above baseline levels.	VKT by PMVs are no more than baseline levels.			
Improved road safety	At least 25 percent of the final goal.	At least 75 percent of the final goal.	Fatalities are 10.0 or less per 100,000 pop- ulation.			
Improved air quality	At least 50 percent of the final goal.	100 percent of the final goal.	WHO ambient air quality norms for local pollutants will be met on at least 350 days a year. Greenhouse gas emissions will follow the overall targets set in Nigeria's Nationally Determined Contribution.			
Improved infrastructure for walking	At least 25 percent of the final goal	At least 75 percent of the final goal	footpaths;			
(Source: Source: Non-Motorised Draft Policy, LAMATA, 2017)						

Table 2.27 Outcomes for the Draft Non-Motorised Transport Policy

(Source: Source: Non-Motorised Draft Policy, LAMATA, 2017)

Outcomes	5-year horizon	10-year horizon	15-year horizon
Improved infrastructure for cycling	At least 25 percent of the final goal	At least 75 percent of the final goal	 100 percent of streets are safe for cycling through the provision of dedicated cycle tracks or traffic calming measures; Bicycle parking slots are available free of charge every 100 m on commercial streets; Development regulations mandate bicycle parking in all buildings.
Improved reach of public transport	At least 25 percent of the final goal	At least 75 percent of the final goal	• At least 80 percent of the population lives within 500 m of a public transport stop/station with a service headway of 5 minutes or less.
Improved reach of MRT	At least 25 percent of the final goal	At least 75 percent of the final goal	 At least 50 percent of the population lives within 500 m of an MRT station with a service headway of 5 minutes or less.
Emissions standards	At least 25 percent of the final goal	At least 75 percent of the final goal	100 percent of the matches or surpasses the Euro IV specification
Universal access	At least 25 percent of the final goal	At least 75 percent of the final goal	 All public facilities, NMT, public tranport, public space, public buildings—are usable by every- one, regardless of physical ability.
Management of PMV use	At least 25 percent of the final goal	At least 75 percent of the final goal	 All streets that have a parking occupancy of more than 60 percent during peak hours are brought under an IT-enabled parking management system with demandbased pricing.
(Source: Lagos Non Motorised Trar	nsport, LAMATA, 2017)		

Table 2.27 (continued) Output goals for the draft the non-motorised transport policy

(Source: Lagos Non Motorised Transport, LAMATA, 2017)

Street design, network and maintenance

Street design is very important for mobility and public space. The policy recognises the changes that will need to happen to obtain the vision and goals. Streets are described as corridors for all modes of transport that are inclusive, attractive and are sustainable and healthy components.

Principles will be used to guide the design and manage streets. The guidelines touch on safety, multiple use, street vending, land use, paved space, flooding, signage, and disincentives for private vehicles. The draft policy focuses on providing a network of complete streets and paths that give priority to NMT modes. Streets will be classified into four typologies; local streets, minor collectors, major collectors, and arterial streets, in accordance with their function, surrounding land use, and other characteristics. Stakeholders will be consulted to identify streets as special streets that limit access to personal motor vehicles. These will be:

- NMT only streets
- NMT-public transport on streets
- Greenways (paths along water bodies, lakes, marched, and parks dedicated to only walking or cycling)

A repair and maintenance programme will be instituted by Lagos State government to ensure all footpath and cycle tracks are in a state of repair and cleanliness. There will be a zero tolerance approach to encroachment and obstructions on footpaths and cycle lanes.

Table 2.28 Street typologies to be adopted to guide the design of streets according to their role in the transport network

Features	Local	Minor collector	Major collector	Arterial
Functions	Access to adjoining uses with little through traffic. Some roadside activity.	Local traffic movement and to connect to arterial streets. Moderate roadside activity.	Local traffic movement and to connect to arterial streets. Moderate roadside activity.	Meant for movement across the city. Significant road side activity.
Speed limit	15 km/ h	30 km/ h	40 km/ h	50 km/ h
Footpath clear width	2 m on at least one side; may also be designed as shared space	2 m on both sides	3 m on both sides	≥ 3 m on both sides
Cycling	In mixed traffic	In mixed traffic	May have dedicated cycle tracks if part of the cycling network	May have dedicated cycle tracks if part of the cycling network
Carriageway	3.5-5.5 m or shared space with priority to NMT modes	4.5-6.5 m, undivided; for two way movement	<5.5 m per direction	6 m (2 lanes)-9 m (3 lanes) per direction
Public transport	No	Feeder service	Feeder buses & medium frequency mainline bus services (<30 buses/h)	High speed/ high frequency bus service (≥30 buses/ h). may have dedicate lanes
Functions	Access to adjoining uses with little through traffic. Some roadside activity.	No medians; pedestrians can cross the carriageway anywhere	Intermittent median with a width of at least 1 m; Pedestrian crossings with a median refuge at least every 50 m; Median openings for vehicular movement per mitted.	Continuous median of at least 1 m width; Pedestrian crossing with a median refuge at least every 200 m; No median openings for motor vehicles movement except at intersections
Intersections		Open at all intersections	When crossing an arterial, may be open and signalised; When crossing a major or minor collector, open and unsignalised	When crossing another arterial, open and signalised; When crossing a major collector, open and signalised; When crossing minor collectors and local streets, closed except for NMT users; At least one intersection every 500 m
At-grade pedestrian crossings at intersections	Raised speed table	Raised speed table	Not raised when signalized; Otherwise, raised speed table	Not raised
Typical ROW	<12 m	12-18 m	18-24 m	>24 m
Speed Reduction measures	Speed bumps, chicanes, etc.	Speed bumps, speed table crossings	Speed table crossings	Speed table crossings; traffic signals
At-grade pedestrian crossings at intersections	Raised speed table	Raised speed table	Not raised when signalized; Otherwise, raised speed table	Not raised
At-grade pedestrian crossings at intersections	Raised speed table	Raised speed table	Not raised when signalized; Otherwise, raised speed table	Not raised

(Source: Lagos Non Motorised Transport, LAMATA, 2017)

Walking and cycling facilities

The walking facilities are described as wide footpaths, pedestrian crossings, traffic calming mechanism, and signage. The entire walking network will be accessible by all and important routes such as routes to school will be highlighted to need walking improvements. Like walking facilities, cycling facilities will be designed with the street typologies described in the draft policy document. Dedicated cycle tracks will be developed as part of a larger network on major and arterial streets with speeds greater than 30km/h. Streets with lower speed limits will give priority to NMT modes. Dedicated cycle infrastructure will be developed on the network. A city wide bike sharing will be provided to allow for last mile connectivity to mass rapid transit stations.

Public transport facilities

Streets and public spaces will be designed to be integrated with and supportive of public transport services. Accessible multi-modal interchanges between different public transport modes and NMT modes. This should create short, direct and clear transfers between the different modes of transport.

Regulations and planning

The policy states that Lagos State government will revise land use plans and building regulations to work hand in hand with the policy, creating active streets and safe environments by restricting heights of walls, ensuring setbacks meet standards, restricting street parking, and encouraging high density developments. To guide implementation of the policy Lagos State government will develop NMT plans that can be adaptable and flexible to allow for regular updates. Lagos State government will also create street design guidelines (Lagos Street Design Manual) for footpaths, cycle tracks, carriageway, BRT, and other street elements. All agencies concerned including the Federal Ministry of Transport are urged to adopt the design standards stated in the Lagos Street Design Manual. Annually data will be collected to aid the planning and monitoring of implementing the policy.

Parking, vending and traffic management

This will involve implementing a formal parking management program focused on utilising revenue collection from parking management to fund public transport and NMT improvements. The policy highlights the importance of preserving existing culturally significant street vending markets by providing supportive infrastructure. Street vending will be regulated by providing infrastructure in locations the ensure continuity of footpaths and cycle tracks. Pedestrians and cyclist mobility will be prioritised when it comes to traffic management by having timed intersections, signage, speed limits, and carry out enforcement and fines for traffic violations.

Funding institutional framework

Funding will be provided by the Lagos State government. This can be done through foreign loans, grants and investments. 60 per cent of the budget allocated to street infrastructure should go towards NMT infrastructure.

Institutional framework

Implementation will involve multiple stakeholders at state and local level, including academics, institutions and technical organisations. A dedicated "Street Design Cell" will be set up with qualified staff trained in basic transport planning and urban design principles. The "Cell" will comprise of internal staff as well as specialised consultants. The "Cell" will be responsible for:

- Planning and monitoring of complete streets;
- Detailed designing and implementation of complete streets;
- Capacity building;
- Community engagement and advocacy.

An NMT Committee will be set up and convene regular meetings. The committee will include:

- Representative from LAMATA;
- Representative from Lagos State Traffic Management (LASTMA);
- Representative from traffic police;
- Representative from Ministry of Physical Planning;
- Representative from Ministry of Transport;
- Representative from Ministry of Works and Infrastructure;
- Representative from Kick Against Indiscipline (KAI);
- Representative from Federal Road Safety Corps (FRSC), Lagos Command;
- Representative from Lagos State Safety Commission;
- Representative from non-government or community organisations, and;
- External consultants/experts with the Street Design Cell.

Discussion with potential stakeholders of non-motorised transport in Lagos

To understand how the policy will affect local businesses and people a roundtable discussion was held. Suggestions were collated to ensure the policy is inclusive, attainable, sustainable and speaks to the transport and climate resilience needs of Lagos. Members of low income communities, members of informal workers, artists, architects, landscape architects, tech based transport companies, representatives from a disability NGO and cycle advocates were present. The discussion was broken down into 8 parts, Urban Planning/Design, Infrastructure. Street Vending, Public Space, Advocacy & Awareness, Technology, Implementation and Other comments.

Urban planning and design

Although the growing population in relation to the lack of available public transport and its burden on the road infrastructure is identified, the policy does not speak on how NMT will deal with the growing population in years to come. There is a need to tackle this within the policy especially under urban planning and design to ensure long term sustainability of the policy and suggested infrastructure developments. At present the draft policy is not linked to other Lagos State policies and urban development plans. It is important this is done to ensure it fits in with the plans already made by the State government. Therefore, it should reference the policies and plans where there are obvious linkages in order to achieve a holistic vision. This will also give confidence in regards to implementation and engagement with other Lagos State government ministries and offices. Linking NMT to other modes of transport, especially public transport to create a network for better access in Lagos State is highly favourable although the section focusing solely on public transport should be removed and rather referenced to an integrated transport policy. Including public transport in the policy creates confusion as to what this NMT policy is trying to achieve. It is understood that this is a policy and not an implementation plan. However, it is important that the policy has a guideline towards the NMT network for each Local Government Area (LGA), specifies the stakeholders within local governments needed to identify the transport needs of the community and key nodes before proceeding to design the NMT network for the LGA. Below is a basic diagram explaining the development of a comprehensive NMT Network plan for Ethekwini Municipality, South Africa. Linking land-use with transport is mentioned in the draft policy but details of how this will be done in regards to NMT is not described in detail. How the policy will include the Ministry of Physical Planning and Urban Development is very important that issue of land-use with transport are addressed hand in hand. For example Lagos has become a city of gated communities. Gated estates disrupt accessibility for those without cars who have to access properties within these estates. The policy should address how walking, cycling and accessibility to such communities through public transport facilities can be integrated.

Infrastructure

The type of infrastructure needed; systematic traffic calming infrastructure and pedestrian and cycle infrastructure, all missing in Lagos so far, are identified and design guidelines are explained in the policy document. However, the details of the how implementation will happen is missing. One of the 15-year output goals states 'Development regulations mandate bicycle parking in all buildings.' More explanation is needed on how this will be added to the building regulations

of Lagos State and how it will be monitored. Apart from linking the different modes of transport through transit stops and bike sharing the policy does not include fitting public transport (rail and bus) with bike carry-on holders for commuters using bicycles. Transport in Lagos does not accommodate safe night time transportation, however this is important for a growing and economically active city where people work at night and the early hours of the morning. This policy must address how NMT will work at night, especially along the lines of security, safety and access to public transport. Greenways are mentioned in this draft policy document as one of the infrastructural NMT elements. There should be an emphasis on Greenways as a main NMT network, especially in the first years of implementation. Greenways in comparison to widening roads is less expensive and disruptive. In addition, creating wider paved roads increases the risk of flooding. Situating cycle paths close to canals and water bodies instead would increase public spaces and safety and reduce flood risk. Greenways should be mentioned in Section 7 (Design Guidelines and Standards) with example diagrams. Though it is not explicitly mentioned, the street designs in the draft policy seem to implicate that some roads will need to be widened for adequate footpaths and cycle lanes. We can therefore assume that in some areas businesses

Table 2.29

Development of a comprehensive NMT Network plan for the Ethekwini Municipality, South Africa



(Source: Ethekwini Municipality, Draft Non-Motorised Transport Plan, 2013, ILISO Consulting (Pty) Ltd)

and homes will need to be removed or moved. The draft policy has to identify guidelines on how displacement will be dealt with to ensure people are treated fairly with minimum disruption and respect of their rights.

Street vending

The policy document highlights the importance of street vending in Lagos and its economy. The policy demonstrates how locations for vending will be identified, while preserving existing markets. Planned vending zones will allow for both formal and informal vending to happen side by side. At present most other policies and state laws are against street trading which has left many street vendors exploited and vulnerable. It is therefore important to understand how the below will be overcome with the policy to ensure this does not continue:

- How will Lagos State government partner with vendors what mechanics will be used?
- What legal backing is there for informal and formal vendors to trade on the streets of Lagos?
- Which Lagos State government agency will manage vendors? A very simple reporting chain could be: Vendors-Area Vendor Leader-Local Government.

Public space

Public space is highlighted throughout the policy document starting with the NMT Policy Vision. The vision identifies the need for accessible and dignified public spaces to improve the wellbeing of the Lagos population. Public spaces are not just recreational but they will give access to opportunities and mobility. Streets are classified as public space for recreation, socialising, commerce and play. The policy identifies several methods to enhance these qualities of street spaces, e.g. slow zones. Other public spaces mentioned in the policy are parks and greenways. At present we have public spaces that are not fully utilised due to policing and the design of the city. Public space has been overlooked and designed badly within Lagos. Integrating public spaces with NMT and public transport will encourage use, safety and ease of movement. Usually, public space is used the way it is designed, for example if a park is solely a thoroughfare you will not find benches or engaging spaces such as an adult gym or play area but if a market is added people will utilise their time in the park. It is important to identify what can be done in each public space depending on the needs of the communities it serves and its integration with the NMT network. The draft policy states that a network for walking and cycling will be developed along water bodies, lakes, and marshes and these are described as greenways. The Lagos Lagoon and Marina were identified as key transport links to already existing and future transport modes, that can act as greenways. This laudable plan is contradictory to on-going constructions and future plans along the waterfront. The new developments are usually gated estates - therefore it would be mandatory to rather use the waterfront for public purposes. Bicycle utilities (e.g. repair shops, parking) have to be located along bike routes. This will create new economic opportunities, encourage the use of the designed network and allow cyclists to ride safely knowing there are utilities at every node.

Advocacy and awareness

Currently with the lack of infrastructure and safe spaces NMT has negative associations and this needs to be changed through advocacy and public awareness. The draft policy has some suggestions:

- Public information campaigns publicising the benefits of NMT modes;
- Work with national organisations to promote NMT;
- Support walks and cycling tours to appreciate the city's history;
- Create way-finding signage and network maps of different areas of Lagos;
- Create incentives for the local business community to encourage and promote NMT.

Advocacy, education and awareness should be designed depending on the different groups who will participate. The messaging used to create awareness and promote NMT should not focus on the negatives or other modes of transport but instead should highlight the positives of NMT both socially and economically. Influencers in media and politics should be identified to spear head

campaigns around NMT. A well structured and comprehensive plan for developing cycling for secondary school students should be an integral part of any long term policy for NMT. Immense education and orientation on proper cycling culture is required for any sustainable NMT policy to succeed and it is best to catch them young. Secondary school students should be educated on the multiple health and environmental benefits of regular cycling and encouraged to adopt a sustainable cycling culture. This would enable them grow into responsible and enlightened adult cycling enthusiasts that would embrace and champion NMT.

Technology

The only mention of technology is in regards to Mass rapid transit (MRT) and the use of technologies to reduce the environmental impact of street systems to manage storm water. Environmentally friendly technologies should have a larger space within this policy. Technology plays a big part in Lagos and will continue to do so. There should be an entire section that provides clear recommendations on a low key, easily applicable and inclusive technology strategy that will allow private and public sector parties to build solutions and connect to an integrated mobility infrastructure for Lagos. There should be reference to technology, machine learning, Apps, mapping, ride-sharing and interoperable systems for mobility. These are all key when thinking about moving towards a city with a NMT plan. The policy needs to be future thinking with long term goals. The policy needs to understand where Lagos is going, how people will live, work and play, and what technologies will be used in the future. At present the draft policy does not take into account future economies and how NMT can leverage on such for example online trading, online delivery of goods, and working with institutions to teach building/fixing of (electric) bikes.

Implementation

Within the policy there is an understanding that implementing, maintaining and managing a NMT network is an uphill battle. One of the major hurdles is the perception of walking and cycling. To overcome this several approaches have been mentioned within the draft policy:

- To build stakeholder buy-in the policy proposes demonstration projects with a high probability
 of success to build public enthusiasm. Feedback is mentioned as a way of learning and as
 a way to gain public buy-in. The priority list for NMT interventions include schools, locations
 with high NMT volumes and spots with high frequency of traffic accidents.
- Lagos State government has sole responsibility to manage the implementation of the NMT policy and develop adaptable and flexible NMT plans. The draft policy urges all state and federal ministries to use the NMT policy to ensure consistency of guidelines.
- LSG is to set up a Street Design Cell (SDC) to oversee detailed design, construction, and maintenance of streets. The SDC will be made up of internal staff as well as specialised consultants. In addition an NMT Committee will be formed to review proposed designs, guide implementation, and monitor performance over time. The committee includes internal LSG ministries and agencies and external institutions, experts, consultants, and technical organisations.
- There are 5 year, 10, year and 15 year goals and outcomes to help plan implementation.

In addition these approaches have been identified:

- Identify quick-win opportunities that can be pursued, in specific suburbs in Lagos where significant upfront investment in infrastructure may not be required. The policy document should identify and leverage innovative and low-cost ideas that will allow Lagos to leapfrog traditional (i.e. very expensive) urban mobility and NMT frameworks that are popular in Europe and America.
- Some Lagos State government ministries and agencies were identified to be a part of the NMT Committee, however others were not listed, for example Lagos State Parks and Gardens Agency (LASPARK). This list needs to be reviewed to ensure all LSG stakeholders are listed. The cooperation of the local governments is indispensable. It is also paramount to start engaging all stakeholders as early as possible, especially because the implementation

and success of the NMT policy relies on their buy-in and ability to perform with the right knowledge and skills.

- A robust monitoring and evaluation plan is necessary to assess if and when the goals and outcomes will be met, preferably at local government level. It can also be a great learning tool for further developments. An external monitoring body is an option to monitor and evaluate the policy.
- Enforcement is very difficult in Lagos, for example it is a regular occurrence to see cars using the dedicated BRT lanes or Kekes running red lights. The officials policing and ensuring safety on Lagos streets pick and chose who and when to reprimand. At times people who use the streets of Lagos are harassed and treated unfairly by these officials. It is important to state in the policy how amicable enforcement will take place and what actions will be taken if the policy is not adhered to both by Lagos State government officials and the general population.

Remarks

During the discussion other comments and suggestions were made that do not fit neatly in to the categories proffered by the draft policy. Below are the comments made:

- Incentives: Section 6.19.2 gives examples of how Lagos State government will incentivise local businesses to promote and encourage NMT use within their businesses. The incentives include tax/fee reduction, waiver parking requirements and utilise other financial incentives. The policy should further define these incentives to assure as much clarity as possible. This can be done by scenario planning and working with the relevant Lagos State government Ministry.
- Job creation: The economic impact of becoming a city with a NMT network is not explored within the draft policy document. NMT will create jobs around engineering, mechanics, digitalisation, park management, park maintenance and has the potential to spark off a fully developed bicycle industry.
- Insurance: Insurance is neglected completely in the draft policy and should not be. Insurance companies have a place within this new space.

Box 2.30 Assessment of the Draft Non-Motorised Policy

The Draft Non-Motorised Transport Policy is currently being reviewed by the Institute for Transport and Development policy (ITDP), the technical partner. Post review the policy will be reviewed by the Ministry of Transport and then presented to the Lagos State Executives Council for consideration and approval. Finally it will be read at the Lagos State House of Assembly for legislation and passage into Law. The time frame for the draft policy to be passed in to law is unknown. However, with elections taking place in 2019, if NMT is understood to be favourable the policy may move through the process faster. As a draft, the Draft Non-Motorised Transport Policy is successful but to ensure the policy is inclusive, attainable, sustainable and speaks to the transport and climate resilience needs of Lagos more work needs to done. Though the draft policy mentions various partners the private sector has been left out. The draft policy names Lagos State government as the main designer, manager, and implementer of the NMT policy. Other stakeholders are mentioned and do come in and out at different points but the roles are not well defined. The private sector and communities should be integral part of the whole process including advocacy and promotion. Throughout the policy there are opportunities and necessary points where different stakeholders should be mentioned and planned for. A policy is somewhat a wish list of where a city wants to get to and how it can get there. However, there has to be a realistic understanding of where you are starting from and a robust way to measure success

Box 2.30 (continued) Assessment of the Draft Non-Motorised Policy

against goals and objectives. The policy therefore needs a detailed monitoring and evaluation plan to assess if and when the goals and outcomes will be met. This will help to ensure long term application and success. Financing is always the bane of governments so it is important to consider various financial models so financing is not what hinders the progress and sustainability of NMT in Lagos. Even though it is hard to include a budget in a policy, there needs to be some budget guidelines. One of the impacts NMT can make on a city is the environmental impact. NMT has the potential to reduce air and noise pollution. It also has the capacity to reduce flooding. However, the policy rarely addresses this. More emphasis should be given on how NMT tackles the environmental issues being faced in Lagos and on how it contributes to the international climate change debate. The policy has learnings and examples from all over the world but it is not integrated with other transport and urban planning policies in Lagos State. For example the hierarchy of transport modes described in the draft includes danfo buses, however the new Bus Reform Initiative focuses on the removal of danfo buses. Also the draft NMT policy encourages street vending, but no other policy supports such. Even though the policy might be aspirational it needs to work with the agenda of Lagos State government to ensure implementation and buyin or it will not be successful. As an aspirational policy it can be used to make change, but this needs to be done prior to it becoming a real policy.

2.5 Transport Institutional Framework

There are 11 formal institutions responsible for the transportation sector created by the Lagos State government while there are 11 federal government of Nigeria owned institutions with direct and regular participation in the Lagos transportation sector. Figures 2.24 and 2.25 present the relationship among these institutions both at the state and federal levels, respectively.



(Source: Urban Mobility Research Group, Heinrich Böll Stiftung, 2015/2017)



State institutions

A. Lagos State Ministry of Transportation

The Ministry of Transportation is the primary organ for managing the transportation function sector in the Lagos State. Public transportation functions were initially performed by the transportation unit under the planning division of the old Ministry of Works and Planning until 1979 when a fully fledged Mmnistry of Transportation was created. In 1984, under the military administration, it was merged with the Ministry of Works and the enlarged ministry became known as the ministry of works and transportation. Ten years later, 1994, another military administration carved out transportation functions again from the Ministry of Works and Transportation into an autonomous Ministry of Public Transportation, which was later changed into Ministry of Transportation in 2002. The vision of the ministry is to provide safe, efficient and coordinated inter-modal transportation system for the sustainable socio-economic development of Lagos State while its mission is to ensure the free flow of the traffic and transport infrastructure development with the primary goal of achieving the stress free movement of people and goods across the state and to ease the motor vehicle administration for the growth of growth of local and foreign investments in Lagos State.¹

Assigned ministerial responsibilities

- (i) Public transportation policy direction and control;
- (ii) Supervision, monitoring and evaluation of the implementation of all transportation policies and programmes by transportation related agencies in Lagos;
- (iii) Formulation and enforcement of all relevant laws affecting transportation;
- (iv) Formulation of policies and programs to enhance the free flow of traffic in Lagos State;
- (v) Provision of road infrastructure and furniture appropriate for transportation and traffic management and control;
- (vi) Supervision and control of mechanic village, motor parks, terminals and transportation unions;
- (vii) Performing oversight function on all state of transportation related agencies;
- (viii) Establishing inter-face with other agencies of the state government on transportation and other related matters;
- (ix) Liaison and co-operation with the Federal Ministry of Transportation and transport agencies of the federal government and other states of the federation.

Objectives (broad)

- To bequeath to Lagosians, an efficient and affordable integrated public transportation system that would galvanize the economy of the state in particular and the nation in general as Lagos is the commercial hub of Nigeria;
- (ii) Embark on various policy reforms in the transport sector by investing in a safe, secure, integrated and intermodal transportation systems;
- Lagos State Ministry of Transportation, "An overview of the transformation of Lagos State transport sector" (sectoral explanatory document, 2012).

(iii) Explore other available modes of transportation such as water and rail while optimizing the use of the road mode as well as investing in the much needed human capacity to ensure sustainable development in the sector.

Objectives (specific)

- (i) Provide efficient and save integrated transportation system;
- (ii) Accelerate the improvement of traffic infrastructure;
- (iii) Introduce a rapid transit system to cope with the increasing mobility demand;
- (iv) Reduce travel time within the metropolis drastically;
- (v) Encourage private sector participation in the public transportation and associated deliverables.

Box 2.33 Assessment of the impacts on transportation in Lagos State

The focus of the transportation unit since its foundation in 1979 was the provision of transport infrastructure until 2002, when the focus began to change towards policy-making and the supervision and control of the transport sector in Lagos. Lagos State Ministry of Works and Infrastructure have the mandate to provide infrastructure projects such as roads and bridges.

The ministry has successfully facilitated the creation of 10 entities with different functions while it has led the formulation of plans and laws, among which is the Lagos State Road Traffic Law 2012. It has introduced the Bus Rapid Transit (BRT) system, the light rail project, the revival of water transportation and the expansion of road infrastructure.

Despite the achievements, transportation is yet to be affordable to the residents; an integrated modal system is yet to be achieved while quality and quantity of the infrastructure is yet to meet the demand of the residents. Also, the travel time within the metropolis has not been reduced drastically. Safety and security remain a major concern of the residents as the conditions for the organised private sector are not attractive enough.

B. Lagos Metropolitan Area Transport Authority (LAMATA)

In 1992, the "Lagos mass transit and transport systems management program" examined the fundamental problems in the traffic sector and one of it's major recommendation was the creation of Lagos Metropolitan Area Transport Authority LAMATA. LAMATA was established throuh the LAMATA Law of January 13, 2002, to coordinate transport policies, programmes and actions of all agencies at different tiers of government. The detailed framework considered functions and responsibilities of the existing Lagos State government transport-related ministries, departments and agencies, and in this context, proposed LAMATA's roles including its core functions, organisational structure, resource requirements and relationship with stakeholders. LAMATA is envisioned to provide a strategic planning platform to address long neglected transport needs of the metropolis and coordinate activities of the different executing agencies to provide a common and consistent basis for implementation. It was established as a semi-autonomous corporate body with perpetual succession (it shall continue to exist irrespective of continuity of its directors or political administration so long it is legally in existence) and a board responsible for formulation, coordination and implementation of urban transport policies and programmes in

Lagos State. The authority has the overall responsibility for transport planning and coordination in the Lagos State with the primary mandate to play a lead role in carrying out transport planning, assist in transport policy formulation, coordination of major operational and investment decisions and implementation. The law grants LAMATA several powers to facilitate the discharge of its statutory functions, including the power to levy and collect user charges in connection with the provision of its services and to collect any other tariffs, fees and road taxes as may be authorised by the Governor.

LAMATA roles and responsibilities

The law establishing LAMATA was strengthened further in 2007 to include planning and regulatory functions across the various modes of transport. Under the amended LAMATA Act 2007, the authority is empowered by law with responsibilities to carry out the following key functions in the Lagos State:

- (i) Coordinate transport policies, programmes and actions of all agencies;
- (ii) Maintain and manage the declared road network (DRN), mainly bus public transport routes of about 632 km;
- (iii) Plan, coordinate, manage and develop the supply of adequate and effective transportation;
- (iv) Recommend route planning and general location of bus shelters; pedestrian ways and bridges;
- (v) Collect and levy transport road user charges and establish a transport fund (TF) as a user reform financing mechanism to increase the low level of cost recovery in the transport sector, and to sustain the performance of LAMATA;
- (vi) Collect 50 percent of net the motor vehicle administration (MVA) revenue (specific items) to be paid directly into the TF;
- (vii) Regulate the Bus Rapid Transit (BRT) along prioritised corridors;
- (viii) Coordinate activities of the state licensing authority and all vehicle in spection units;
- Make policy recommendations on public transportation to the Governor, including mechanisms for implementation;
- (x) Prepare plans for the development and management of an integrated multi-mode public transport system.

The government envisaged that the successful performance of these functions by LAMATA will assist in poverty alleviation by increasing economic efficiency through lower transport costs and prices, and enhancement of employment and social opportunities.

Box 2.34 Assessment of the impacts on transportation in Lagos State

LAMATA has since its establishment in 2002 redefined the approach to transportation in Lagos State. It introduced innovative mobility strategies into the transportation system in Lagos and gradually moved the transportation from the post-1983 haphazard sector into a semi-organised urban service. The authority is behind the establishment of multiple institutions, formulation of strategic master plan, conceptualisation and implementation of new transportation projects such as the BRT, the light rail project, the cable car (gondolas), the revival of water transportation and the expansion of road infrastructure. However, the combination of the roles of a service provider and a regulator for LAMATA is overwhelming for the authority. This is being reflected in the conditions of the BRT buses and the road infrastructure such as bus shelters, road markings, electronic information boards, and the ticketing procedures. The quality and maintenance of the buses have been compromised while there has been observable deterioration in the quality of other infrastructure rather than consistence improvement and upholding of pristine conditions. In correcting this compromise, LAMATA had revoked the concessionaire license given to the National Union of Road Transport Workers (NURTW) to operate the BRT system. Aftermath of the revocation, a new concessionaire has been engaged with new 434 buses for operation. The extent of new concessionaire to operate a sustainable BRT system will be a project for examination in the future.

The most recent project under LAMATA is the Bus Reform Initiative. This project will see the introduction of small buses, transporting 17 to 20 people, replacing danfo buses and keke marwas. The Governor of Lagos has stated that the drivers of the informal public transport vehicles will be integrated in to the Initiative however there is no public information on how this will be done.

In LAMATA's efforts at transforming the transport sector of Lagos State, the safeguard measures against the residents that are being negatively affected by the projects seems inadequate. Compensation for loss of properties affected by widening of roads still follow the rigid mindset of the presentation of formal property documents, which the majority of properties in Lagos does not have, and not necessarily of social protection of the victims. The obvious lack of transparency and accountability in many of the operations and projects of the authority continue to threaten large scale attraction of reputable and qualified private sectors to the system.

C. Lagos State Waterways Authority (LASWA)

The Lagos State Waterways Authority (LASWA) is the organisation responsible for regulating, developing and managing all aspects of the waterways of Lagos State. It was established through Lagos State Waterways Authority Act 2008 after purported repealing of National Inland Waterways Authority Act, 1997. The vision is to develop and promote safe and appropriate navigation and recreational activities for all waterway users, while protecting, maintaining and enhancing the unique conservation status of the waterway

Goals of LASWA

The vision of LASWA will be achieved through the following goals:

- (i) Manage, improve and enhance navigation opportunities for the waterway;
- (ii) Protect the interests of those navigating and using the waterways;
- (iii) Promote better access and information for canoeists and users of small craft;
- (iv) Contribute to enhanced bio diversity, heritage and landscape values of the waterway;

- (v) Develop the health, economic and social benefits of navigation, to the advantage everyone;
- (vi) A renewed focus on boating education and safety campaigns;
- (vii) Partnerships with the boating community;
- (viii) New penalties for unsafe behavior;
- (ix) Increased compliance checks .

LASWA roles and responsibilities

- (i) Construct, hire, purchase or otherwise acquire workshops and vessels of any class within the state;
- Regulate, establish and maintain within the waterways in Lagos, lines, regular services of ships or other like carriers and generally regulate the use of state and internal waterways by all users including private and common carriers;
- (iii) Enter into contracts for the maintenance, exploration, superintendence, management and transit of all state and inland waterways and terminals, platforms, piers and jetties with any other person, authority, company or such other private operators;
- Own, construct, purchase, take on lease or otherwise acquire and work in any wharf, pier, dock, jetty, transportation terminal, building or work capable of being advantageously used in connection with the business of the authority as waterway transportation or carriers;
- (v) Design ferry service and other water transportation routes, issue, regulate and control all licenses for ferry services and other water transportation;
- (vi) Charge and collect water transportation tolls, rates and charges;
- (vii) Clear and maintain waterways free from all obstructions, derelicts, wrecks and abandoned properties;
- (viii) Install route buoys, gauges, distance boards and markings along the water ways;
- (ix) Insure the vessels and other properties of the authority in any manner it deems fit;
- Undertake capital and maintenance dredging and channelization of the waterways;
- (xi) Undertake hydrological and hydrographical surveys of the waterways;
- (xii) Undertake installation and maintenance of lights, buoys and all navigational aids along water channels and banks of water ways;
- (xiii) Clear water hyacinth and other aquatic weeds;
- (xiv) Insure the vessels and other properties of the authority in any manner it deems fit.

Box 2.35 Assessment of the impacts on transportation in Lagos State

The authority made considerable contribution to the mobility index in Lagos State with a monthly movement of 2.2 million people, equivalent to about 74,000 people per day and 0.34 percent of the daily mobility in Lagos State. From inception LASWA was a contentious body because the National Inland Waterways Authority (NIWA) argued that constitutionally it had the sole mandate to provide regulations on the nation's waterways, charge fees and protect stakeholders' interests. This has been an ongoing legal battle in March 2017, the Federal High Court ruled that Lagos State had "no authority to margin the waterways because such power fell under the exclusive list."² Dissatisfied with the ruling, Lagos State took the case to the Appeal Court. The Appeal Court ruled in July 2017 that "It is hereby held that the Lagos State House of Assembly is competent to make laws in respect of the intra-inland waterways in Lagos State, except the Inter-State waterways declared as International or Inter-State Waterway under item 5 in the 2th Schedule to the National Inland Waterways Act'.³ NIWA, not satisfied with this judgment have appealed to the Supreme Court. While waiting for the hearing another court hearing, FHC/L/ CS/1098/07 filed by fishermen operating in Eti-Osa Local Government Area of the State, went the way of Lagos State government and LASWA. The judge stated that "The State Government has the authority to legislate over Inland Waterways within its territory; the State Government possesses the power to grant permits and collect fees as this is a residual matter and that NIWA has no constitutional power to regulate Inland Waterways within Lagos State.⁴ The legal battle between LASWA and NIWA looks as though it may be coming to an end. This will give LASWA the powers needed to fulfil their mandate and achieve their objectives without continuous conflict with NIWA. Despite impressive outlook in the sector, safety on the waterways remains a key issue for the regulatory role of the authority while boats operating in communities such as Makoko, Epe, Ejinrin, Festac, Igbologun, Egan and Badagry appear not to be under the remit of the authority. Though faster, it is less cost effective to travel by boat. From Ikorodu to Lagos Island it will cost between N500-N600 and take 20 to 25 minutes. The same trip via road costs N300 and takes two to three hours.⁵

D. Lagos Ferry Services Company (LAGFERRY)

Lagos Ferry Services Company (LAGFERRY) was incorporated on January 15, 2008 as a limited liability company with the Lagos State government as the sole initial investor. It is a special purpose vehicle (SPV) complimenting the efforts of the Lagos State government in developing water transportation sector and subsequently reducing the strain on Lagos roads. The company has been granted a universal license for all the ferry routes as defined by the Lagos State Waterways Authority (LASWA). The all-access license permits LAGFERRY or its potential franchisees to deliver water transport services to previously underserved areas of the State. The vision of the company is to provide the safest, most affordable and time efficient journey for its clients. It seeks to alleviate the daily challenges of commuters on the roads by providing a viable alternative via the inland waterways of the Lagos lagoon. It envisions becoming the most trusted name not only in the water transport sector but in public transportation. The secondary goal is to serve as an industry catalyst and be a facilitator for the success of water transportation in Lagos.

5 G A Nwakunor, A Ajeluorou and G Salau, "Lagos waterways... A hidden treasure untapped," http://guardian.ng/features/weekend/lagos-waterways-a-hidden-treasureuntapped, accessed on October 30, 2017

² O Emelike, "NIWA sad over Appeal Court ruling on Lagos waterways," http://www.businessdayonline.com/ niwa-sad-appeal-court-ruling-lagos-waterways, accessed on October 30, 2017.

³ ibid.

⁴ J Omoaka, "Court rules against NIWA over control of Lagos waterways," http://shipsandports.com.ng/ court-rules-niwa-control-lagos-waterways, accessed on October 30, 2017

Box 2.36 Assessment of the impacts on transportation in Lagos State

The company can be described as a public commercial entity to actualise the strategy of government in the water transportation sector. It is an operational entity with supervision and guidance from LASWA. The company can be credited with the success of moving 2.2 million passengers on a monthly basis. Although, the licensing structure by LASWA is not clear, but granting universal license to LAGFERRY may suggest a sole player in the sector while potential operators can only obtain franchise. The sole player strategy may work in the medium term, but it will stifle competition in the long term, insulate operators from direct supervision of LASWA, reduce rate of growth and expansion and negate the overall vision for the water transport in the state.

E. LAGBUS Asset Management Limited

LAGBUS was incorporated on November 18, 2004 and started operations on February 17, 2007 with 123 buses on three routes. It has over 500 buses and 40 routes currently in operation. LAGBUS has the vision to deploy buses in a dedicated right of way with prepaid tickets, selected operators and GPS monitoring to create a modern bus transportation system for Lagos. The success will depend on the expertise of its people, a uniform service, high standards and full compliance. Its mission is to create a modern, secure and sustainable bus transportation service designed for the special needs of Lagos State.

Principles of establishing LAGBUS

In evolving LAGBUS as an institution that will implement a new public bus system in Lagos, it has to be guided by the following principles:

- (i) The company must run as a private limited liability company;
- (ii) Management of the maintenance company must be separated from the bus company;
- (iii) Bus company must operate in conjunction with local transport operators
- (iv) Ticketing is to be centralised;
- (v) Backward integration with investment in bus assembly plants is necessary;
- (vi) Ownership of the company should include institutional private investors.

Goals of LAGBUS

- (i) To ensure project sustainability;
- (ii) Promote operation of safe brand new bus fleets on Lagos roads;
- (iii) Ensure deployment of electronic payment system;
- (iv) Empower existing stakeholders;
- (v) Ensure timely fleet renewal and expansion;
- (vi) Manage sub-operators and franchisees operating within the bus route network.

Objectives of LAGBUS

- (i) Run bus operations in all the 57 local governments and LCDA's in Lagos state;
- (ii) Achieve excellent customer service;
- (iii) Expand and integrate the bus route network in Lagos State;
- (iv) Deploy scheduled bus services along the bus route network in Lagos State;
- (v) Develop technical and infrastructural capacity for the integrated bus system.

Box 2.37 Assessment of the impacts on transportation in Lagos State

Conceptually, the LAGBUS system appeared to be a unique and problem solving model for transportation in Lagos. Its operational routes have increased from 3 in 2007 to 40 in 2015, and the fleet has also increased from 123 to 500 buses between 2007 and 2015. It has 6 main depots and 4 mini depots in 9 different locations in Lagos while its introduction has reduced significantly the old high occupancy buses, known as molues. Similarly to BRT, LAGBUS is being supervised by LAMATA, but with different operating procedure. While BRT operates through a single concessionaire with direct reporting to LAMATA, LAGBUS operates through multiple franchises with reporting to a limited liability company and overall coordination by LAMATA.

F. Lagos Bus Services Limited

LBSL was incorporated in 2017 as part of the Lagos State's Bus Reform Initiative. It's a transport asset acquisition, operations and advisory services company. Like LAGBUS and BRT, LBSL offers mass transit in Lagos State but unlike LAGBUS, LBSL buses are able to ply dedicated BRT lanes.

LBSL is responsible for leading the Lagos State's Bus Reform Initiative. In 2017 LBSL invited bids for the Procurement Workshop Equipment for Bus Depots, Construction of Bus Depots and Maintenance Yards and expression of interest for the financing and operating of buses.

Vision of Lagos Bus Services Limited:

 The vision of Lagos Bus Services Limited is to deploy buses in dedicated right of way with prepaid tickets, select operators and GPS monitoring to create a modern bus transportation system for Lagos. Their success will depend on the expertise of their people, a uniform service, high standards and full compliance.

Mission of Lagos Bus Services Limited:

 The mission of Lagos Bus Services Limited is to create a modern, secure and sustainable bus transportation service designed for the special needs of Lagos. They aim to use the best practices while creating opportunities for all stakeholders and be a model for other transport services.

Box 2.38 Assessment of the impacts on transportation in Lagos State

It seems that LAGBUS Asset Management Limited has been rebranded as Lagos Bus Services Limited (LBSL). Both companies have the same mission and vision. In addition, Lagos Bus Services Limited (LBSL) has over 500 buses and 40 routes in operation, similar to that of LAGBUS. LAGBUS replaced the failed Lagos State Transport Corporation (LSTC) and now LBSL is doing the same with LAGBUS. The demise of LAGBUS is reflected in the inadequate maintenance of the buses. The schedule is irregular and ticketing is manual despite the aim of

Box 2.38 (continued) Assessment of the impacts on transportation in Lagos State

introducing an e-payment system. The franchise system is shrouded in protective arrangement reducing the growth of potential private partners. With no clear indication of the difference between LAGBUS and LBSL it is hard to see how LBSL will successfully achieving its vision of creating a modern bus transportation system that will assist in alleviating the transportation issues in the state.

G. Lagos State Traffic Management Authority (LASTMA)

The Lagos State Traffic Management Authority (LASTMA) was set up through the Head of Service Circular HOS/I2/2000 of 13th July, 2000, with responsibility for regulation of traffic. In June 2004, the LASTMA Bill was signed into law.

Vision

The vision of the authority is to develop a culture of regulation, control and management of traffic operations state wide and to ensure hitch free traffic flow on Lagos road.

Mission

The mission statement for the agency is to reduce to the barest minimum, deaths, injuries, and economic losses through road traffic accidents, conflicts, congestion, delays and saving man hours usually wasted on public highways in Lagos State by employing modern traffic management techniques to inject order and control into the road traffic system in the state

Goal

The goal of establishing the authority is to create an atmosphere for a sustainable social and economic growth by ensuring free traffic flow in the state.

Staff capacity

At inception, all staff of the former Traffic Management System Department of the Ministry of Transportation was transferred to the newly created agency while about 240 staff consisting of various cadre were seconded to complement the effort of the already existing staff inherited from the Ministry of Transportation. On commencement in 2000, the staff strength was about 450 which has increased to 2,715 as at December 2011. The entry qualification into LASTMA ranges from first school leaving certificate (primary six) to university degree for different positions.⁶ The agency commenced her operations with (5) zones which have evolved to the present 18 area commands, 35 zonal offices and headquarters operations.⁷

Roles and responsibilities

The authority, at inception, was saddled with the following responsibilities:

- (i) Traffic control, management and enforcement, state wide;
- (ii) Public education and enlightenment;
- (iii) Road research and statistics;
- (iv) Road furnishing installation and maintenance;

6 *ibid*.

 [&]quot;Area commanders and zebras," Lagos State Traffic Management Authority, http://www.lastma.gov.ng/index.php/area-commanders-and-zebras, accessed on January 5, 2016.

- (v) Driver training and rider training;
- (vi) Traffic safety and accident management;
- (vii) Maintain healthy relationship with federal road safety commission and other traffic agencies;
- (viii) Training of state and local government traffic personnel;
- (ix) Traffic control and enforcement of state and national laws that govern the safe use of vehicles and declared roads in Lagos State;
- (x) Deter and apprehend road traffic offenders;
- (xi) Educate drivers, motorists and the general public on the proper use of the highways;
- (xii) Conduct research on driver behavior and traffic safety, in order to develop the most efficient and effective means of bringing about safety improvement;
- (xiii) Install and maintain traffic control devices on highways;
- (xiv) Establish and regulate the conduct of driving schools;
- (xv) Destination and enforcement of the use of bus-stops and bus terminals;
- (xvi) Cooperate with bodies, agencies or groups engaged in road safety activities or in the prevention of accidents on the highways;
- (xvii) Determine works and devices designed to improve traffic flow and device the appropriate road works and the locations where works and devices are required;
- (xviii) Identify, develop, promote and maintain new or alternate methods of traffic management and road safety;
- (xiv) Removal of abandoned and broken down vehicles on highways.

Box 2.39 Assessment of the impacts on transportation in Lagos State

In the years preceding May 29, 2015, LASTMA appears to be the most famous institution in Lagos State. Officers of the authority supported by men of the Nigerian police, in implementing their roles and the Lagos Road Traffic Law of 2012, were very decisive in dealing with different categories of motorists. Vehicles were impounded from alleged traffic offenders with heavy imposition of fines. Vehicles that cannot be claimed by offender within reasonable period were forfeited to the state and auction at giveaway prices to interested members of the public. While some offenders received jail terms, others were sent to psychiatric hospital for mental ability evaluation. The traffic management system became a corruption breeding platform for many officials of the authority and became a basis for constant crisis between the officials and different stakeholders in the city. On certain occasions, the crisis led to the death of authority's officials and residents. The impressive outlook of LAGBUS notwithstanding, the system is dealing with structural and operational challenges. Although, the conditions of the buses are better than the equipment being operated under the Bus Rapid Transit (BRT) system, they are nonetheless showing signs of inadequate maintenance conditions reducing the quality of journey by the passengers. Despite the increment in the number of fleet and operational routes, the system appears to be inadequate as evidenced in the number of people waiting to board on daily basis.

Box 2.39 (continued) Assessment of the impacts on transportation in Lagos State

The schedule is irregular while ticketing is still manual. The entry point into the system by potential private investors is still shrouded in protective arrangement and technically reducing the growth of participants under the franchise system. Furthermore in November 2016 state governor, Mr Akinwunmi Ambode, banned LAGBUS buses from using BRT corridors and dedicated lanes, therefore further increasing journey times and limiting routes. In the conceptual city transportation hierarchy, LAGBUS ought to pick passengers from the BRT and rail stations and feed into the secondary routes within each districts, but it seems that the discreet aim of replacing the old bus system molues overshadowed this fundamental strategy.

Semi-formal institutions for transportation delivery and management in Lagos State

In addition to 22 formal institutions identified, there are 2 major semi-formal institutions with numerous affiliates influencing the direction of transportation in Lagos. They are described as semi-formal because they are registered with the government, but coordinating large members within public transport sector without instruments enjoyed by formal institutions. Although, all of the semi-formal institutions are trade associations, they nevertheless, have significant influence on Lagos transport system. Their roles are mainly to promote the welfare of the members, promote safe and quality transportation system and collaborate with the government in ensuring safe transportation and free flow of traffic in the city. As at 2005, the Lagos State government recognised only two transport associations and advised other associations to affiliate with either of the recognised two. The recognised associations are the Road Transport Employers Association of Nigeria (RTEAN) and the National Union of Road Transport Workers (NURTW). RTEAN are the owners of vehicles who engage members of NURTW to operate the vehicles. There is a history of regular clashes between the two parties over fees payable, amount to be remitted by members of NURTW and control of about 223 transport parks in Lagos. Both RTEAN and NURTW have both been invited by the Lagos State Governor to be operators and franchise owners on the new buses as part of the Lagos Bus Initiative, reiterating the recognition of both organisation in Lagos State. However, an extraordinarily important player within the system is the Petroleum Tankers Drivers Association, a unit under the National Union of Petroleum and Natural Gas Workers (NUPENG). Unlike other associations, this body has no direct reporting or relationship with the Lagos State government. Its influence on Lagos transportation is enormous as its members are dominant in Apapa through parking of their petroleum products tankers and therefore causing traffic congestion on all links roads coming into the city from all directions of the country, as mentioned earlier. Figure 2.39 shows the relationship between the formal and semi-formal transport institutions in Lagos State.





(Source: Urban Mobility Research Group, Heinrich Böll Stiftung, 2015/2017)

2.6 Schematic Affordability Evaluation for the Transport System

Access to people, goods, services and information is the basis of economic development in a city. Beyond the design, implementation, capacity and maintenance of the available public transport system, the costs of travel play an important role whether it is affordable for many people. Table 2.33 shows approximately the compiled costs for a return journey between Mile 12 (Kosofe) and the CMS bus stop on Lagos Island (distance of around 22 km).

Assumptions on table:

- 5 persons per household as contained in Lagos State Household Survey, 2012¹
- 3 daily travels per household
- 18 travels per week and household (includes trips on the weekend)
- 72 travels per month and household
- 25percent maximum affordability threshold of transportation cost to monthly income

Monthly Income	percent of house- holds	Mode	Daily fare by mode (return journey)	Household size and no. of travel	Daily cost of transportation	Monthly cost of transportation	-
Less than	45	BRT	240	5 p. / 3 travels	720	51,840	
20,000		danfo	600	5 p. / 3 travels	1,080	43,200	
		cab	5,000	5 p. / 3 travels	15,000	360,000	
20,000	25	BRT	240	5 p. / 3 travels	720	51,840	
-		danfo	600	5 p. / 3 travels	1,800	43,200	
39,000		cab	5,000	5 p. / 3 travels	15,000	360,000	
40,000	18	BRT	240	5 p. / 3 travels	720	51,840	
-		danfo	600	5 p. / 3 travels	1,800	43,200	
59,000		cab	5,000	5 p. / 3 travels	15,000	360,000	
60,000	9	BRT	240	5 p. / 3 travels	720	51,840	
-		danfo	600	5 p. / 3 travels	1,800	43,200	
100,000		cab	5,000	5 p. / 3 travels	15,000	360,000	
more	3	BRT	240	5 p. / 3 travels	720	51,840	
than		danfo	600	5 p. / 3 travels	1,800	43,200	
100,000		cab	5,000	5 p. / 3 travels	15,000	360,000	

Table 2.41 Cost of return journey and affordability between Mile 12 and CMS

(Source: Urban Mobility Research Group, Heinrich Böll Stiftung, 2015, based on Lagos State Household Survey (2013) and field research)

1 Lagos Bureau of Statistics, Household Survey Report, 2012 Edition, Ministry of Economic Planning and Budget (2012).

affordable fairly affordable not affordable

More than 90 percent of the urban transport in Lagos State is mainly road based. According to LAMATA, Lagos caters for about 22 million trips per day with approximately 2 million vehicles on the road per day.¹ In decongesting the roads, the Lagos State government through LAMATA conceptualised the idea of the Lagos urban rail network (LURN) to move large number of commuters within and outside the city, and also become a basis for integration of land uses and transportation while entrenching development of all sectors socially and economically.

LURN

Plan" (2015))

LURN is a network of originally seven – now six – urban rail-based lines and one mono rail covering major priority and high commuter demand corridors within the Lagos metropolis and adjoining border communities in Ogun state. The rail transit is concentrated in locations where there is high traffic volume. The six lines and one mono rail links activity centres in the state as well as cutting across existing transport corridors. The network is fully integrated with the planned and existing water transport and the BRT routes.

Box 2.42 The proposed rail lines of LURN

- Blue Line: Okokomaiko to Marina
- Red Line: Agbado to Marina via Iddo and Muritala Mohammed International Airport (MMIA)
- Green Line: Marina to Lekki (planned airport)
- Yellow Line: Otta (Ogun State) to Iddo
- Purple Line: Redeemed Camp (Ogun state) to Ojo
- Brown Line: Mile 12 to Marina
- Mono Rail: Victoria Island to Ikoyi

(Source: Lagos State Ministry of Transportation, 2018)



Map 2.43 Proposed six rail lines for Lagos State

1 "Strategic Transport Master Plan Propositions," Lagos Metropolitan Area Transport Authority, accessed January 5, 2016, http://www.lamata-ng.com/stmp.php.

daily passengers of 10,213,984 as shown in table 2.36 below. The blue line is expected to be operational already by the year 2016. Figures 2.44 and 2.45 provide the timeline for different

Objectives of LURN

- (i) Reduce severe traffic congestion;
- (ii) Promote the use of public transport;
- (iii) Improve road traffic safety;
- (iv) Increase travel efficiency and workers' productivity;
- Improve the image of public transport and attract more car users to public transport;
- (vi) Significantly contribute towards urban restructuring, shortening of travel distances and improving city sustainability;
- (vii) Stimulate economic growth, development and job creation;
- (viii) Improve quality of the environment air and life;
- (ix) Promote business tourism.

Implementation of the Blue Line

Figure 2.44	Total system	length, estimated	l cost and	capaciyt of LURN
-------------	--------------	-------------------	------------	------------------

S/N	Rail line	Length (km)	Cost (\$)	Projected passenger volume (peak hours)	Daily passenger carriage
1	Blue line (Marina to Okokomaiko)	27	1.4 bn	74,000	450,000
2	Red line (Agbado to Marina)	20	1.2 bn	65,000	-
3	Green Line (Marina to Lekki Free Zone)	37	1.4 bn	80,000	-
4	Yellow Line (Otta/MMA to Iddo)	34	1.3 bn	25,000	-
5	Purple Line (Redemption Camp to LASU Ojo)	60	2.3 bn	35,000	-
6	Brown Line (Mile 12 to Marina)	20	780 m	60,000	-
7	Orange Line (Redemption Camp to Marina)	42	1.6 bn	35,000	
8	Mono rail (Victoria Island to Ikoyi)	-	-	-	
Total		250		374,000	10,213,984

(Source: Lagos State Ministry of Transportation, 2015/2017)




(Source: Urban Mobility Research Group, Heinrich Böll Stiftung, 2015/2018)

Figure 2.46 Completion timeline for the different activities under LURN

	•	•									
		rapid in L revived by	of developing a agos State was y former Govern ola Tinubu	ior	quir • The	e H5 s	nnounce ubway tra anche of	ains	posed depen	to be in	are sup- operation, available es and
d	he idea of eveloping rapid in								investo	ors	
L w	agos State /as con- eived		the B	tructior lue Line nenced	e		s	The Blue supposed		New d for beg operat	ginning of
	1985		2	008	20)10	20	013	2018	8	
19	80		2000	2	009	2	011	20	16	2019	2032
The idea w scrapped b Muhammae Buhari		by Gen.	/ Gen.		PPP venture was agreed with Eko Rail (not anymore)		SI	he Red Lir upposed t peration			
Buhari			 A metro was Lagos Staticompletion Conceptua completed LASG appr construction ko-Iddo-Mator LAMATA st focusing or Red Line 	e with a date o l desigr oved 7(on of Ok arina lin arted th	a f 2011 n was D bn for t cokomai- le ne projec:	c I F t t t t t r i	Federal M could not _agos Sta blan which he appro the World rail projec s finance oan.	accomod te in the h led to a val of a lo Bank. To t of the B	date borrowing delay in ban from day, the day the	1	

(Source: Urban Mobility Research Group, Heinrich Böll Stiftung, 2015/2018)

The Blue Line running east-west along a 27 km corridor with 11 stations from Okokomaiko to Marina is the flagship of all the rail networks. It is currently undergoing construction in the middle of Lagos-Badagry Expressway which is being redeveloped and expanded into a ten-lane integrated highway. The corridor was chosen as a flagship project because of large concentration of high density neighbourhoods and heavy traffic flow. The total passenger volume/day is 450,000 on average on completion by 2016 with an estimated travel time of 37 minutes from Okokomaiko to Marina down from present 2 hour journey time. The total passenger volume/day is expected to climax at 850,000 by the year 2032.² Along the blue line track are 13 proposed stations as shown in box 2.46 and map 2.47.

Box 2.47 Proposed stations	s along the corridor for the Blue Line
1. Marina station	km 0
2. Ebute-Ero station	km 1.5 (removed from the plan)
3. Iddo station	km 3.0 (removed from the plan)
4. National Theatre station	km 4.6
5. Iganmu station	km 7.3
6. Alaba station	km 9.9
7. Mile 2 station	km 11.7
8. Festac station	km 14.4
9. Alakija station	km 16.1
10. Trade Fair Complex station	km 19.3
11. Volkswagen station	km 21.8
12. LASU station	km 23.4
13. Okokomaiko station	km 25.8

Map 2.48 Proposed stations along the Blue Line from Marina to Okokomaiko



Government/agencies/implementing/the@Blue Line project

2

"Strategic Transport Master Plan Propositions," Lagos Metropolitan Area Transport Authority, accessed January 5, 2016, http://www.lamata-ng.com/stmp.php.

The construction project is being financed under loan agreement between:

- Chinese government and;
- Lagos State government.

Among the government agencies participating in the project are the following Lagos State ministries:

- Ministry of Works and Infrastructure (MWI);
- Ministry of Physical Planning and Urban Development (MPPU&D);
- Ministry of Transportation (MoT);
- Lagos State Lands Bureau and;
- Federal Ministry of Transportation.

The project is being delivered under a private-public partnership model with Lagos State government providing the track and ancillary infrastructure while a concessionaire will provide mobility equipment. Table 2.49 provides the project implementing partners as shown on the on-site project board.

Survey of potential beneficiaries of the Blue Line

Lagos State government Investor and owner Lagos Metropolitan Transport Supervising and managing agency on behalf of the Authority (LAMATA) Lagos State government currently vacant Concessionaire Ensures that the project development is in line with Ministry of Physical Planning and Urban Development existing mater plans and policies Preparation of resettlement action plans and land Ministry of Land acquisition for the project **Ministry of Transport** Coordinates all transport agencies Ministry of Works and Upgrading of the expressway Lagos-Badagry in line Infrastructure with light rail to reduce congestion Local governments and Receive compensation for land expropriation and communities benefit from the new train line once it is completed

Table 2.49Stakeholder relations of the Blue Line project

(Source: Urban Mobility Research Group, Heinrich Böll Stiftung, 2015)

Table 2.50	Blue Line project implementation partners
Role	Party
Client	LAMATA on behalf of the Lagos State government
Contractor	China Civil Engineering Construction Cooperation (CCECC)
Consultant	Nexant
Concession	er Eko Rail (now being replaced with new concessionaire)

 Table 2.50
 Blue Line project implementation partners

(Source: Lagos Metropolitan Area Transport Authority, 2015)

Table 2.51 Contractors and consultants of the Blue Line



(Source: Urban Mobility Research Group, Heinrich Böll Stiftung, 2015)

To know the perception of commuters along the Blue Line, a survey was conducted at the locations of four proposed stations along the corridor. The survey was conducted through the use of questionnaire. A total of twenty questionnaires were administered along the Blue Line corridor Okokomaiko to Marina, focusing on:

- Orile
- Iganmu
- Mile 2
- Alaba Suru stations

resulting in five questionnaires per station. Each questionnaire was divided into sections including socio-economic characteristics of respondents, respondents' perception on the proposed rail transit and fare commuters are willing to pay.

Social and economic sharacteristics of the respondents

a. Occupation

The main occupation of the respondents is shown in figure 2.44. The dominant occupation of the people interviewed is trading, accounting for 50 percent. Craftsmanship such as mechanics, welding, panel beating, vulcanizing, accounts for 33 percent. Public sector employee accounted for 9 percent, private sector employment accounted for 6 percent while 2 percent accounted for the unemployed. This implies that the rail line option will be helpful in moving people and their trading goods.

b. Monthly income

The monthly income distribution of the respondents is shown in figure 2.45 with about 24 percent of the respondents earn less than 18,000 NGN per month. This category of people has to supplement their meager income with secondary activities in order to be able to meet their basic needs, including housing. Relative higher incomes were recorded with 31 percent earning between 18,000 NGN and 25,000 NGN, 36percent earning between 26,000 NGN and 50,000 NGN, 7 percent are earning 51,000 NGN and 75,000 NGN and 2percent are earning above 76,000 NGN.

Respondents' perception of the proposed rail transit

a. Ability of the rail system to improve mobility in Lagos State

Figure 2.46 reveals that majority of the respondents agreed that the rail option will improve the mobility within the city, resolving problems related to road transportation, which include an increase in car ownership, the inability to forecast travel time, delay in travel on roads and the inefficiency of the road system and the road space.

b. Method of improving mobility

Figure 2.47 shows that 8percent of the respondents agree that the rail option will improve mobility and transportation within the city through increased travel efficiency, 18percent are of the opinion that the rail option will increase mass transportation, 22 percent agree to a reduction in travel time, 23percent agree to reduced fares while 29percent agree to a traffic reduction.

c. Importance of rail line to the urban poor

In figure 2.48, 49 percent of the respondents confirmed that the rail line will reduce transport fares for the urban poor, 38 percent said the new offer in mass transportation will bring better transportation opportunities to people and goods while 10 percent said it will create employment and 3 percent said it will bring general development opportunities. It can be deduced that all the listed options are of great importance to the urban poor who are majorly traders and that there is a need for more affordable fares.

Sustainability of the new rail transport

a. Concerns of unsustainability

11percent of the population expressed opinion that the rail will not be sustainable, 40percent agreed that it will be sustainable while 49 percent are not sure of its sustainability except for proper maintenance culture.

b. Factors for sustainability

The respondents are of the opinion that factors such as poor maintenance culture, rapid urbanisation, lack of technical skills, embezzlement and corruption might not make the rail option sustainable. The mentioned factors need hence to be tackled to guarantee the long term success of the project.

c. Fares that the respondents consider as affordable

Figure 2.52 shows that 29 percent are willing or able to pay 50 NGN, 32 percent are willing or able to pay between 50-100 NGN, 27 percent are willing or able to pay between 100-150 NGN while 12 percent are willing or able to pay between 150-200 NGN.

d. Factors for modal choice

Table 0 E0

18 percent said they are indiffirent to modal choice, 26 percent said they will use the new rail line to avoid congestion, 27 percent said the new rail line will be convenient to transport their goods while 29 percent said the new rail line will be faster than their existing travel option to reach the Marina CBD.

Table 2.52	Occupation of respondents
2	Unemployed
6	Private sector employment
9	Public sector employment
33	Crafts
	Teo dia a
50	Trading
(Source: Urban	Mobility Research Group, Heinrich Böll Stiftung, 2015)

Occupation of reasonandants





(Source: Urban Mobility Research Group, Heinrich Böll Stiftung, 2015)

Table 2.54

Respondents' perception on the contribution of the rail line to improve the mobility



(Source: Urban Mobility Research Group, Heinrich Böll Stiftung, 2015)





(Source: Urban Mobility Research Group, Heinrich Böll Stiftung, 2015)

Table 2.57

Importance of the rail line to the urban poor



⁽Source: Urban Mobility Research Group, Heinrich Böll Stiftung, 2015)

Table 2.58Factors that might decrease the sustainability
of the new rail transport







Conclusion on the Blue Line case study

Based on the presented results, one is unfortunately left to wonder on the effiency of the planned rail system – firstly in terms of the planning process, secondly in terms of the implementation, and thirdly in terms of the operation.

The planning and implementation processes of rail systems are complex and cost-intensive, let alone the operation and maintenance costs. The latter may in a all-season hot and tropical environment result in even higher costs. Additionally, train drivers need to be trained which causes additional costs. Given the enormous challenges that Lagos State is facing in order to implement, operate and maintain a functioning and safe transportation system, it is astonishing that Lagos State government has not favoured the expansion of the BRT system over the implementation of the rail system. BRT is cheaper and easier to implement and recognised as a valid alternative to rail systems. New bus routes can gradually be implemented as funding is available and informal bus drivers can easily be trained as BRT drivers. As it seems, Lagos State government has greatest difficulties to find funders and concessionaires for its urban rail network.

Consequently, it makes itself again dependent on Chinese investments, constructions and even operation without generating any benefit for Lagosians. The entire technology will be brought from China – which is good for the Chinese economy as it will require as well maintenance work from Chinese firms – instead of emphasising on the capacity building of locals and the integration of the millions of informal bus drivers. The strategy behind the urban mobility policies are difficult to understand and appear being little coordinated with other ministries such as the Ministry of Physical Planning and Urban Development even though the strong correlation between urban form and urban transportation is evident. Figure 2.58 reflects exactly this: The respondents of our little survey fear that the poor maintenance culture, the rapid urbanisation, the lack of technical skills, embezzlement and corruption might not make the rail system sustainable. Instead of improving the maintenance culture in the existing BRT system – that, as mentioned, has been a problem – the government decided to implement a transportation system that is on all levels and many times over more complex, more expensive, extremely time-consuming and less predictable in terms of success.



Table 2.60Proposed payable fares by the respondents

a. Adoption of a decentralised development model in Lagos State

At the heart of the snail speed development in Lagos is an over-centralization of tools and resources for development. Local governments that ought to be at the centre of development have been completely ostracised. To obtain disaggregated and vibrant city data, embark on local driven transport solutions and to evolve a sustainable and inclusive transport system in Lagos State, the increased decentralisation of power to local governments offers a pathway.

b. Unbundling of the Lagos Metropolitan Area Transport Authority (LAMATA)

The multiple roles of LAMATA as service provider, industry coordinator, fund warehouse and regulator are overwhelming for one institution. The authority should be unbundled into three institutions with LAMATA focusing on coordination and service delivery, the Lagos Transport Safety and Standard Commission (LTSSC) can deal with industry wide standard, regulations, guidelines, equipment specification, emission control and consumer protection among other regulatory issues. LTSSC can absorb the current Vehicle Inspection Service. The third institution, Lagos Transport Fund (LTF) can mobilize, warehouse, grow and disburse the fund as appropriate. A this stage of transportation in Lagos, LAMATA should begin a vibrant engagement of local administrations by building their capacity to play significant roles in the future of transportation in Lagos State.

c. Broad based Lagos State transportation policy

Despite the existence of the Lagos State Strategic Transport Master Plan, the Lagos State Road Traffic Law 2012, the excerpt of Lagos Development Plan 2012-2025 and the potential of the Non-Motorised Transport policy, there is need for a holistic and broad Lagos State transportation policy that will aggregate all the stakeholders in the sector, roles and responsibilities of stakeholders, clear entry and exit points for potential operators and investors as well as transparent finance and funding mechanism for the sector. Also, such a policy would outline the training needs and approaches for all categories of players in the sector, the transport infrastructure maintenance operation framework, and the monitoring and evaluation strategies for the transportation sector in Lagos.

d. Land use revision and fundamental urban design redevelopment of the city

A key factor for the success of transport transformation in the city of Lagos is the redefinition of the city's urban design approaches. Retrofitting a 70percent informal and slum city with a contemporary, smart and sustainable transportation system will be a complex task, hence, LAMATA should collaborate closely with the Ministry of Physical Planning and Urban Development, Lagos State Urban Renewal Agency, Ministry of Housing, Lands Bureau, Ministry of the Environment and other relevant agencies to set forth the redevelopment of the city in an inclusive and participatory manner. In the past 10 years, if the Lagos State Urban Renewal Agency (LASURA) had received considerable political, institutional and financial support from the Lagos State government as compared to the Lagos State Traffic Management Authority (LASTMA), transportation in Lagos might have improved tremendously while multifaceted problems confronting the sector today would have reduced significantly. If LASURA would have been empowered to implement large scale interventions in many slum communities through upgrading and redevelopment, Lagos State would have witnessed a consequential increase in road and other transport infrastructure both in guantity and guality. Perhaps, the Lagos Road Traffic Law that threatened motorists and residents of the city would have been formulated in another inclusive manner considering the level of engagement between the residents of informal communities and LASURA. It is instructive to note that while LASURA seeks to support, expand and improve on the livelihoods of the residents, LASTMA seeks to control, enforce and penalize the mobility of the residents.

e. Vibrant resettlement and compensation policy

In many instances, the transport infrastructure project implementation under LAMATA has continued to maintain the policy of "no formal title, no compensation" for victims of transformation without taking into consideration that formal titles have been severely restricted to the majority of property owners in the state. The policy has continued to promote social and economic inequality, recycle poverty, increase the number of disloyal citizens and threaten democratic

principles. The project implementation under LAMATA needs to imbibe the principle of improving the conditions of "project affected persons" (PAP)¹ instead of leaving them in a precarious social and economic condition than they were before the commencement of the project. To achieve this principle, LAMATA may spearhead the reengineering of the compensation system in Lagos State and partner with relevant agencies to develop a city wide resettlement policy.

f. Formulation of clear and non-combatant phase out plan for informal operators by LAMATA and the Lagos State Ministry of Employment and Wealth Creation

As a matter of priority, LAMATA, in collaboration with the new Ministry of Employment and Wealth Creation, should develop a phasing-out plan for integrating informal operators into the formal system. The plan will outline phase out strategies for mini buses (danfos), motorcycles (okadas), tricycles (keke marwa) and informal boats. The phase out plan should be devoid of the autocratic approach which many governments in the cities of developing countries usually adopt. The plan should be participatory which all the stakeholders in the sector will be committed to and exhibit a high level of transparency in its implementation. Parts of the plan may include alternative opportunities for the operators in the informal sector, entry models into the formal sector, type and specifications of new transport equipment expected in the city, platforms for participation in the new formal system, incentive strategies and training opportunities for the operators with a view to share the larger vision of the city.

g. Expansion of transport fund to support phase out of informal operators

If the state will consider a non-combatant phase out and the integration of the informal operators to the formal system, the expansion and the utilisation of the existing transport fund will become expedient. The fund should be expanded to explore opportunities in the informal sector by raising fund through transport trade associations. A certain percentage of each association's monthly income between 5percent and 10percent should be remitted to the fund which should be reinvested to the sector. The fund should focus among other areas on training, equipment procurement and maintenance, support mechanism and certification.

h. Pipeline reticulation plan as part of overall transport strategy for the city

Apart from the "Report on Transportation"² in the Vision 20:20 that outlined the roadmap for the petroleum pipe network, all the transportation plans in Lagos State did not have a considered pipeline network in the overall strategic direction for transportation in Lagos. Perhaps, the conclusion is that the pipe networks are the remit of federal government of Nigeria. However, the pipe network triggered problems have technically knocked out Apapa and all its road feeders from the road network in Lagos with consistent reverberating effect on the traffic situation in the city of Lagos. LAMATA can increase its influence in the sector with a strong collaboration with the Nigerian National Petroleum Corporation and other relevant agencies in the sector. Resolving the perennial gridlock at Apapa would be a major milestone for transportation in Lagos. Pending the resolution, the Lagos Ferry Services Company and its franchisees may increase its fleet around Apapa to relieve the road sector.

i. Massive and transparent investment in transport infrastructure

To bridge the huge transport infrastructure gap in the city, it is imperative that the government considers massive and transparent investment in infrastructure. It will be deceptive to conclude that LAMATA alone can provide transport infrastructure in a city of some 20 million people and with a large scale transport infrastructure deficit. Hence, it will require extensive collaboration

1 "Social development, involuntary resettlement, "World Bank, accessed January 28, 2016, http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTSOCIALDEVELOPMENT/EXTINVRES/ 0,,contentMDK:20480221~menuPK:1242368~pagePK:148956~piPK:216618~theSitePK:410235,00. html.

2 National Technical Working Group on Transportation of National Council on Vision 2020, Nigeria Vision 2020 Program, Report of the Vision 2020 (2009).

with both local and international stakeholders, especially the local administrations, private infrastructure investors through transparent and accountable private-public-partnership, development partners and organised private sector transport operators.

j. Early information on institutional, managerial and operational framework for Lagos Urban Rail Network (LURN)

In the public statement by the Governor of Lagos State in June 2015 in this matter, he affirmed that a part of Lagos urban rail network, the Blue Line (Okokomaiko to Marina) will commence operation in 2016. This has been moved to 2019.³

As at date, there is no clear information to the public on the operational framework for the system. It is incumbent on LAMATA to take urgent steps in realizing the following or making the information on them available, if the rail operation is commencing in 2019.

- Clarify the identity, board and managerial framework, capacity and man date of the institution that will drive the operation of the rail system.
 Currently, there is no clear institution that will manage the operation of the rail system. The formation of a new entity may be appropriate;
- (ii) Clarify the types of train and schedule of operation (movement timetable to be printed and circulated in Lagos) and types of services that will be available;
- (iii) Clarify the price schedule, types of tickets, terms and conditions for buying tickets, modes of payments and locations to purchase tickets.
- (iv) Provide safety information;
- (v) Enable consumer protection and feedback mechanism;
- (vi) Provide the stations' operation schedule.

k. Upgrade and repositioning of auto mechanic workshops in Lagos State

As transport remains a vital factor for driving the social and economic growth of the city, the current infrastructure and equipment maintenance framework cannot support the system. With the emergence of new initiatives and expansions in the sector, it is expedient to reposition the maintenance component to be able to play a vibrant supportive role in the sector. This can be achieved by providing comprehensive training programs focusing on the bottom of the ladder maintenance personnel. Such personnel would include existing artisans from different mechanic workshops across the city, converting danfo drivers and conductors, okada and keke marwa operators among other personnel. Also, there is a need to upgrade the existing mechanic workshops with a view to reposition them for the emerging opportunities in the sector. Upgrading can be achieved in phases with the categorisation of workshops as training and upgrading can be supported through a transport fund. Specific details, processes and procedures are expected to be captured in the suggested holistic Lagos State transport policy (refer to c.).

Local researchers and research assistance

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FLOOD AND WETLAND MANAGEMENT



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3.1 Introduction	123
3.2 Drainage and Flood Control Policies, and Legal Framework	127
3.3 Wetland Policies and Legal Framework	129
3.4 Institutions For Flood and Wetland Management	131
3.5 Adaptation Strategies	135
3.6 The Case of Victoria Garden City	139
3.7 The Case of The Ifako-Ijaye Local Government Area	141
3.7 Recommendations	143

3.1 Introduction

Lagos is among the top 20 cities with increasing numbers of the present and future population exposed to flooding.¹ Rising sea levels erode beaches and coastal wetlands, inundate low-lying areas and increase the vulnerability to flooding from strom surges and intense rainfall. Most parts in Lagos were established along water or located in floodplains near rivers and the Lagoon which are subject to periodic flooding.² The natural environment of Lagos can be broadly characterised as a low lying coastal zone, of which 22 percent consists of water found in lagoons and creeks. An additional 18 percent of land is very low and subject to regular flooding. The long coastline of 180 kilometers, comprising 22 percent of the nation's total coastline, fringes the Atlantic Ocean. Most of the land in Lagos state has an elevation of less than 15 meters above sea level. The land surface in Lagos generally slopes gently downwards from north to south, and is particularl low lying in Victoria Island, Lagos Island/Ikoyi, and Apapa. Large parts of mainland Lagos are built on a slightly higher north-south ridge.³ The last few years the city witnessed higher than average rainfall , sometimes causing major flooding and disruption, characterised as a likely consequence of changing global climate and as such a harbinger of future trends.⁴





(Source: Flood and Wetland Research Group, Heinrich Böll Stiftung, 2018)

In Lagos, flood regularly occurs through three ways. Lagos has a flat topography with lots of rivers discharging their running water and sediments (sand and debris) through the lagoon and creeks into the Atlantic Ocean. The sediment loads from these rivers are high and influence the configuration of the inland shoreline, the nourishment and the behaviour of the 180 kilometers long coastline of Lagos State. The ocean waves, the wind, the tide, and the offshore ocean currents influence the amount of sediments to be retained in the Lagos lagoon and the creeks. They also influence the inland regression of all beaches within the Lagos 180 kilometers coastline. The nature and combination of flora and fauna and the mangrove swamp along the lagoon, the creeks and the estuary also influence the survival of the foreshore and the wetlands.

Urban area flooding is generated by extremely flat topography (in low-lying area), excessive rainfall, inadequate stormwater drainage system and obstruction of natural streams and water courses. Coastal area flooding is due to the inundation of the lagoon, estuary and coastlands

- 2 Eldon D. Enger & Bradley F.Smith (2002) Environmental Science- A study of Interrelationships
- 3 Lagos State government, Lagos State Development Plan 2012-2015 (2013; Lagos State Ministry of Economic Planning & Budget), 105
- 4 ibid.

¹ U. C. Nkwunonwo, M. Whitworth, and B. Baily (2016): Review article: A review and critical analysis of the efforts towards urban flood risk management in the Lagos region of Nigeria. February 2016 Natural Hazards and Earth System Sciences 16(2):349

with ocean waves and storm surges, high tidal levels and arbitrary as well as unregulated modifications of the shoreline, which cannot be absorbed by the natural wetlands. River flooding is due to extremely high water levels in rivers overtopping their flood plains.⁵ The drainage system is grouped into three types. Tertiary drains are line drains to road such as ditches. Secondary drains are collector drains as channels while the primary drains are canals that collect from secondary drains and discharge to the lagoon, the sea or the ocean.





5

Engr. M. A. Akinsanya, FNSE- RESILIENT DRAINAGE INFRASTRUCTURE MODELS: Panacea for Sustaianble Development of Lagos State (5th Lagos State Climate Change Summit)

Traditionally, wetlands have been viewed as places to be avoided and dreaded or as a breeding ground for mosquitoes, diseases and sources of air pollution. But times have changed. Various roles have now been attributed to wetlands which have succeeded in elevating those to popular venues not only of recreation, but also being economic power houses.5 According to Ramsar Convention on Wetlands (1971) they are areas of marsh, fen, peat land or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt including areas of marine water the depth of which at low tide does not exceed six metres. Lagos floodplains/wetlands help to reduce flooding, assist in flood peak modification in rivers, watershed and shoreline protection. They help in treating wastewater, in keeping water clean, in replenishing groundwater and are a valuable wildlife habitat.⁶

With an ever-increasing urban population vis-à-vis the scarcity of dry lands, encroachments, sand filling projects, slum developments, flooding and the shrinking drainage ability of the wetlands have therefore become a pertinent issue and challenge for the city's government. Still, foreshores along the Lagoon and ocean and wetlands are considered as prime land and remain havens for human settlements despite being prone to severe flooding.



Map 3.3 Waterbody and wetland in Lagos State

(Source: Google Earth, 2018)

6 Maureen N. A. and Ngozi O. O. (2016). The Legal Framework for the Protection of Wetlands in Nigeria, Journal of Law, Policy and Globalization, www.iiste.org, ISSN 2224-3240 (Paper) ISSN 2224-3259 (Online) Vol.54, 2016 There is no substantive flood and wetland policy in Lagos State. However, chapter 5.2 under the sustainable environment pillar of the Lagos State Development Plan 2012-2025 provides a clear direction for drainage and flood control. In chapter 10.2, the Lagos State Development Plan 2012-2025 recognises the problem of flooding in Lagos State by virtue of its low lying character and the need to prevent the flooding of homes, businesses, roads and other essential parts of the urban strucuture. The plan, therefore, outlines its objectives, targets and strategies as follows.⁷

Policy objectives and outcomes:

- Effective control on the incidence of flooding and erosion in Lagos State;
- An adequate and world class network of drainage facilities that are regularly maintained.

Policy targets:

- Reduce incidence of flooding in Lagos State from 40 percent to 20 percent of urbanised and semi-urbanised areas of Lagos by 2015 and eliminate all by 2025;
- Develop a Storm Water Drainage Master Plan for the entire Lagos and implemented by 2025;
- Develop a regulatory framework for wetlands management in order to track and regulate land use pattern within approximately 10,000 ha of Lagos wetlands to prevent erosion, storm water drainage channel blockages, encroachments and contrventions;
- Sustain, improve and promote the involvement of Private-Public-Partnership (PPP) in the areas of Restoration of Urban Stormwater lines through the construction and reclamation of canal bank roads and erection of wire-mesh fences on channels set-backs;
- Sustain the continous monitoring of flooding problems through the establishment of Flood Disaster Early Warning and Advocacy Mechanisms through the drainage offices within the 20 LGAs and 37 LDCs;
- Develop institutional frameworks and community involvment for the upgrade, maintenance and de-silting of primary and secondary urban storm-water drainage infrastructure networks;
- Develop frameworks for communication with stakeholders and institutions involved in stormwater infrastrucutre management;
- Develop a policy and guidelines on storm-water infrastructure management.

Policies and strategies:

• Research and planning:

The state shall develop an integrated and comprehensive Drainage System and Erosion Prevention Master Plan with a phased implementation plan. As part of this exercise the State will conduct an updated inventory of exisiting drainage channels and asses the future drainage channel requirements of the state. The state will also establish a constant drainage facilities surveillance using modern technologies.

Improved and maintained drainage network:

The state shall ensure that there is an adequate and quality network of drainage facilities that are regularly maintained. They will prevent the right of way of drainage infrastructure (primary, secondary and tertiary drainage channels) from obstruction by physical developments on wetlands and coastal areas. There will be reclamation approach to all canal bank roads and coastline areas in the state and where necessary settlements in these areas will be relocated. The state will maintain a programme to construct and upgrade drainage channels (primary, secondary and tertiary) to world class standard (conduit drains and lined channels) to meet the state's needs.

7

Lagos State government, Lagos State Development Plan 2012-2015 (2013; Lagos State Ministry of Economic Planning & Budget), 105

Public awareness and involvement:

The state will maintain reliable infromation to facilitate proactive flood management and information dissemination to the public. It will also enhance public awareness on the danger of indiscriminate dumping of refuse and obstruction of drainage channels. Local authorities and local communities will be involved in regular work to keep all drainage channels clear of rubbish and other blockages.

Box 3.4 Policy assessment impact on flood management in Lagos State

The key measures currently undertaken by the state governement to combat poor drainage and consequent flooding during the rainy seasons are:

- Public englighment and advocacy (flood early warming);
- Preparation of stormwater drainage master plans;
- Implementation and construction of stormwater drainage projects;
- Yearly de-silting and maintenance of exisiting urban stormwater drains;
- Separation of contravening structures from drainage setbacks and canal right-of-way;
- Discouraging and demoslishing slab drains in major roads.

Still, the policy target of reducing incidence of flooding in Lagos State from 40 percent to 20 percent by 2015 has not been achieved which raises concerns about government policy promises, their actual implementation and the monitoring of set targets or goals. The Lekki flood of 2017 demonstrated the administration's low attention to policy implementation and its neglect of non-structural approaches which promote flood risk assessment and management.

Table 3.5	Summary of laws and policies affecting flood management
	delivery in Lagos State

Policy or law	Focus	Application
Nigerian Urban and Regional Planning Law (Decree) No. 88 of 1992	Urban development	General application
Lagos State Development Plan 2012 – 2025	Overall development	General application
Lagos State Urban and Regional Planning and Development Law 2010. The Ministry has 3 parastatals viz: Lagos State Physical Planning Permit Authority (LASPPPA 1998), Lagos State Building Control Agency (LABSCA), and Lagos State Urban Renew- al Agency (LASURA).	Urban development, slum regeneration , drainage	General application
The Lagos Drainage Master plan for the entire Lagos State 2012	Drainage	General application
Lagos State Environmental Protection Agency Law 1997 No 9	Environment	General application
Environmental Management and Protection Law 2017	Environment, drainage	General application
(Source: Authors' own representation)		

The Ministry of Environment Lagos State started developing the policy on wetland conservation and management in 2016. It was reviewed in January 2017 with a number of stakeholders but has not been fully adopted as a policy, most likely because of the passing of the new Environmental Management and Protection Law 2017.

Overall policy statement

 To promote conservation, protection and restoration of wetlands and their eco-system services in Lagos State.

Specific policy statements

In reference to the above policy statement the below policies of broader content shall have the following effect:

- 1. Ensure that every proposed developmental activity, interference, conversion or alteration of a wetland, or introduction of alien and invasive species in a wetland will be subjected to relevant assessment and prerequisite environmental approval.
- 2. Promote the protection and restoration of degraded wetlands.
- 3. Undertake Environmental and SocioDeconomic studies of wetlands to provide information/ data for planning and decision making over wetland conservation and management.
- 4. Identify and establish setback limits for all wetland ecosystems in the State.
- 5. Support and promote compliance with relevant legislation related to wetland and biodiversity.
- Ensure that adequate research and study as well as public education and awareness campaigns on the dangers of invasive species and the methods to control them are carried out.
- 7. Ensure periodic inventory and mapping of all identified wetland geographic location, size and status are carried out in the State.
- 8. Promote Advocacy and public awareness on sustainable use of wetland resources to encourage understanding and participation of the public, private sector, governments, NGOs and other interested parties through all appropriate means.
- 9. Incorporate wetland conservation and management issues into the State Environmental Education Strategy and other relevant systems.
- 10. Promote recognition and application of traditional and indigenous knowledge in wetland management.
- 11. Ensure that the State Policy and Legal Framework on wetland and biodiversity management should be in conformity with relevant National Legal framework and ratified International Conventions.
- 12. Adopt and implement an ecosystem based approach in the management of all wetlands and biodiversity.
- 13. Establish synergy with relevant Ministries Department Agencies (MDAs) and other stakeholders for planning, implementation and information sharing in wetland conservation and management.
- 14. Support the development of site-specific wetland management plan for Economic, Social and Educational purposes.⁸

Box 3.6 Assessment of the draft Lagos State policy on wetland conservation and management (2016)

The major objective of this policy is to ensure a sustainable management of wetlands and their resources with a view to enhancing the ecological and socio-economic attributes. The policy will be geared towards restoration of degraded wetlands, ensure sustainable development through conservation and preservation of the existing pristine wetlands as well as their biological diversity.

8

Box 3.6 (continued) **Assessment of the draft Lagos State policy on wetland** conservation and management (2016)

Other objectives:

- To establish an effective and efficient International and legal frame work;
- To improve scientific information and knowledge base on Lagos wetlands;
- To strengthen institutional capacity on conservation and management of wetlands;
- To promote innovative planning and integrated management approaches.

According to the Ministerial Press Briefing April 2017, two wetland areas at Badagry and Epe were fenced. There is has been no further plan of action in the development and implementation of the policy.

Law	Section (s)	-	Challenges
Constitution of the Federal Republic of Nigeria	The constitution makes provision in C Two on the fundamental objectives and directive principles of state policy for tection and improvement of the enviro and 'safeguard the water, air and land and wild life of Nigeria.' Section 20 o fundamental objectives and directive principles of state policy lays out the lines to guarantee a safe environment Nigerians and emphasises the duty of to not only protect the environment, b to continually enhance it.	nd the pro- onment d, forest f the guide- t for f states	Nigerian Constitution does not specifically make provision for reliefs relating to violations of the environment. No environmental rights in the constitution that can ensure the protec- tion of the environment (wetland)
Land Use Act 1978	It was primarily promulgated to ease burden on government for acquiring I public purposes. The Act enables go ment to determine the uses of land. Section 36(2) preserves the rights of of land who were using such for agric purposes prior to the inception of the	and for vern- holders cultural	Through the provisions of the land use Act, most of the country's wetlands reverted to the government. This has led to pollution of wetlands by farmers seeking alternate fertile land, and mass extinction of breeding ground for fish and other species of aquatic life.
Environmental Impact Assessment (EIA) Legislation Act No. 86 of 1992.	To ensure that potential environmenta pacts are foreseen at the appropriate of project design and addressed befor decision is taken on the project. It is important to protect our fishery, w creeks wetlands and other lands, air, inal plants and mineral resources from impact of human activities.	stage ore any vildlife, medic-	Most EIA reports have been criticized by the public for lack of credibility.
Sea Fisheries Decree No. 71 Of 1992	The decree sets out to regulate, proh restrict the taking of fish in any speci within the territorial waters of Nigeria		There is monitoring and policy implementation gap that weaken the Sea Fisheries Decree.

Table 3.7Laws on wetland protection in Nigeria

(Source: Authors' own representation)

3.4 Institutions for Flood and Wetland Management

The institutional framework in Nigeria can be traced back more than four decades in history. The federal government of Nigeria has since the first, second, and third National Development Plans of 1962-1968, 1970-1974, and 1975-1980 initiated plans for the management of all disasters including flooding. The continued propensity of flood incidents in Nigeria necessitated the establishment of additional institutions from the late 1990s to assists in flood disaster management in Nigeria.

A. National and State Emergency Management Agency (NEMA)

NEMA procures and distributes relief materials in the form of food items, non-food items and bedding materials to the affected victims while a technical mitigation committee of FEPA undertakes flood impact assessment responsibilities and develops structural and non-structural measures.

B. Commission for Refugees (NCFR)

NCFR prepare emergency shelters or find suitable accommodations for internally displaced persons.

C. Federal Environment Protection Agency (FEPA) (established earlier in 1988)

D. Nigerian Metrological Agency (NIMET)

NIMET studies the pattern of precipitation nationwide and acquires, classifies and preserves metrological data needed for flood prediction and forecasting. Non-governmental organizations, particularly the Red-Cross society respond by providing cash and relief materials to affected persons or by ensuring that those who lost their lives are properly buried.

E. Federal Ministry of Environment (FME) in 1999 – National Strategic Institutions for Flood Management in Nigeria

The FME integrated various ministries and agencies to tackle flooding in Nigeria:

- Federal Emergency Management Agency (FEMA);
- National Emergency Management Agency (NEMA);
- State Emergency Management Agency (SEMA), Local Emergency Management Agency (LEMA);
- National Orientation Agency (NOA);
- National Commission for Refugees (NCR);
- National Environmental Standards and Regulations Enforcement Agency (NESREA) which by the 2009 Nigerian Acts supersedes
 - FEPA;
 - Nigerian Meteorological Agency (NIMET);
 - Nigeria Hydrological Services Agency (NIHSA);
 - NEST (Nigeria Environmental Study and Action Team);
 - Building Nigeria's Response to Climate Change (BNRCC).

F. Lagos State Ministry of the Environment

The Ministry was created to initiate and formulate policies, to regulate and set standard on environmental matters in the state, hence the mission is to foster a clean, healthier sustainable environment for the well being of the citizenry through the application of best practices in environmental management. The ministry conducts its activities through the commissioner for the environment, special adviser and two permanent secretaries, thus Office of Environmental Services (OES) and Office of Drainage Services (ODS).

Lagos State Ministry of the Environment responsibilities:

- Waste management;
- Environmental sanitation and protection services;
- Pollution control;
- Ecological and conservation matters;
- Control and regulation of outdoor advertisement;

- Deflooding;
- Sewage management;
- Coastal and hinterland erosion control;
- Evaluation of Environmental Impact Assessment (EIA);
- Environmental Audit Report (EAR).

Note: Responsibilities related to flood management are suited under the department of Drainage Construction and Water Resources; Emergency Flood Abatement.

G. Office of Drainage Services (ODS)

The Departments under the Office of Drainage Service include:

- Drainage Planning and Design Department;
- Drainage Construction and Dredging Department;
- Drainage Special Projects Department;
- Drainage Maintenance and Operations/EFA;
- Land Reclamation and Erosion Control Department;
- Drainage Enforcement and Compliance Department;
- Water Resources Department;
- Finance and administration;
- Accounts department.

It offers the following technical services:

- Ground water hydrology;
- Control of water pollution and hyacinth;
- Identification and management of gullies and degraded areas;
- Preparation of master plans of the drainage system in Lagos;
- Proper routing and management of storm water;
- Supervision and management of donor agencies assisted projects.

The Office of Drainage Services is saddled with the responsibility of ensuring effective storm water management to reduce the incidence of flooding in Lagos state to the barest minimum. The deflooding programme is one of the strategic ways of sustaining flood management plans based on the predicated raining programme, thus:

- Pre Rain Programme January-March;
- Mid Rain Programme April-July;
- Post Rain Programme September-December.

The Drainage Construction and Dredging Department is charged with the following responsibilities:

- Flood Control and management;
- Identification and management of flood prone and flood affected areas;
- Attending to drainage matters and complaints;
- Monitoring of primary and secondary drainage channels against abuses;
- Construction and rehabilitation of primary and secondary drainage channels;
- Dredging and maintenance of primary channels.

Box 3.8 Assessment of Office of Drainage Service

The Office of Drainage Services (ODS) was one of the two arms under the Ministry of the Environment, but administrative metamorphosis in the past few years have drastically changed and affected its mode of operation. The two arms (Offices of Environmental Services and Drainage Services) were merged into a single entity in 2017 for effective resource management, now called the "Cleaner Lagos Initiative". Early 2018, ODS was finally removed from Ministry of the Environment and it is now under the Lagos State Public Works Corporation named "Lagos State Public Works and Drainage" with a Special Adviser to the Governor on Public Works and Drainages. The operational separation of functions and duties between the newly constituted Lagos State Public Works and Drainage and the Cleaner Lagos Initiative which is expected to maintain the primary, secondary and tertiary drainages is not clear. The unplanned and untimely administrative changes resulted in a delayed and slow deflooding programme in the city and were not able to prevent the floods in July 2017 and May 2018. Another key challenge of the insufficient institutional flood management is the lack of reporting and feedback mechanisms enabling the relevant agencies to quickly respond to drainage emergencies.

H. Lagos State Ministry of Physical Planning and Regional Development

Provisions in the Lagos State Urban and Regional Planning Law of 2010 established the following agencies under the Ministry of Physical Planning and Regional Development to ensure sustainability of the environment:

- Lagos State Physical Planning Permit Authority (LASPPPA).
- Lagos State Building Control Agency (LASBCA).
- Lagos State Urban Renewal Agency (LASURA)

These agencies have been empowered to grant development permits, control developments and renew and regenerate the blighted areas in the state, respectively.



Picture 3.9 Flooded area in Apapa, March 2018

(Source: Niyi Fajimi)

3.5 Adaption Strategies

Lagos experiences regular flooding generated by its extremely flat topography, increasingly excessive rainfalls, an inadequate stormwater drainage system and obstruction of natural steams and water course; ocean storm surges through high tidal levels and arbitrary/ unregulated modification of the shoreline. The floodings in recent years in Lagos State are directly linked to a combination of all the factors.

Adaptation strategies and actions have been employed by the Lagos State government over the years:

- Lagos Mainland storm-water Drainage Master Plan (1972-1974), the first ever in Nigeria which has been fully implemented;
- Lagos Island Storm-water Drainage Master Plan in 1988-1990;
- Storm-water Drainage for Apapa in 1991-1992;
- A study of Environmental Impact Assessment, Economic Benefits and Cost Estimation was conducted under the Lagos Drainage and Sanitation Projects in 1992-1993. It covered, Lagos Mainland, Lagos Island and Apapa Local Government Areas;
- The Greater Lagos Drainage (1998-1999) complemented the 1974 study, covering an additional area of 500 sq km;
- The Lagos Drainage Master plan for the entire Lagos State (2012 till date) is still on-going, covering over 3,500 sq km.

The storm-water drainage master plan development and storm-water drainage projects implementation were commissioned in 2013 under the Lagos State Ministry of the Environment as part of the adaptive strategies to develop resilient drainage infrastructure (refer to table below).

S/N	Resilient drainage infrastructure intervention	Panacea for sustainable infrastructure development	Sector
1	Construction and dredging of 12 Nos stormwater drainage channels in Lekki peninsula	 Deflooding of LCC Lekki Expressway expansion work Deflooding of all housing estates within this, e.g. Lekki peininsula scheme 1, Igbo-Efon, Nicon Town, Victoria Garden City, Elegushi estate, Ajiran etc. 	 Roads Transportation Housing Health Education Commerce
2	Upgrading and construction of system 6C stormwater drainage channel	 Deflooding of LUTH, Idi-Araba Deflooding of Mushin Deflooding of Birch Free- man High School Deflooding of Ishaga Road, Surulere Deflooding of Apa- pa-Owonronshoki Expressway 	 Roads Transportation Housing Health Education Commerce

	Table 3.10	Overview of drainage infrastructure interventions since 2013
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(Source: Lagos State Ministry of The Environment, Office of Drainage Services, 2013)

Map 3.11 Flood risk levels in the Lagos area qualitatively determined by coupling population density with list of flooding events and locations



(Source. Adopted from U. C. Nkwunonwo, M. Whitworth, and B. Baily (2016): Review article: A review and critical analysis of the efforts towards urban flood risk management in the Lagos region of Nigeria)

Non-structural measures

Many proactive measures and action had been embarked on by the state government to combat flooding in recent years. Laws and governement regulations around flood plains, drains and wetland are reviewed to meet or abide with international standards. Adaptive measures also include ensuring that people do not reclaim or sandfill canals, do not build kiosks, shops and attachements on drains and canals, do not dump refuse, debris or waste inside the canal and maintain drains in front of private houses.⁹ A key initiative includes the Drain Dock and The Emergency Flood Abatement Gang (EFAG) 2012. Lagos is also the first region in Nigeria to carry out a detailed topographic mapping of the area with LiDAR (Light Detection and Ranging) data acquisition and GIS-based analysis aimed at addressing the challenges of flooding. Other non- structural measures to reduce the exposure of urban population to flood risks have been included into the existing framework for urban development in the city which is guided by land use plans and zoning regulations in terms of permissible developments, height, density and building setback provisions. Property developers in Lagos are expected to build according to zoning regulations providing safeguards to flood risks e.g. regulations on the minimum setback to the ocean, lagoon, river and creeks, and gorges/canal/drainages respectively. These regulations are however not effectively enforced as seen in the large numbers of buildings and other structures on drainage paths, flood plains and close to the coastline leading to the demolition of buildings located on drainage paths in flood prone communities like ljora-Badia (2010, 2012 and 2013) or Agege and ljeshatedo in 2011. It seems that such demolitions are more often carried out in lowincome areas whilst failures to apply to regulations in high-brow areas are less often punished.

Other non-structural measures undertaken towards the effective management of floods by city officials include the following:

- Establishment of an Emergency Command Control Centre;
- Strengthening the drainage department of the Ministry of Environment by increasing the number of engineers and staff from 5 before 2007 to 75 in the period 2007 to 2011;
- Posting of structural engineers to all local governments;
- The Building Control Agency is divisional and local government based;
- Decentralisation to enforce and ensure free flow of information
- Division of the state into areas that are flood prone and not flood prone areas;
- Building of relief camps, one in each of the three senatorial districts, to shelter displaced persons. Only one is presently completed and in use improving primary health care delivery in communities.¹⁰
- 9 Lagos State government, Lagos State Development Plan 2012-2015 (2013; Lagos State Ministry of Economic Planning & Budget), 105.
- 10 Adelekan .I. (2014) Flood Risk Management by Public and Private Agents in the Coastal City of Lagos, 6th International Conference on Flood Management (ICFM), São Paulo, Brazil

Box 3.12 Assessment of flood risk and wetland management in Lagos State

The flood risk and wetland management efforts in Lagos considered in the global context of current flood risk management practices reveal significant gaps. A number of non-structural approaches which promote flood risk assessment and management are frequently ignored. Efforts to manage and assess flood risk in Lagos are aimed at both prevention and control of flooding. A strategic approach towards flood risk management would look like this¹¹:



Wetland management has not yet played any role; wetland areas are rather sand filled and used as additional construction ground for residential and commercial purposes. The role of LASPARK in the management of wetlands and green areas to control flood needs to be strengthend. Specific Recommendations on flood management were formulated during the Lagos State Annual Climate Change Summits 2009-2015 and are still waiting for implementation¹²:

- Lagos State government should embark on the upgrading existing and installation of up to date real time weather monitoring, prediction instruments and early warning systems for the state;
- Planning across the city and every development sector should integrate appropriate measures that would make communities more resilient to climate change induced extreme weather event;
- Lagos State government needs to substantially build up emergency response capabilities;
- The proposed Lagos State climate change plan of action should take into account sea level rise of over 1m and storm surges of over 2 meters by 2100;
- The government should put in place a strategy for integrated coastal zone management (ICZM);
- Lagos State government state should strengthen its research capacity to gather, analyse and disseminate climate related data such as high resolution digital elevation land-use patterns, meteorological and oceanographic data etc, to facilitate the determination of climate change risks, impacts and adaptation planning;
- Lagos State government needs to develop a compreensive coastal adaptation strategy, identifying cost effective and appropriate adaptation options for different areas and infrastructure at risk;
- A comprehensive response approach that will include climate change information system, flood risk analysis and operational adaptation strategy, with emphasis on increasing people's resilience, should be put in place;
- The establishment of a working group to investigate the feasibility and approach required for the establishment of the continental programme for the assessment and management of risk to the African coastal environment should be given a top priority by both the federal government and coastal states in Nigeria;
- Lagos State government, which has ultimate responsibility for the protection of the people

¹¹ Authors's own representation

¹² Lagos State Annual Climate Change Summit Communique 2009-2015

Box 3.12 (continued) Assessment of flood risk and wetland management in Lagos State

- of the state as well as their properties, should take climate change scenarios into account in planning and budgeting for disaster response;
- Lagos State government should strengthen its Early Warning System¹³ as an adaptation strategy against climate change effects;
- The urban development master plan¹⁴ needs to be reviewed and upgraded to include climate change and adaptation consideration;
- Governments at all levels should start to reframe climate change issues and seek new kinds of solutions to help affected communities and people to deal with negative effects of climate change that exceed their capacities, within the context of the Warsaw International Mechanism on Loss and Damage¹⁵;
- The government should continue to support the African Coastal Cities Climate Change Vulnerability and Adaptation Planning Project¹⁶ towards making Lagos more resilient.

13	ibid.
14	ibid.
15	ibid
16	ibid.

In July 2017, flood ravaged Lekki, one of the highbrow area of Lagos after a few days of heavy down pour 15 Residents lamented that the flood was so massive that they were unable to leave their homes. Other places affected included Victoria Island, Ajah and Victoria Garden City. Commenting on the flooding, Prof. Sani Mashi, Director-General and Chief Executive Officer of the Nigerian Meteorological Agency (NiMet) called for the demolition and reconstruction of structures in these areas to contain annual flooding: "Lekki is a land belonging to the sea; by implication, Lekki is built on the sea. Therefore, if you are building in the sea, the starting level of the building has to be above the sea, so what needs to be done is to demolish structures in Lekki. If you can't demolish them, then convert the ground floor to be the base level."17 The Chairman of the VGC Property Owners' and Resident Association (VGCPORA), Architect Olusegun Ladega, called on a stop to all sand filling activities of lagoons and oceans causing coastal erosion and forcing water back to land until estate developers produce the required Environmental Impact Analysis. He also called on the enforcement of the original drainage master plan and the 2010 urban regional plan and development laws.¹⁸ Early in 2018, Victoria Garden City Property Owners and Residents Association (VGCPORA) engaged with the Lagos State Government to find solutions. They had identified three main reasons for the flooding in Victoria Garden City (VGC):

The encroachment upon the original buffer zone between VGC and the Melrose Park Estate

Despite VGCPORA's complaints in 2009, Melrose Park Estate Developers continued the construction of its new estate including the fencing off and sand filling of about 1.40 meters in length of a portion of the Southern Canal thereby failing to preserve the natural watercourse as planned in the original LASG Drainage Masterplan (System 158). Consequently seven outlets from VGC drainage system into the canal were shut off.



Map 3.13 Extract from the Lekki Regional Drainage Master Plan

(Source: Victoria Garden City Property Owners and Residents Association)

18 https://guardian.ng/news/lekki-property-owners-propose-end-to-sand-filling-flood-management-strategies/

The reconstruction of the Lekki Epe Expressway

Prior to the reconstruction of the Expressway, VGC was levelled with adequate water runoff drainage systems. In 2013 the Expressway was elevated 1.5 m above VGC level. The reconstruction was done without any runoff water drainage systems between lkota and Ajah on the northern flank of the Expressway. Whilst the existing drain was removed during expansion of the Expressway, it has not yet been replaced The conversion of the VGC roundabout to a four way-junction in 2016 added further surface water runoff chutes without connecting to a drainage system. As a result all run off water now discharges into VGC.

No collector drains to channel discharge

Sand filling of retention pond near VGC gate

A retention pond near VGC gate used to connect with the Eastern canal into the lagoon, it was sand filled by a claimant in about 2013. The loss of the retention pond is regularly causing flooding into VGC with sand from the retention pond entering the drainage systems and the Eastern Canal now blocking the flow of water to the lagoon

Critical review

VGCPORA urges Lagos State government to undertake the following to prevent further flooding in the area:

- Melrose Park Estate is expected to fully comply with the resolutions of a stakeholders' meeting of 29th April 2009: to remove all encroachments in the Buffer zone and to restore the natural watercourse to its original state so that it will comply with the LASG Lekki Regional Drainage Masterplan (system 158);
- Construction of a drainage collector system at the Lekki Epe Expressway to discharge all runoff water from the expressway into the canal as per the LCC/HiTECH original design;
- Reopening of the retention pond and the VGC Eastern canal and ensure strict enforcement. of the original plans.



Picture 3.14 Results of blockage of natural drainage course at the Melrose Park Estate

(Source: Victoria Garden City Property Owners and Residents Association)
Ifako-Ijaiye covers a total area of 43 square kilometres within Lagos State's 3,577 square kilometres land area. The Ifako-Ijaiye Local Government was created along with 183 other local governments on 1 October 1996 by General Sani Abacha, the then military head of state. It was carved out of Agege Local Government, with headquarters in Ifako. The 1991 census found the majority of inhabitants to be Yoruba. The major settlements are Ijaiye, Ifako, Alagbado, Iju, Ishaga, Ojokoro, and Alakuko. The Ifako-Ijaiye Local Government Area is located in the northern part of Lagos State and has a very sloppy topography. It is highly prone to various disasters caused by floods, which result in serious erosion. The continuous erosion has led to landslides, which in turn have created gorges in places such as Unity, Haruna, Isale-Oro, Ajibodu, Adewale-Adegun, or Idiagbon. The land, however, is known for its rich agriculture due to its good soil. The Ifako-Ijaiye Local Government Area also has a river, which flows from Ogun State through the Ladoke Olayinka area and has created a natural gorge.¹⁹

Ifako-Ijaiye was one of the areas reported in the 2011 flooding disaster.²⁰ A number of vehicles and houses were submerged by the flood. In 2018, residents told the research team during a site visit that flood has been generally minimal in Ifako Ijaye over the past year due largely to two things: enforcement of the drainage master plan²¹ and the implementation of enlightenment campaigns.²² The master plan serves hereby as an overall management instrument of existing drainage channels and waterways. As some people have extended their resident walls or shops far on to the road side and over the water ways, Ifako-Ijaiye government officials apply a participatory approach by clarifying risks with the communities and where necessary, by identifying and removing illegal structures built on water ways and drainage channels. Sometimes these enforcement actions face opposition from local unemployed youths, preventing the demolition of unwanted structures on drainage systems. As the population in Ifako begins to construct new buildings, drainage channels are often constructed when repairing the road network. The main issue to prevent the free flow of water and the high deposition of silt into the drainage channels. The local government, with support from the state government, now undertakes regular clearance of the silt to allow free flow of water during heavy rainfall.²³

Critical review:

Based on the finding from Ifako Ijaiye, the local government urges Lagos State government to undertake the following to prevent further flooding in the area:

- The state government should continue to support the local government in the enforcement of the drainage master plan.
- With increasing population growth in Ifako Ijaiye the road network development should strictly be in conjunction with drainage maintenance and construction.

- 19 NIGERIA: IFAKO-IJAIYE URBAN PROFILE- United Nations Human Settlements Programme (UN-Habitat), 201
- 20 (http://www.thegazellenews.com/2013/07/05/exclusive-flood-sweeps-away-nursery-pupil-in-ifako-ijaiye-killer-canal)
- 21 Results of fieldwork, conducted in 2018
- 22 ibid.
- 23 ibid.

3.8 Recommendations

The Lagos State government embarked on numerous substantive flood management strategies in collaboration with both local and international private and development institutions to learn from global best practices in coastal cities flood management. However, there is still the need to improve on early meteorological forecasts at the city level, proper dissemination of flood warnings, awareness of flood risks among the public, and how their habits as well as activities contribute to flooding. Therefore, Lagos still needs to develop a comprehensive flood risk management system, hence a clear, robust, inclusive and forward looking strategic plan that is informed by rigorous research, administrative data gathering, and dialogue with the public, evaluation and learning.

Recommendations:

- Appropriate selection of drainage types, of proper construction methods, and an adequate supervision;
- Maintenance of drainage infrastructure has to be intensified due to age with regular inspections;
- Quality management with regard to standard construction materials;
- Application of best practices that will ensure delivery of resilient drainage to mitigate and serve as adaptation strategy for climate change thereby providing save environment for development;
- Adequate system that allows for the flow of water away from the surface of the road pavements, building roofs and environment.
- Prioritisation of legislation and provision of resources towards flood hazard and flood risk mapping for entire Lagos state. This is the basis of flood risk mitigation within the European Union framework, which requires all constituting states to prepare flood hazard and flood risk maps to promote the concept of living with floods.²⁴
- Flood risk reduction under the "living with floods" idea is multi-disciplinary, indicating that various industries can assist in reducing the impacts of flooding. This is the case in the UK in particular.²⁵ In view of the widening of the public awareness of flooding, there is a need for improved collaboration between the Lagos State government and the federal ministries, departments, and agencies such as NEMA, NESREA, and NIHSA.

- 24 EC (European Commission): Flood Risk Management Flood Prevention, Protection and Mitigation, Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions, Brussels, 2004
- 25 EA (Environment Agency): Working With Natural Processes to Manage Flood and Coastal Erosion Risk, Environment Agency, London, 2010

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Olusola Adeoye

SOLID WASTE MANAGEMENT



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4.1	
Introduction	149
4.2	
Policy, Laws, and Institutions	151
4.3	
Governance and Stakeholders	161
4.4	
The Case of Kosofe	169
4.5	
The Case of Amuwo Odofin	175
4.6	
Conclusion	183

4.1 Introduction

According to the Lagos State government, the city produces more than 10,000 metric tonnes - the equivalent of more than 1,000 trailers – of waste daily.¹ It is probable that the effective volume of solid waste production is much higher, as these figures are based on official numbers. Informal waste collection has been formally banned and consequently does not figure in the official estimate. The generation, disposal, and management of waste represent some of the most visceral flows of our society. About 4 billion tonnes of waste are generated globally each year, giving rise to a 433-billion-dollar industry which collects and disposes of waste across multiple geographies.² By some estimates, the contribution of waste management to global employment is as high as 6 percent, with attendant effects on climate change.³

Many cities in developing and emerging regions have been undertaking efforts to form new arrangements between the flexible informal systems and the institutional and legally recognised forms of waste management. Formal and informal activities can be connected by offering official waste collection stations that are discharged by municipal waste trucks. However, in order to tackle the enormous challenges of city regions like Lagos that grows at a rate of 300,000 people per year and to relieve the overstrained central government, the approach might just be to implement multi-layered urban governance by integrating formal and informal forms of urban management and by strengthening local governments and communities.⁴

The chapter will outline the waste management system in the urban agenda and in the programmes of both state and local governments. A crucial update to this edition is an examination of the state government's abrupt (and seemingly arbitrary) launch of the Cleaner Lagos Initiative, a legislation-backed move to hand over waste management operations throughout the state to corporate actors representing "Big Waste" – all but edging out grassroots initiatives in the process. The chapter reiterates the implications of this unilateral move by the government for a waste management system that has historically been multi-scalar in nature, and highlights the continuing relevance of such a system to everyday life in the different neighbourhoods of Lagos. Broaching the issue of multi-scalar connections automatically touches on the politically sensitive topic of informal waste pickers and cart pushers, whose activities have been effectively banned since the new Lagos Waste Management Law came into power in 2007.⁵

However, for many urban and rural poor, waste picking in the city is an obvious income source. Further, informal waste pickers represent a key jigsaw piece in the municipal waste management system for different reasons. Firstly, many streets are too narrow for conventional waste trucks to enter. Secondly, poor people may not have the monetary resources to pay for garbage disposal – a situation which resourceful cart pushers take advantage of to generate income while contributing to a healthier and cleaner city. Importantly, in spite of the official ban, cart pushers have emerged as critical stand-in service providers even in better-off neighbourhoods in the wake of recent boycotts by local waste collection companies protesting their virtual exclusion from the new privatisation regime in the sector.⁶

The chapter chronicles in a first step the history of solid waste management in Lagos State and

- 2 Michele Acuto, "Everyday International Relations: Garbage, Grand Designs, and Mundane Matters," in International Political Sociology 8 (2014), 345–362.
- 3 Daniel Hoornweg and Perinaz Bhada-Tata, "What a Waste: A Global Review of Solid Waste Management." Washington, DC: The World Bank (2012).
- 4 Fabienne Hoelzel and Ebun Akinsete, "Towards a new community-led governance approach, integrating the global into the mundane and why design matters," in Public Sphere Journal. Africa Summit Special Issue (London: London School of Economics, ISSN 2056-533X), 26-42.

6 Eno Bassey, Bertram Nwannekanma and Adelowo Adebumiti, "Lagos residents turn to cart-pushers while awaiting new waste reform." The Guardian Newspapers, Nigeria, 25 June 2017.

¹ Lagos State government, Lagos State Development Plan 2012-2015 (2013; Lagos State Ministry of Economic Planning & Budget), 106.

⁵ Law no. 5, 2007.

150

maps the relevant laws and policies that guided the establishment of the Lagos State Waste Management Authority (LAWMA) and that regulated the operations of the authority for nearly three decades, beginning in 1991. Further, important revisions to LAWMA's mandate ushered in by the state's 2017 Environmental Management and Protection Law are highlighted. In a second step, the current and proposed governance mechanisms within and around LAWMA are examined, especially in relation to their operationalisation within the framework of the Cleaner Lagos Initiative. In a third step, the results of the waste management field research in the Kosofe and Amuwo Odofin local government areas are presented. The field research, carried out in 2015 before the implementation of the Cleaner Lagos initiative, aims to reflect the practicability and day-to-day reality of the indigenous private waste collection model that LAWMA presided over. The research team aims to carry out another field research of the practicability of the Cleaner Lagos initiative at a later stage. The chapter closes with a summary of findings and a conclusion.

In 1873, in an effort to try to clean up Lagos, the following was gazetted:

"Householders and owners of unoccupied lands throughout the town are requested to keep the streets clean and around their premises, by sweeping them at least once in a week as well as cutting and clearing away bush and grass and removing other sources of nuisance."¹

Sir William Macgregor was the Governor of the Lagos colony between 1899 and 1902, when the population was around 40,000, and he introduced a number of very significant drainage and sanitation measures. The public health ordinance was circulated in 1908, under the Lagos municipal board of health, to improve environmental health conditions.² Early legislation with focus on solid waste dates from the township ordinance 1917, when Lagos became the first city to have a town council; this established the broad principle of municipal responsibility for health and sanitation. The Nigeria town and country planning ordinance of 1946 also covered sanitation issues and was in operation until 1992.³

From the 19th century, sanitary inspectors or attendants carried out duties largely concerned with the control of infectious diseases and their activities became prominent during the Bubonic plague outbreak in 1924. In the 1930s they became known as nuisance inspectors and were concerned with waste and environmental sanitation, amongst many other things. The "dreaded and respected" sanitary inspectors continued into the 1950s and 1960s and had several name changes until they became known as environmental health officers in 1988.⁴ Environmental health officers head environmental departments within local governments and the Ministry of the Environment also has officers with this portfolio. There appears to be little information about any major waste management initiatives during the 1950s and 1960s, a period characterised by agitation for independence and the subsequent civil war, which started in 1967.⁵ The oil boom years of the 1970s saw increased industrialisation and urbanisation in Lagos, and the city became so overwhelmed with waste that it became known as one of the dirtiest cities in the world. The hosting of FESTAC in Lagos in 1977 was a catalyst to address the ever increasing waste management problem.⁶ In April 1977 the Lagos State Refuse Disposal Board (LSRDB) was created, under the Lagos city council, and managed by Canadian pollution consultants.⁷ In 1981, its name was changed to the Lagos State Waste Disposal Board (LSWDB) due to the added responsibilities of commercial and industrial waste collection, clearing of drains and disposal of abandoned vehicles.⁸ Lagos State was the first state government to establish a Ministry of the Environment in 1979. Environmental issues are administered by the ministries of environment at the federal and state levels and by environmental health departments at the local government level.

- 2 Leke Oduwaye and Taibat O. Lawanson, "Land Use Development, Planning Administration and Planning Education in the Lagos Metropolis." Proceedings of the International Workshop of Association of African Planning Schools, University of Cape Town, October 2008.
- 3 Geoffrey I. Nwaka, "The Urban Informal Sector in Nigeria: Towards Economic Development, Environmental Health, and Social Harmony," Global Urban Development Magazine 1, 1 (2005).
- 4 Sani Garba, "Environmental Health in Nigeria, Yesterday, Today and Tomorrow," Available at: http://www. gamji.com/article3000/NEWS3730.htm. Accessed 11 December 2017.
- 5 Lasse Heerten and A. Dirk Moses, "The Nigeria–Biafra war: postcolonial conflict and the question of genocide," in Journal of Genocide Research 16 (2014), 169-203.
- 6 Lagos State Ministry of the Environment, http://moelagos.gov.ng/agencies/lagos-state-waste-managementauthority-lawma-2/. Accessed 15 December 2017.
- 7 ibid.
- 8 ibid.

Ade Aduwo, "Historical preview of town planning in Lagos" in Urban and Regional Planning in Nigeria.
 A Collection of Readings, ed. AM Laseni (1999; Lagos: Nigerian Institute of Town Planners Lagos Chapter).

Esstablishment of the Lagos State Waste Management Authority (LAWMA) in 1991

The Lagos Waste Management Authority (LAWMA), formerly known as the Lagos State Refuse Disposal Board (LSRDB), was established in 1991 to collect, transport and dispose solid wastes in the state under edict No. 55. However, under military rule it had fallen into disorder and in 1999 the Lagos Waste Management Authority was designated as the only authority permitted by law to undertake commercial, industrial and trade waste collection services in Lagos State. It was supervised by the office of environmental services within the Lagos State Ministry of the Environment, which was established in 1979. The agency became responsible for the collection and disposal of municipal and industrial waste, as well as for the provision of commercial waste collection services to the state and local governments. LAWMA was charged with the responsibility of ensuring effective and efficient disposal of both residential and industrial waste in Lagos. Apart from being responsible for general solid waste management, LAWMA had the role of management of all government disposal facilities. In 2007 its functions were redefined in the Lagos Waste Management Authority Law, and under sections 1 & 2 (3) (c) its functions were to be carried out by a governing board. The governing board provided for one local government chairman from each of the three senatorial districts in Lagos to be members and also a representative from a community based organisation. Section 5 (1) (I) of the law empowered the governing board to enter into contract with local governments, state agencies, regional authorities and private persons to provide waste management services and to plan, design, construct, manage, operate and maintain solid waste disposal and processing on their behalf.9

LAWMA's mandate under the 2007 law was to enforce environmental laws on defaulters or violators, and promotes strict compliance and awareness of environmental practices among citizens of Lagos State. These responsibilities were implemented by a department with monitoring, enforcement and compliance responsibilities.

Box 4.1 Laws related to the establishment and operation of LAWMA

- Edict no. 9 1977 (Lagos State Refuse Disposal Board);
- The Land Use Act 1978;
- Environmental Sanitation Law 1978 (which insisted on the use of dustbins and stipulated that it was a nuisance to indiscriminately dispose of refuse);
- Lagos State Waste Disposal Law 1981;
- Environmental Sanitation Law 1983 (went further to categorise waste into commercial and domestic waste and prohibited burning of any commercial waste);
- The constitution of the Federal Republic of Nigeria 1989;
- Edict no. 55 1991 (LAWMA);
- Lagos State Environmental Protection Agency 1999;
- Lagos State Environmental Sanitation Law 2000 (recognises LAWMA as an agency of government that should provide commercial services to the state and local governments);
- National Environmental Standard and Regulations Enforcement Agency Act 2007;
- Lagos Waste Management Authority Law 2007.

Lagos Waste Management Authority Law 2007.

9

Box 4.2 Federal policies and legislations that have influenced waste management policies

- Harmful Waste Act 1988;
- Federal Environmental Protection Agency (FEPA ACT) 1988;
- National Policy on the Environment 1989;
- Federal Republic of Nigeria Constitution of 1989 (This stated the mandatory establishment of state and local government environmental protection bodies.);
- National Management of Solid and Hazardous Wastes Regulations 1991;
- National Guidelines and Standards for Environmental Pollution Control 1991;
- National Effluent Limitations Regulations 1991;
- National Environmental Protection (Pollution Abatement in Industries and Facilities Generating Waste) Regulations 1991;
- Environmental Impact Assessment Act (EIA) 1992;
- Environmental Impact Assessment Procedural Guidelines 1995;
- FEPA Sectoral Guidelines for Solid Waste Management Projects 1998;
- National Oil Spill Detection and Response Agency Act (NOSDRA ACT) 2005;
- National Environmental Standards and Regulations Enforcement Agency Act (NESREA ACT) 2007 (this repealed the Federal Environmental Protection Act of 1988. However, the subsidiary legislation under the FEPA Act is still in force);
- National Environmental Protection (NEP) (Effluent Limitation) Regulations;
- NEP (Pollution Abatement in Industries and Facilities Generating Waste) Regulations;
- NEP (Management of Solid and Hazardous Waste Regulations);
- National Environmental (Sanitation and Wastes Control) Regulations 2009.

Restructuring in 2007 and ban on cart pushers

In 2007, LAWMA's functions were redefined in the Lagos Waste Management Authority Law. Pilot studies with private sector participants (PSPs) began in 2003, following which hundreds of PSPs – small- and medium-scale local businesses mostly constituted by erstwhile informal sector actors – were formally brought in to collect, transport and dispose of waste. An informal labour force collected any residual waste. Although this is now deemed illegal and LAWMA has imposed a ban on refuse cart pushers, the latter still operate clandestinely, usually at night and in the early hours of the morning, especially where formal operators have failed to keep up with collection schedules.¹⁰ During this period the state government began "Operation Clean Lagos", upgrading dumpsites and restructuring the private sector programme to ensure contractors only got paid if they actually brought the waste to approved dumps.¹¹

Box 4.3 Lagos Waste Management Authority Law 2007: Mission

- To provide professional, efficient and sustainable waste management and disposal services to the generality of Lagosians, corporate bodies and governments (local and state) in Lagos State.
- 10 Awa Omiko, "Here Comes Again Lagos Cart Pushers," The Guardian Newspapers, Nigeria, 7 March 2015.
- 11 Lagos State Ministry of the Environment. http://moelagos.gov.ng/2016/09/15/lasg-resumes-operationclean-lagos/. Accessed 15 December 2017.

Box 4.4 Lagos Waste Management Authority Law 2007: Vision

- To provide unprecedented, efficient waste management services to all its domestic and industrial/commercial clients, governments inclusive;
- To ensure adequate provision of waste receptacles as alternatives to indiscriminate waste dumping;
- To ensure effective partnership with the private sector and other stakeholders in waste management;
- To ensure adequate public enlightenment and education for re-orientation and decent waste collection and disposal habits.

Box 4.5 Lagos Waste Management Authority Law 2007: Aims and objectives

LAWMA had a mandate to protect public health and the environment for the benefit of present and future generations while promoting justifiable economic development. This was to be achieved through strategic measures such as reforms and setting standards which sought to ensure best waste practices within the society.

Further restructuring in 2017 by the provisions of the Environmental Management and Protection Law

The Environmental Management and Protection Law (EMPL) enacted by the state government in 2017 is a comprehensive piece of legislation that addresses the management of several disparate but interconnected aspects of the city's natural and built environments, including waste, water, drainage, public recreation facilities, and advertising.¹² The law, in a single document, outlines the functions of the different government agencies and departments in charge of each of those aspects, and assigns responsibility for overall supervision to the state Ministry of the Environment. The EMPL retains LAWMA as the principal regulatory authority for waste management activities in the state; however, the extent of the authority's involvement in day-to-day operations has been curtailed at the same time that new institutions have been proposed to complement its redefined range of functions. Significantly, the law makes provision for three new institutions in this regard: the Public Utilities Monitoring and Assurance Unit (PUMAU), the Lagos State Environmental Trust Fund (LSETF) and the Lagos State Environmental Sanitation Corps. Under the law, LAWMA is reimagined as being chiefly responsible for monitoring and regulating the activities of the cohort of private sector actors freshly tasked with private waste collection and dumpsite management activities. PUMAU, for its part, will design and implement a new "Public Utilities Levy" to be charged to all private residences and businesses across the city. This levy, which will pay for the services provided to customers by the private waste collection companies, will be collected and centrally administered by PUMAU. An important provision of the levy is that it will extend concessionary rates to households in low-income areas of the city - though detailed plans of how this will be achieved have not yet been made available. The LSETF is

12 The background to the enactment of the Environmental Management and Protection Law illustrates the tendency for top-down planning often demonstrated by the state government. The law was passed within a matter of months and in near-secrecy, with little room for public deliberation or input from citizen representatives. The evidence suggests that this was done at least partly to minimise public scrutiny of aspects of the law relating to the government's plans for privatising waste management under the Cleaner Lagos Initiative; plans which, according to senior officials at LAWMA, Governor Ambode is personally invested in.

ostensibly being set up to support the objective of subsidising waste collection levies for poorer communities, which are designated in the EMPL as "Special Levy Areas". The law details a set of guidelines for setting up and managing the Fund and its governing board – as it does for PUMAU – but there is, as of the first quarter of 2018, no evidence of operations on the ground. The Environmental Sanitation Corps, imagined as a military-style replacement for the erstwhile Kick Against Indiscipline Brigade, will be responsible for on-the-ground enforcement of sanitation laws and levy collection.

·	Corporate services
•	Waste management services (Landfill management, sanitation, environmental health, marine operations, enforcement)
•	Commercial services (Medical/hazardous waste, PSP industrial and domestic operations, recycling)
•	Planning, sesearch and statistics
•	Legal services
•	Engineering services
-	Finance
-	Internal audit
-	Projects
-	Press and public relations
-	Corporate intelligence and strategy
•	Monitoring and advocacy
	Procurement

Table 4.6LAWMA departments and units under the 2007 law

Table 4.7	Provisions of the 2017 Environmental Management and Protection Law
	relevant to waste management

Provision	Implementing institution
Supervision of all government departments involved in waste management and coordination of activities between public actors and other stakeholders, including citizens	Lagos State Ministry of the Environment
Licensing of private sector actors and regulation of all activities related to waste management; Provision of cleaning and waste collection services in public areas	Lagos Waste Management Authority
Establishment and enforcement of income-sensitive Public Utility Levy to fund waste collection services provided by private and public actors	Public Utilities Monitoring and Assurance Unit
Raising additional funds from public and private sources and directing them towards areas of need, including the funding of concessionary rates for low-income households	Lagos State Environmental Trust Fund
Enforcing acceptable waste management practices in public places and assisting PUMAU with collection of the Public Utility Levy from households and businesses	Environmental Sanitation Corps

Table 4.8	3 LAWMA's statutory functions (as specified in the 2017 Environmental Management and Protection Law)
1.	Liaise with government agencies at all levels to facilitate achievement of the city's overall waste management objectives
2.	Create and regulate standards for waste collection and disposal
3.	Draw up master plans for waste collection and disposal in the city
4.	Work with other stakeholders in the sector to assess the environmental implications of the city's waste management strategy
5.	Monitor pollution and environmental impacts arising from implementation of the waste management strategy
6.	Collect and dispose of waste generated in public facilities
7.	Collect and dispose of animal carcasses from public areas
8.	Collect and dispose of vehicles abandoned in public places
9.	Clean common areas such as streets, roads and highways
10.	Provide waste management services in the transitionary period before contracted private entities begin full operations
11.	Administer operating licenses to private actors involved in waste management
12.	Monitor the construction and operation of waste management facilities by licensed private actors
13.	License and track all waste disposal systems operated by public and private actors
14.	Make specific regulations regarding the disposal of electronic and medical wastes by licensed private and public actors
15.	Keep a central database on information related to waste management
16.	Set guidelines for the reduction of waste generated and disposed of at source
17.	Enhance public appreciation of waste sorting measures and regulate adherence to those measures
18.	Adopt best practice in the collection, treatment and disposal of waste
19.	Contract private actors to engage in waste recycling and incineration
20.	Manage and monitor the initial signing-on and periodic progress of third-party providers
21.	Operate and supervise a call centre to deal with complaints and enquiries from the public
22.	Stimulate further investment in the waste management sector by private sector actors
23.	Support research aimed at improving the technical and institutional aspects of the city's waste management strategy
24.	Carry out any other activities essential to the fulfilment of its statutory functions
25.	Halt or prevent any activities that will detract from its overall mission of environmental and health protection

(Source: Adapted from the 2017 Environmental Management and Protection Law)

LAWMA recycling initiatives: recycling banks

The LAWMA recycling bank was an initiative introduced by the Fashola administration towards the adoption of recycling as an alternative to going to dumpsites. There are plans for recycling banks which will serve as store houses for paper, can, glass and plastic waste to be situated in every estate within Lagos State. LAWMA already introduced recycling banks in some organised areas where households are encouraged to deposit recyclables like plastics, cans, and bottles. Some of the former scavengers in the state were employed by LAWMA to be resource managers of the recycling banks.

The list of implemented test projects include:

- 1. Compost plant at the Odogunyan Compost Plant, Ikorodu for the treatment of market waste;
- 2. Waste-to-energy plant at Ikosi Market: generation of biogas from the market waste to be used for operating 2KVA generator at the market;
- 3. Plastic recycling plant at Olusosun for the conversion of water sachets into garbage bags. A buyback programme for water sachets, cartons, paper and glass was introduced;
- 4. Recycling clubs in secondary schools to instil a recycling habit in young people.

Box 4.9 Assessment of LAWMA recycling initiatives

The above-mentioned test projects of the waste-to-energy, resource recovery and recycling activities by LAWMA demonstrated little success in terms of commercial viability and general usability. It appears that the projects and initiatives have failed to deliver what they were intended to. The Odogunyan compost plant is not in operation anymore since farmers rejected the compost, whereas the biogas generator was never in operation at all. The same applies to the buyback programme for used materials. Problems included lack of proper feasibility studies, lack of finance, weak business plans, and above all the insufficient involvement of the future users already in the planning process.

Box 4.10 Dumpsites in Lagos State

Until recently, there were five operational dumpsites in Lagos State (there are now four), all of which were previously managed by LAWMA but are now under various forms of management:

- Olusosun This was the largest (and therefore most lucrative) dumpsite in the state up until recently. Located close to lkeja, the mainland's central business district, it was easily accessible via roads built and maintained by LAWMA prior to privatisation. The dumpsite was therefore considered prime land by both formal and informal operators, especially those involved in recycling. In early 2017, management of the site was transferred to Revive, a private waste management company a move that foreshadowed the broader sectoral reforms ushered in by the Cleaner Lagos Initiative. Following a historic fire incident at Olusosun in March 2018, however, the dumpsite was declared inoperative by the state government, with no plans to revive it. The government has announced that the site will instead be given over to a "green park" complete with recreational facilities and a golf course a testament to the immensity of its land mass.
- Igando (Solous II and III) This is now the largest dumpsite in the state, in terms of volume of waste deposited. Under the new privatisation regime, management of the site has been transferred to West African Engineers, another private waste management company.

Box 4.10 (continued) Dumpsites in Lagos State

- Ikorodu Located far away from the commercial hub of the mainland, this dumpsite is relatively small (hence its official designation as a "satellite dumpsite") and is one of the least developed dumpsites in terms of existing infrastructure. A probationary agreement for management of the site (for six months) was reached with former executives of the scavengers' association at Olusosun in October 2017.
- Epe This is the second of three satellite dumpsites in the state. Plans are underway for a sanitary landfill to be built and operated by by Visionscape Sanitation Solutions (the lead private concessionaire under the Cleaner Lagos Initiative) at a different location in Epe, following which the existing dumpsite will be sealed.
- Badagry This is the third satellite dumpsite in the state, though little has been officially published on operations at the site.



Map 4.11 Analysis of the waste management delivery system in Lagos State

(Source: Waste Management Research Group, Heinrich Böll Stiftung, 2015/2017)



(Source: Waste Management Research Group, Heinrich Böll Stiftung, 2015/2018)

Box 4.13 Waste transfer stations in Lagos State (built by LAWMA and newly refurbished by Visionscape

- Simpson (Lagos Island);
- Oshodi;
- Agege (this is the only one actually designed as an incineration plant but is presently not working).

(refer to map 4.12 for location)

Other initiatives planned under the government-led administration of the sector include:

- Procurement of compactors for dumpsites;
- Rehabilitation of the dumpsites at Olusosun, Igando and Abule-Egba;
- Evacuation of refuse backlogs at illegal dumpsites located in various areas in the state;
- Creation of more transfer loading stations;

- Review of the operations of private sector participants (PSP) in waste collection;
- Intensive day and night sweeping.

However, as the next section outlines, much has changed following the institution of the new Environmental Management and Protection Law and the associated privatisation of the waste management sector in early 2017. The crucial issues of who benefits from the new arrangement and who is largely excluded are addressed, along with the implications for governance and multi-scalar integration in the sector.

Recent explorations on the contemporary urban strategies revolve around "urban governance," "the governance of cities," or "urbanising of government".¹ Contemporary governance approaches should be close to the needs and realities of everyday life and include the integration of informal activities and structures, as opposed to excluding them. Governance in this context is understood as a shift from more formal structures of central management to processes through which the metropolitan or city government relates to their environment, not least in public service delivery. Urban governance should be understood as processes through which public and private resources are coordinated in the pursuit of collective interests.²

Waste management cuts across several institutional structures, policies and sectors, and is therefore a particularly suitable lens through which to view urban governance practice in Lagos.

Public governance structures for waste management

In addition to the federal- and state-level institutions described in previous sections, structures have been instituted to manage waste-related issues at the level of local governments. Administratively, Lagos State, with its capital at Ikeja, comprises five divisions:

- Lagos;
- Ikorodu;
- Ikeja;
- Epe;
- Badagry.

In 1991, the divisions were further subdivided into 20 local government areas (LG); and in 2006, to improve the local administration, 37 local council development areas (LCDA) were created, bringing the local government entities to 57. However, the LCDAs are not recognised at federal government level and this created some contention between Lagos State and the federal government. At the local government level, which is the third tier of government, the waste and environmental management unit handles general environmental sanitation. The unit is headed by a chief environmental health officer (CEHO) under direct supervision of the executive chairman. The CEHO is responsible for policy formulation, implementation, inspection, monitoring and prosecution of defaulters of any environmental offences at that level. It also liaises with the state government on environmental issues, through the Ministry of the Environment.

In April 2008, in accordance with the law establishing the Lagos State Waste Management Governing Board, a nine-member board was inaugurated, which included three chairmen of local government councils, each representing the three senatorial districts of Lagos State.³

Privatisation and formalisation of the waste management sector under the Cleaner Lagos Initiative

The Cleaner Lagos Initiative, announced by the Ambode administration in late 2016, has effectively come to override other waste management initiatives that were proposed before it. Perhaps most notably, an already-signed contract for a three-year international cooperation programme (from May 2017 through to April 2020) between the state government and the French Agency for Development (AFD) which proposed a participatory, community-driven approach to the upgrading of waste management facilities in the state was abruptly cancelled by the governor in

Philipp Rode and Priya Shankar, "Governing cities, steering futures" in Governing Urban Futures, eds. Ricky Burdett, Philipp Rode, Priya Shankar, Shan Vahidy (2014; London School of Economics and Political Science, LSE Cities), 4-5.

² John Pierre, *The Politics of Urban Governance* (Basingstoke: Palgrave Macmillan, 2011).

³ Babatunde Raji Fashola, "Inauguration Of The Governing Board Of Lagos State Waste Management Authority (LAWMA)," http://www.tundefashola.com/archives/news/2008/04/14/20080414N01A.html, accessed 22 December 2017.

late 2017.⁴ As has become customary with the state's initiatives in this sector, annulment of the AFD project was done without consultation with relevant stakeholders, including the government agencies (principally LAWMA) that had already begun the first phase of implementation. The timeline of events leads us to surmise that the drastic step of cancellation, with the penalties implied in the contract, was taken by the Ambode administration to make room for the more profit-oriented Cleaner Lagos Initiative being introduced.

As alluded to earlier, the trademark of the Cleaner Lagos Initiative is the creation of a mostly brand-new network of formal private sector and government actors, with either freshly defined or redefined roles in waste collection and management in the city. These actors can be broadly divided into four categories, according to the responsibilities assigned to them under the initiative:

- Dumpsite management and recycling: The actors that took over from LAWMA in this space include Revive and West African Engineers, two Big Waste companies that, in the wake of privatisation, were in charge of managing the two big dumpsites at Olusosun and Igando respectively. The abrupt takeover of the dumpsites from LAWMA by these companies brought about an upheaval of the established system, which was up until then run inclusively (even if hierarchically) by networks of scavengers, scrap dealers and waste pickers. Following the hostile takeover of both sites, scavengers in particular found their incomes slashed by up to two-thirds, with the profits from the most valuable recycles retrieved from the dumps accruing largely to the big companies. The medium-to-long term vision of the government is to have dumpsites across the city replaced by landfills equipped with the requisite technology for sanitary waste treatment.
- **Residential waste collection:** The sole entity assigned to the collection of waste from households across the city is Visionscape Sanitation Solutions, another Big Waste company that is entirely new to the Lagos context. The company initially presented itself as having ample experience of waste management in other cities around the world, both in developed and emerging markets. An investigative report in a local newspaper revealed a contrary state of affairs: it found that the company was in fact very recently incorporated, with little more than a virtual presence in the countries it claims to have worked extensively in; and that the company as an entity has no experience whatsoever in waste collection and management.⁵ The company's exaggerated claims seem to have found legitimacy in the modernising agenda being pursued by the Ambode administration the reasoning by the latter being that the old system of PSP operations had to be thrown out because it was simply not efficient enough for a state like Lagos with its megacity status. While the grand visions of progress conjured up in the state's attempts to modernise the sector might seem inspiring at first glance, the unfolding reality tells a different story.

To begin with, Visionscape's waste collection operations only got off to a shaky start in January 2018, six months after the initial publicised start date of July 2017. Further, the company's brief tenure has been dogged by its apparent inability to cope with the sheer volume of waste generated in the state, as well as by conflict arising from a refusal by the former PSPs to relinquish their status without a fight. The resistance by the PSPs (who are now referred to as "Waste Collection Operators", or WCOs) was sustained to the point that Visionscape was forced to negotiate new terms of engagement with them. On the strength of those negotiations, the erstwhile PSPs have been nominally restored to their role as residential waste collectors - working, this time, under the auspices of Visionscape rather than those of LAWMA. Under the renegotiated terms, Visionscape will be principally

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- Personal communication with Technical Assistance Consultants and officials of the Lagos State Urban Renewal Authority, the government agency responsible for project implementation, September 2017.
- Nicholas Ibekwe, "How Lagos govt sidelined local operators for foreign company with no experience in waste collection," Premium Times, Nigeria, 2 April 2018.

responsible for building high-level waste infrastructure such as the sanitary landfills referenced above, and will only provide backup waste collection services in the event that the recommissioned WCOs fall behind in their contractual obligations.⁶

While the opacity surrounding government negotiations makes it difficult for citizens to keep themselves apprised of the status of the Visionscape project, it is apparent from recent developments that financing has been a key obstacle to full implementation: most notably, a lucrative NGN 50 billion (approximately US\$ 140 million) "green infrastructure" bond, fully guaranteed by the state government, was issued by the company in August 2017 - ahead of a revised start date of September 2017. According to another newspaper report, the lion's share of the NGN 50 billion naira raised will go towards capital and infrastructure spending.⁷ The company's operational costs for the first quarter of 2018 were covered by upfront bulk payments (amounting to a little over NGN 700 million naira monthly) made by the state government; an arrangement that was intended to be in place until the Public Utilities Monitoring and Assurance Unit could start collecting the Public Utility Levy from residents. However, the perceived ratio of the costs of this arrangement to the benefits that taxpayers stand to gain from it is so high that the state House of Assembly, in March 2018, placed a moratorium on the monthly payouts by government until internal investigations into the matter could be completed.⁸ Besides the immediate concerns flagged by the House, it remains to be seen how the guarantor arrangement will work in practice, particularly how much of the costs will be passed on to residential customers and tax payers in the event that the bond does not generate sufficient returns and the government has to pay back investors from public funds.

Commercial waste collection: Prior to the launch of the Cleaner Lagos Initiative, LAWMA engaged, coordinated and evaluated the activities of the private sector participants (PSPs) mentioned earlier. The introduction of PSPs from the late 1990s by the Bola Tinubu administration was as a result of the irregularity of the services delivered by government agencies up until then. The operation of the PSPs was state-wide. The PSPs were supposed to collect waste from their customers once or twice a week. However, many residents complained about the erratic nature of collection services and the inability of PSPs to perform their duties because of broken down vehicles. There were also complaints about PSP operators increasing their monthly charges, even though it was illegal for them to increase those charges without LAWMA's approval. Under the PSP scheme, the state government was supposed to provide bins to households following payment of an annual land use charge, which was to be made through the Land Records Company.⁹

Following the unveiling of the Cleaner Lagos Initiative, however, important changes occurred with respect to future prospects for the PSPs. Significantly, PSPs would no longer collect waste from residential customers – that would now be the sole preserve of Visionscape – but would only be authorised to collect waste from commercial entities across the city. The PSPs retained under the Cleaner Lagos Initiative would be paid from the Public Utility Levy collected centrally by the PUMAU. This scaling back of PSP duties would have resulted in a significant downsizing of the workforce, leaving only a handful of the over 300 operators that were previously in business. (The criteria for selecting the PSPs that would be retained and those that would be let go were not made clear to the public at the time.) As indicated above,

⁶ Maureen Ihua-Maduenyi, "LASG makes changes to Cleaner Lagos Initiative," Punch Newspapers, Nigeria, 30 April 2018.

⁷ Patrick Atuanya, "Inside the Lagos/Visionscape deal that costs taxpayers up to N85bn," Business Day, Nigeria, 14 March 2018.

⁸ Agency Report, "Lagos Assembly summons 3 commissioners over heaps of refuse," Premium Times, Nigeria, 22 March 2018

⁹ Land Records Company, http://landrecordscompany.com/. Accessed 22 December 2017.



Figure 4.14 Actor-network diagram showing public and private stakeholders

Heinrich Böll Stiftung, 2015/2017)

this sparked protest within the ranks of the PSPs, with several of them instituting a boycott and refusing to evacuate waste from their assigned neighbourhoods, resulting in a backlog of uncleared waste in those neighbourhoods. The effects would have been particularly dire for PSPs that had taken out long-term loans to finance their operations under the previous regime, as their means of repaying those loans would have been significantly diminished.¹⁰

Public waste management: According to the EMPL, the only aspects of operations in which LAWMA would be directly involved under the Cleaner Lagos Initiative were the cleaning of public spaces such as streets and highways and the collection of waste from government facilities. From recent indications, however, these functions will henceforth be under the purview of the Ministry of the Environment and yet another cohort of private companies – leaving LAWMA with only regulatory duties to perform.¹¹ To help fulfil the function of street cleaning, the state government has instituted a scheme aimed at employing about 27,500 "Community Sanitation Workers" (CSWs) under the Cleaner Lagos Initiative. The CSW scheme is basically an expansion of the old "Highway Manager" scheme in which the government employed workers – most of whom turned out to be women – to clean the major highways and arteries in the city.¹² The main elements that are meant to set the CSW scheme apart are: the expansion of street-cleaning operations to all roads in the city, and not just the major ones; the introduction of mechanised sweepers to replace the manual methods previously used; the raising of entry requirements for the job, by requiring a

10 Interview with PSP truck drivers and members of the Scavengers' Association of Nigeria at the Olusosun dumpsite, July 2017.

11 Maureen Ihua-Maduenyi, "LASG makes changes to Cleaner Lagos Initiative," Punch Newspapers, Nigeria, 30 April 2018.

12 Interview with senior LAWMA official involved in the drafting of the Environmental Management and Protection Law, September 2017.

minimum of secondary school certification from applicants; and the guarantee of job security and benefits (such as insurance, pensions and tax exemptions) for all employees, in a bid to attract male as well as female applicants. The aim, in other words, is to upgrade the existing street sweeping scheme to the level of sophistication that is implied in other aspects of the Cleaner Lagos Initiative – the achievement of which might entail considerable benefits for those newly coming on board.¹³ As Figure 4.14 shows, however, there is no room in this new official narrative for the mass of so-called informal workers who, notwithstanding their invisibility in formal structures, have an equally valid stake in the sector.

The pivotal role of informal workers in the waste management sector

For many decades now, thousands of informal actors - cart pushers, cart builders, waste pickers, metal scrap collectors, and resource merchants - working on dumpsites and elsewhere in the city have created a thriving enterprise out of collecting discarded plastics and metals and selling them on to entities that process the materials into new products. These workers play a vital yet largely unseen role in the city's development: long before recycling became a fashionable thing to do, they had been working quietly behind the scenes, many times under less-than-dignifying conditions, to extract value from all sorts of non-biodegradable waste. (Metal scrap collectors, for example, have recycled more iron and steel for onward sale to local manufacturing companies than the multi-billion dollar Ajaokuta Steel Company has produced in its lifetime.¹⁴) In some families, this crucial livelihood source has been passed down through the decades, providing food, shelter, education and economic opportunity for generations of their children.¹⁵ Before the new Cleaner Lagos Initiative structure came into effect, sector representatives put the number of waste pickers and scrap dealers in their ranks at over 10,000.¹⁶ Recent interviews with those representatives indicate that these numbers have reduced drastically following the introduction of the initiative. The current position of each of the relevant actor groups is examined in some more detail below.

Cart pushers: As mentioned earlier, cart pushers were banned from operating in 2007. Notwithstanding this, they still operate illegally, being involved in house-to-house waste collection, transportation and recovery using purpose-built carts. Cart pushers still exist because they fill an important gap in the demand for waste collection services in the city: they often provide the only service in low-income neighbourhoods; and, in the wake of the recent PSP boycotts and Visionscape's delay in commencing residential waste collection as originally stipulated, they have increasingly become the last resort even for households in middle-income areas. As is the case with other informal worker groups, the informality of cart pushers' activities has made it almost impossible to have accurate data regarding the extent of their involvement in the sector. It is however estimated that there are about 5,000 cart pushers around the city collecting several hundred tonnes of waste per day.¹⁷

Cart builders: This is another group of locals who are also playing a major role in the operations of the informal private sector in waste management. Though very small in number, they are the ones who invest their funds in the construction of the carts used by the cart pushers.¹⁸

13 ibid.

- 14 This decades-old steel mill in central Nigeria has never manufactured a single item in its long history, despite the huge sums of money (at least US\$ 8 billion) invested in it to date. See www.bloomberg.com/ amp/news/articles/2018-05-24/a-steel-factory-gears-up-to-start-production-after-40-years
- 15 Interview with executives of the Scavengers Association of Nigeria and the National Association of Scrap and Waste Dealers Employers of Nigeria, April 2017.
- 16 ibid.
- 17 Adebola Olugbenga O., "The roles of informal private sector in integrated solid waste management in the achievement of the Millennium Development Goals (MDGs) in Lagos, Nigeria (paper presented at the Solid Waste, Health & Millennium Development Goals CWG- WASH Workshop in Kolkata, India, 2006), and information retrieved in an interview with Adebola Olugbenga in May 2015.

18 ibid.

Waste pickers: Dumpsites across the city are rife with able-bodied people, mostly men, who painstakingly sort out recyclable items - plastics, metal, paper, glass - from the heaps of waste that arrive on those sites on a regular basis. Many waste pickers are migrants from villages in other parts of the country who have come to make a decent, if precarious living in the city. These men work with a singular aim in mind: to leave as little of anything that is valuable on the dumpsites as possible. Positioned right at the bottom of the informal value chain, waste pickers are the workers who put in the hard labour required to retrieve valuables from the dumps, after which they sell their goods to buyers higher up in the value chain - mainly scavengers and metal scrap dealers under the previous regime. With the launch of the Cleaner Lagos Initiative, however, the bargaining power of waste pickers has shrunk significantly, with unfavourable implications for their incomes. At the Olusosun dumpsite, for example, waste pickers previously sold plastics to scavengers at the rate of NGN 20 per kilogramme. When Revive took over the management of the dumpsite in early 2017, however, the company slashed this rate by half and banned the waste pickers from selling plastics directly to scavengers or other buyers who might offer them better rates. The tight security measures put in place at the dumpsite by Revive ensured that compliance was enforced; many waste pickers, unable to survive under the new regime, reportedly left the job to go back to their villages, with no indication that they would find other means of employment there.19

Scavengers: Workers in this group sometimes buy recycled material directly from communities, which is why heaps of sorted waste can sometimes be seen awaiting sale in certain neighbourhoods. More commonly, though, scavengers operate on the dumpsites, traditionally acting as the first (and sometimes only) tier of middlemen between waste pickers and the companies that eventually process their recycled materials, particularly plastics. As indicated earlier, however, scavengers' fortunes, just like those of others in the informal sector, have dwindled under the new privatisation regime. The scavengers in the Olusosun example cited above were mostly put out of work following Revive's order restricting the trade they could do with the waste pickers on site. In general, no one was allowed to sell any plastics obtained on the dumpsite to any third party within or outside the site; they could only sell to Revive, the reigning monopoly, at a fraction of their former prices. Waste pickers were still allowed to sell other rubber products, paper, glass, and metal directly to scavengers and scrap dealers, but those are less valuable than plastics because demand for them is much lower in the market.

Scavengers have traditionally united under the umbrella of informal trade associations such as the Scavengers Association of Nigeria at Olusosun and the Waste Recycling Association of Nigeria at Igando.However, the bargaining power of these associations became significantly weakened in the wake of the occupation of the dumpsites by the Big Waste companies, with the direst effects felt by those in the lower ranks who have little or no recourse to alternative arrangements. It is interesting to note that inequalities exist even within the ranks of scavengers. In a recent development, the former executives of the Scavengers' Association of Nigeria (SAN) who were ousted from Olusosun by Revive in early 2017 have been compensated, at least temporarily, with a contract for management of the satellite dumpsite at Ikorodu. This would have qualified as a major win for scavengers, except that only a privileged few - mainly former association executives, who number about 10 - are able to muster the resources required to invest in the new opportunity, leaving behind the mass of scavengers (nearly 3,000 of them) who were equally affected by the takeover.²⁰

Metal scrap collectors: As their name implies, these workers deal specifically in recyclable metals retrieved from residences (by cart pushers) and dumpsites (by waste pickers). The National Association of Scrap and Waste Dealers Employers of Nigeria (NASWDEN) was formed as an

- 19 ibid.
- 20
- Interview with former executives of the Scavengers' Association of Nigeria now based at the Ikorodu dump site, October 2017.

umbrella body for workers all along the metal scrap value chain, from cart pushers to processing companies. NASWDEN has recorded some wins in its history – for example, despite the general ban on cart pushers in the state, the association lobbied the government on behalf of its members, and the government thereafter granted metal scrap collectors permission to continue using carts for their work provided the carts are transparent and their contents visible. This standing agreement has however not made metal scrap collectors immune to the vagaries of an uncoordinated government system: there are numerous reports of officials from government agencies, some of which constitutionally have nothing to do with waste management, harassing and extorting money from cart-pushing scrap collectors under the pretext of enforcing a ban that has since been modified to accommodate them. This is yet another example of how formal structures, with all the government attention that they receive, fail to adequately protect the vulnerable citizens that make up the ranks of informal workers in the city's waste management sector.

Resource merchants: Historically, these merchants were involved in the purchase of recovered recyclables and reusable materials from scavengers. Some members of this group were retired scavengers who no longer worked directly on the dumpsites due to old age or an improvement in their financial means. With scavengers and other third-party vendors significantly excluded from the dumpsite ecosystem now, it is unclear how resource merchants will keep up their supply (especially of valuable plastics) in the future, and the impacts this will have on their income and employment prospects.

Other actors

Recycling companies: Micro- and small-scale recycling companies process recovered materials like paper, aluminium, animal by-products, plastic, and metal into forms that can be used by local manufacturers. Recently, the Recycling Association of Nigeria was formed by some of these companies towards the goal of strengthening their collective position in the waste value chain.²¹

International development partners: LAWMA has received support from development agencies such as the World Bank and the United States Agency for International Development. Around 2005, the Lagos State government sought World Bank assistance to improve governance, infrastructure expansion and service delivery. This gave birth to the Lagos Metropolitan Development and Governance Project (LMDGP), with its broadly stated goal to improve the quality of life of Lagos residents.

Under the urban infrastructure component of the LMDGP, a solid waste management initiative was developed with the objectives of upgrading existing dumpsites and commissioning new transfer loading stations. The overall cost of the LMDGP was over US\$ 200 million.

However, the project did not succeed in building any transfer loading stations as originally planned – and improvements to existing dumpsites (including Olusosun, the most strategic of the lot) were minimal in scope, leaving conditions at those dumpsites largely intact.²²

21 Personal communication with members of the Recycling Association of Nigeria, April 2017.

22 World Bank, "Implementation Completion and Results Report... for the Lagos Metropolitan Development and Governance Project," 24 March 2014, http://documents.worldbank.org/curated/ en/872021468290442515/Nigeria-Lagos-Metropolitan-Development-and-Governance-Project. Accessed 27 April 2018.

4.4 The Case of Kosofe

Kosofe Local Government Area is located in the northern part of Lagos State. It is bounded by three other local governments, namely Ikeja, Ikorodu and Somolu. Its jurisdiction compromises 10 wards and encompasses an area of about 178.85 km². The local government secretariat is located along Ogudu Road.

The waste management research group performed field research through mapping and photographing on the ground, and by interviewing residents and owners of local businesses. Twenty-three questionnaires were administered, each of which contained 23 questions. Twenty questionnaires were answered correctly and evaluated for this case study.

The case study mapped the waste management processes of three neighbourhoods in Kosofe LGA – all of which are different in character, land use, functions and social structure – under the now-elapsed LAWMA/PSP regime:

- 1. Agboyi-Ketu: Low-income, informal settlement and slum area (red on the map);
- 2. Ogudu Road: Mixed-use area (yellow on map);
- 3. Alapere housing estate: Middle-class gated housing estate (dark blue on map).

Map 4.15 Scope of the Kosofe study area



(Source: Waste Management Research Group, Heinrich Böll Stiftung, 2015, based on Google Maps)

Temporary dumpsite before transportation to final dumpsite Entrance Residential use Commercial use Community dumpsite Waste collected at various community dumpsites is being transported with canoes to the temporary site where is is collected by **PSP** operators (Source: Google Earth) Household Arbitrary Temporary Final dumpsite Waste Transportation Transportation by PSP waste community by PSP dumpsite Olusosun processing dumpsite (LAWMA) (Source figures 4.16-4.19: Waste Management Research Group, Heinrich Böll Stiftung, 2015)

Figure 4.16 Agboyi-Ketu (low-income): Mapping of urban texture, fabric, land-use, and waste collection

Figure 4.17 Alapere (middle-class): Mapping of urban texture, fabric, land-use, and waste collection



170



Figure 4.18 Ogudu Road (mixed use): Mapping of urban texture, fabric, land-use, and waste collection

Figure 4.19 Kosofe: Comparison of solid waste management delivery across sample sites



Frequency of waste collection in Amuwo Odofin LGA

Figure 4.20 reveals the frequency of waste collection in the sample sites under the LAWMA/ PSP regime:

- In the Agboyi-Ketu community, the "informal settlement," the designated private sector participant (PSP), in license order of LAWMA, collected the waste twice a week.
- In the Alapere housing estate, the gated-community estate, waste was collected once a week.
- On Ogudu Road, the mixed-use area, the designated PSP collected the waste generated twice a day, between 9 am and 12 pm during the day and 9 pm and 11 pm at night.
- Though the PSPs received high marks from residents and businesses for the frequency
 of waste collection in all three areas, households in the informal settlement and the
 gated community were not satisfied with the frequency of collection in their respective
 areas. Respondents suggested that the frequency in both areas be increased to promote
 effective evacuation of waste.



Figure 4.20 Kosofe: Frequency of waste collection in the three case study examples

(Source: Waste Management Research Group, Heinrich Böll Stiftung, 2015)

Waste service charges in Kosofe

Figure 4.21 reveals the methods used in billing residents for waste disposal. The majority of the LAWMA/PSP operators charged fees on a per-building basis. This was the case in the Alapere housing estate and on Ogudu Road, where shops were also likely to be charged on an individual basis. In Agboyi-Ketu, however, LAWMA/PSP operators did not charge formal fees for services rendered. Instead, an informal system was in operation whereby residents voluntarily contributed whatever little they could afford to the operators for onward transfer of the waste that had been aggregated at the arbitrary dumpsite in the community.

Figure 4.21 Kosofe: Waste service charges in the three case study examples



(Source: Waste Management Research Group, Heinrich Böll Stiftung, 2015)

Payment of waste service charges

Figure 4.22 reveals the payment practices of residents in the three areas:

- In Agboyi-Ketu, as indicated above, residents did not pay official service charges on account of their relative poverty;
- In Alapere housing estate, 100 percent of the households paid their waste service charges to the estate management company, while
- On Ogudu Road, the majority (75 percent) paid their waste service charges while the rest did not pay.

Payment was made in one of three ways, depending on the neighbourhood:

- To LAWMA directly;
- To PSP participants;
- To the relevant estate management company.



Figure 4.22 Kosofe: Payment of waste service charges in the three case study examples

(Source: Waste Management Research Group, Heinrich Böll Stiftung, 2015)

Amuwo Odofin is a local government area located in the Badagry division of Lagos State. It is located in the Lagos west senatorial district with a vast land area and a large population. It covers a land mass of 100 km² and is divided into two geographical spheres, namely the upland and riverine areas.

As with the Kosofe case study, the waste management research group performed the field research through mapping and photographing on the ground, and by interviewing residents and owners of local businesses. Twenty-three questionnaires were administered, each of which contained 23 questions. Twenty questionnaires were answered correctly and evaluated for this case study.

The case study mapped the waste management processes of three neighbourhoods in Amuwo Odofin LGA – all of which are different in character, land use, functions and social structure – under the now-elapsed LAWMA/PSP regime:

- 1. 4th Avenue, Festac: A gated community (yellow on map);
- 2. Jakande estate, Mile 2: A middle-class estate (brown on the map);
- 3. Old Ojo Road: A low-income, informal settlement and slum area (red on map).

Figure 4.23 Scope of the Amuwo Odofin case study area



(Source: Waste Management Research Group, Heinrich Böll Stiftung, 2015)



Figure 4.25 Jakande: Mapping of urban texture, fabric, land-use, and waste collection



Figure 4.24 4th Avenue: Mapping of urban texture, fabric, land-use, and waste collection


Figure 4.26 Old Ojo: Mapping of urban texture, fabric, land-use, and waste collection





Frequency of waste collection in Amuwo Odofin LGA

Figure 4.28 shows how often LAWMA/PSPs collected waste from each of the three neighbourhoods in the sample:

- PSPs generally collected waste from households once every week.
- At certain locations on Old Ojo Road and in Jakande Estate, heaps of waste were dumped and collected on a daily basis.

Figure 4.28 Amuwo Odofin: Frequency of waste collection in the three case examples



(Source: Waste Management Research Group, Heinrich Böll Stiftung, 2015)

Waste service charges in Amuwo Odofin

Figure 4.29 below reveals the methods of billing respondents for waste disposal across the sample sites. Billing methods mainly varied according to income level:

- On Old Ojo Road, an informal settlement, billing was done per housing unit or building
- On 4th Avenue in Festac (a gated community) and Jakande Estate in Mile 2 (a middle-class housing area), billing was done per household.



Figure 4.29 Amuwo Odofin: Waste service charges in the three study areas

(Source: Waste Management Research Group, Heinrich Böll Stiftung, 2015)

Payment of waste service charges

The analysis in figure 4.30 reveals the response of local residents and businesses to the waste management charges levied on them:

- On 4th Avenue, Festac, bills were fully paid;
- In Jakande Estate, Mile 2, 80 percent of bills were paid;
- On Old Ojo Road, 70 percent of service charges went unpaid. This prompted a cycle in which service delivery by LAWMA and the designated PSPs became irregular, leading to the rise of informal cart pusher services – much of which had to be offered clandestinely given that they had been banned by LAWMA.

Figure 4.30 Amuwo Odofin: Payment of waste service charges in the three case examples



(Source: Waste Management Research Group, Heinrich Böll Stiftung, 2015)

Identification of general problems in Amuwo Odofin

Overall, as pictures 4.31-4.41 show, the lingering challenges associated with waste management in the three study areas are:

- The lack of a central temporary waste dumping point before collection;
- The low frequency of waste collection, which is not sufficient to keep up with the rate of waste generation;
- Poverty and the attendant reduction in formal service delivery in informal settlements;
- Inadequate and unhygienic means of waste storage by residences and businesses, potentially leading to groundwater pollution and health hazards.

Pictures 4.31–4.41 Amuwo Odofin: Waste dumped in front of residential buildings, cart pushers render waste collection services to residents, and waste stored in sacks, cartons, polythene ags, and buckets



Old Ojo Road Informal housing





4th Avenue, Festac Gated community









Old Ojo Road Informal housing



Old Ojo Road Informal housing



4th Avenue, Festac Gated community



Jakande Estate, Mile 2 Middle-class housing



Critical review

The case studies presented here reveal the planning framework adopted by LAWMA in municipal waste management under the previous PSP-mediated regime. The cases also illustrate the varying degrees of compliance by different income groups with the mechanisms put in place by LAWMA. Even though the LAWMA/PSP regime is officially over at the time of writing, some useful insights – and, importantly, implications for the new private sector-led regime – can be drawn from the case studies, both of which were conducted while the old arrangement was still in effect. While a post-implementation assessment of the brand-new Cleaner Lagos Initiative will be needed to tease out answers to many of the questions raised here, they are certainly useful for prompting pre-emptive thought and action on the part of the stakeholders involved.

It is evident from both case studies that waste collection systems became less formal the further down communities happened to be on the socio-economic ladder: in Kosofe, households in the middle-class gated housing estate in Alapere, for example, took their waste in the first instance to a collection point designated by LAWMA, while those in low-income Agboyi-Ketu dumped their waste at a spot arbitrarily chosen by residents. Likewise, in Amuwo Odofin, there was greater scope for informal cart pushers to operate along the low-income Old Ojo Road than in the middle class areas of 4th Avenue and Jakande Estate, and the better-off residents of those latter areas were better integrated into LAWMA's official waste collection schedules. Moving up the ladder to upper-middle-class Ogudu Road in Kosofe, residents overwhelmingly used private bins that mostly kept waste out of sight until they were collected by PSP operators.

It is notable that official arrangements for waste collection by PSP operators did exist in all the case study areas regardless of income band – even if actual collection patterns were less than adequate. Overall, though, the findings indicate that there was a need to improve on the system and quality of the services provided by LAWMA and the PSPs in the study areas. The frequency of waste collection, the number of collection vehicles deployed and the amounts charged for waste disposal in an area all determined the degree to which residents subscribed to official schemes. The cases of Agboyi-Ketu in Kosofe and Old Ojo in Amuwo Odofin show that official waste collection and billing systems struggled in poorer neighbourhoods, prompting recourse by LAWMA and the PSPs to more flexible arrangements for waste collection and payment for services. The defaults in payment occurred in spite of the fact that billing rates across the study areas were not very high to begin with: occupants of single-room units (not flats) were charged NGN 150 (US\$ 0.42) per month; those in 2-bed flats were charged NGN 250 (US\$ 0.69) per month; while those in 3-bed flats were charged NGN 300 (US\$ 0.84) per month.

What these observations point to is that more, not less, flexibility is needed to effectively provide and pay for waste management services in low-income areas. It is unclear whether the new public-private arrangement, with PUMAU and Visionscape as key players, will be able to deliver the degree of flexibility required in this regard - though the recent return of the former PSPs to the waste collection scene offers greater scope for achieving this. From current indications, billing is supposed to become more efficient in the new regime. The issue of residents' ability to pay is still outstanding, though: while the efficient billing structure mediated by PUMAU may be good news from an investor/private sector perspective, it is not likely to leave room for the kinds of adhoc, flexible arrangements that we have seen between low-income residents in Agboyi-Ketu and LAWMA/PSP operators. Whether these elements of responsiveness have even been acknowledged, let alone incorporated, in the design of the new payment structure remains to be seen.

As the foregoing case studies have shown, there can be real consequences for operating a billing regime that is not favourable to the poor: arbitrary dumpsites can spring up within communities without notice; and cart pushers, regardless of bans placed on them by the government, can step in to fill gaps left by the suspension of formal collection services. In light of these realities, it is important for LAWMA and other government actors to envisage making more room for informal

solutions to co-exist with formal ones, so that the interests of rich and poor stakeholders alike can be better served. On the one hand, Visionscape and public sector actors are confident that the state-of-the-art technologies being introduced by the Cleaner Lagos Initiative are capable of solving the major problems faced under previous regimes. On the other hand, experience shows that there is a lot that can be learned from the responses that communities themselves have developed to their infrastructure challenges, and it would behoove external actors to work in line with those bottom-up innovations rather than against them. This, arguably, is the key to building a truly sustainable and resilient waste management system in a dynamic and multifaceted city such as Lagos. Garbage is one of the most pervasive elements of contemporary societies.¹ On the one hand, waste is an everyday "issue" that affects each of us several times daily – no matter whether rich or poor, or living in "formal" or "informal" neighbourhoods. We all produce large and increasing amounts of waste daily. The world currently generates about 4 billion tonnes of waste per year, sustaining a US\$ 433 billion industry.² On the other hand, however, garbage and its politics remain largely "black-boxed" out of everyone's sight, silently flowing in and out of our households, neighbourhoods, cities and countries.

The need for inclusive stakeholder engagement

Waste management is challenging as it cuts through several government levels, institutions, neighbourhoods, and finally the household level. The picture in Lagos State promises to become even more complicated with the ushering in of the new private sector-driven regime under the auspices of the Cleaner Lagos Initiative. As the first section of this chapter outlined extensively, LAWMA laid the groundwork in previous administrations with a series of laws, policies, and projects. However, subsequent sections on governance and stakeholders show that the state government, acting through its various agencies, does not open up the processes by which its policies and strategies are formed to a significant proportion of stakeholders, particularly those represented in the informal sector. Before and after the wholesale privatisation of the sector, LAWMA has largely acted centrally and in a top-down manner, revealing plans and programmes after the government has signed off on them rather than involving all relevant stakeholders in deliberation from the inception stages. For example, the banning of informal cart pushers and the requirement for private sector participants to go through LAWMA created administrative burdens for those who wanted to engage in waste recycling and waste-to-wealth businesses. A more inclusive solution would be to implement low-threshold engagement opportunities that informal-sector workers can more easily take advantage of. Unfortunately, little has been done by the government so far to recognise the activities and roles of the private recycling businesses that have now emerged as major stakeholders in waste management, especially those operating on a small to medium scale. These stakeholders have nonetheless established a wide network of operation and distribution both within and outside the country. More government support would put them in good stead to contribute significantly to the environmental objectives of the Cleaner Lagos Initiative while deriving economic value from their enterprise.

The need for decentralisation of authority

Lagos State faces huge challenges of population increase, environmental degradation and youth unemployment. These challenges can be addressed by revisiting its relationship with local governments and reviewing the state's encroachment into local government functions over the years, especially in the area of waste management. Presently, local governments do not have powers to directly regulate waste management. It is telling that even the new, supposedly comprehensive Environmental Management and Protection Law makes no provision for local government leadership in any aspect of waste management. Local governments can make byelaws that provide for waste disposal and management; however, they are currently not judiciable. An alternative route would be to give local governments direct responsibility for ensuring effective waste management in their areas of jurisdiction. In this vein, they could apply to the state for licenses to manage the waste in their respective areas through special entities established for that purpose. Local governments therefore need to have an ongoing open dialogue with LAWMA and other relevant government agencies regarding the peculiar waste management needs in their various communities. It is only on this basis that effective local waste management initiatives can be established. A review of the scope and adequacy of the activities of environmental health officers, mentioned earlier in the chapter, could also throw light on how local waste management practices can be improved.

2

¹ Michele Acuto, "Everyday International Relations: Garbage, Grand Designs, and Mundane Matters," in International Political Sociology 8 (2014), 345–362.

ISWA, "Globalisation and Waste Management." Vienna: International Solid Waste Association (2012).

The need for broader government support for recycling initiatives

The state and local governments need to adopt a much more open and flexible policy of working with the private sector on innovative waste-to-wealth initiatives. Historically, only the biggest private sector-led projects have caught the attention of government actors – such as the NGN one billion waste recycling facility opened at Igando by WestAfricaENRG in 2015 – and even then, the support given tends to be retrospective and laudatory, rather than proactive and practical. The huge problem of storage of recyclables coupled with the need for land that can be designated as local collection points requires collaboration across government agencies, with the Ministry of Physical and Urban Development playing a key role. Unfortunately, the idea of separating waste at source, which is fundamental to new thinking in waste management, has barely been touched upon by the state (the Cleaner Lagos Initiative, for all its emphasis on innovation, is silent on this aspect). A multi-scalar, government-led approach to tackling the challenge would include public awareness campaigns on how waste can be avoided, separated, collected and recycled.

The need to identify bottlenecks in past and present waste management initiatives

The case study section presented the results of field research in parts of Kosofe and Amuwo Odofin, looking at different neighbourhoods in terms of consumption, wealth, and settlement structure. Evidence from those local communities clearly shows that there were huge gaps in LAWMA's waste management strategy before the sector was privatised. Indeed, this is the premise upon which the Cleaner Lagos Initiative was introduced - that the organised private sector would be able to do a better job of financing the huge investments needed to make the changes required in the city's waste management landscape. Still, it would be productive to critically examine the reasons why a significant proportion of pre-existing recycling and waste recovery initiatives failed to be commercially viable. Further, the extent of the informal waste collection and recycling sector has not been accurately quantified, meaning that the exact volume of waste generated in the city remains unknown, as does the size of the informal sector and its potential for economic empowerment. Finally, it is not clear why the state government is optimistic that universal coverage of the population will be achieved under a fully privatised regime, when evidence from similar contexts shows that the poor often end up being excluded from privatised municipal services because they cannot afford to pay the charges levied by for-profit actors.3 A key area that remains largely neglected, even with the introduction of the seemingly all-encompassing Cleaner Lagos Initiative, is the need to address citizen attitudes and behaviour around waste generation, sorting and recycling, with a view to minimising the quantities of waste that end up in landfills, however well-engineered they may be. It is only when demand-side efforts at waste management complement supply-side initiatives, both formal and informal, that the benefits of technological innovation in the sector can become apparent. Changing public attitudes towards waste would require extensive citizen engagement - and is indeed a ripe area for research and intervention by government and development partners. Recently announced plans by the government to open 57 plastic bottle collection and recycling centres around the state is a step in the right direction, but more needs to be done to bring this and other relevant schemes into the mainstream.⁴

The need for a more grounded approach to policymaking in the state

Last but not least, it is important to point out the need for a context-responsive and nuanced approach to policy making in the city's waste management sector. Under the old regime, for instance, LAWMA, in collaboration with PSPs, was charged with delivering waste management services to the public for a fee. Unfortunately, however, many poor households were unable to pay their bills, resulting in reduced service from the providers. The peculiarity of the rugged and narrow roads in many informal settlements also made it impossible for waste collection trucks to

- 3 K. Bayliss, "Privatization And Poverty: The Distributional Impact of Utility Privatization," in Annals of Public and Cooperative Economics 73, 4 (2002), 603-625.
- 4 Bertram Nwannekanma, "Lagos to create 57 plastic bottle collection centres," The Guardian, Nigeria, 23 April 2018.

gain access. This gap created by the breakdown in public infrastructure is one that cart pushers were (and are still) well positioned to fill. A ban on their activities will only serve to exacerbate the waste aggregation problem in hard-to-reach communities, which will in turn increase government agitation against "dirty" and "ugly" informal settlements and provide justification for eviction orders - perpetuating what has now become a familiar vicious cycle in the state. It is hoped that the elements of the Cleaner Lagos Initiative that are specifically aimed at serving the poor - notably, the subsidies to be provided by the Environmental Trust Fund and the deployment of fit-for-purpose waste collection vehicles to hard-to-reach areas - will be implemented with as much zeal as the more profitable aspects of the initiative. As alluded to above, this may prove difficult to achieve with profit-seeking private sector operators at the helm of service provision. In sum, to achieve a "beautiful and aesthetic Lagos State", as is stated in the mission of the Lagos State Development Plan (LSDP) 2012-2025, everybody needs to be engaged in such a way that they can contribute meaningfully to the overall vision, whatever their status. The LSDP aims to create jobs for the poor, when in fact the informal waste sector already offers significant job and income-earning opportunities for participants. The key is for government to recognise this contribution and integrate it into a holistic waste management strategy that makes room for both rich and poor to participate, and to do so on equitable terms.

Local researchers and research assistance

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STRATEGIC PLANNING AND URBAN MEGA PROJECT



Research

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5.1 Introduction	191
5.2 City Leadership and Strategic Planning in Lagos State	193
5.3 The Case of the Lekki-Epe Expressway	203
5.4 The Case of the Tejusho Market	211
5.5 The Case of Eko Atlantic City	217
5.6 The Case of the Lekki Free Zone (LFZ)	229
5.7 Conclusion	235

5.1 Introduction

Presently, the Lagos State government is embarking on several capital-intensive large-scale projects. Some of them are focusing on mobility infrastructure – e.g. the light rail scheme from Okoko to Marina, the redevelopment of Lagos-Badagry expressway into 10 lanes incorporating BRT lanes and the light rails, reconstruction of Mile 12-lkorodu road incorporating BRT lanes, and the recently commissioned Ejigbo-Ajao Estate link bridge. Large parts of the existing city are being re-planned – as it becomes visible through the example of the Lekki Free Zone – or being restructured through the creation of large new town developments like Eko Atlantic City. The three-dimensional vision of these two new city districts reflect global mainstream urban designs of Dubai, Singapore and Shenzhen. The fact that mega-projects visually and socially depart from their surroundings is in most cases a logical and intentional outcome of their competitive objectives.¹

"Mega-project" seems to be a concept of growing importance in today's globally connected business environment. Usually commissioned by governments and delivered by private contractors, these projects are often of international scope as they involve the participation of investors and contractors from multiple countries. They require intense planning and the coordination of capital, technology and political influence.² The long-term nature, the participation of numerous partners and contractors with divergent interests, the fluid nature of technologies deployed, and the dynamism in the external environments are some of the factors that contribute to the enormous complexity of mega-projects.³ It is imperative to understand the relationship that exists between urban mega projects, strategic planning, global challenges and city leadership in Lagos State.

In most studies, some key issues relating to mega-projects and their environment have been identified as indices that contribute to the failure of such projects. These factors include local inflation in housing prices and land values, pressure on community infrastructure and services, higher unemployment rates after a period of high expectations, increased level of pollution, declining resource production, psychological effects of relocating existing residents and impact on quality of life on community cohesion.

Mega-projects have a huge demand on land resources and increase the pressure on congested and densly populated areas. As a consequence, people are displaced and relocated from their homes, deprived of their means of livelihood, resulting again in unemployment, underemployment, increase in poverty and development of slums and squatter settlements. The environmental impact of mega-projects may include disruption of natural habitat (deforestation, wetland reclamation, increased flooding etc.). It is therefore of high importance to periodically review their impacts on the environment and local communities to ascertain if the benefits really justify the costs and if they are worth being continued.

The intention of this chapter is to investigate how the role of strategic planning – the vision of the future development of the city and the region – in Lagos State is reflected in the actual planning and implementation of the Lekki Free Zone, the Tejuosho Market, the Lekki-Epe Expressway and Eko Atlantic City. This includes the identification of motives and reasons behind the selection of the site and structure of these projects, the pinpointing of key laws, policies and regulations guiding its implementation so far, the examination of the relationship that exist between the

¹ Mike Harris, "Megaprojects: A Global Review and the Australian Context" (paper submitted for the Festival of Urbanism, University of Sydney, October 15 - November 6, 2014, 15, retrieved on January 21, 2015, http://sydney.edu.au/festival-urbanism/news/2014/downloads/megaprojects_review_harris.pdf).

² Paul K. Gellert and Barbara D. Lynch, "Megaprojects as Displacements" in Megaproject Planning and Management: Essential Readings, Part IV, Chapter 22, eds. Bent Flyvberg (2014; Cheltenham,/ Northampton: Edward Elgar)

³ Ilke Kardes, Ayse Ozturk, S. Tamer Cavusgil and Erin Cavusgil, "Managing Global Megaprojects: Complexity and Risk Management," *International Business Review* 12 (2013): 905–917, accessed January 15, 2016, doi: 10.1016/j.ibusrev. 2013.01.003.

various actors in charge of the project, the identification of the social, and economic and environmental effects these projects has been exerting on users during conception and the (ongoing) implementation.

A master plan, usually described as the quintessence of modern planning, represents an ideal end-state for a particular city or a part of a city, e.g. a neighbourhood but with serious gaps between the initial vision and actual results.¹ In an effort to move away from comprehensive plans, significant reform since the 1980s and 1990s adopted a more flexible approach that is called "strategic planning" and described as "more pragmatic, incremental and typically focused on 'getting things done' ".² In turn, "city leadership" translates into long-term strategic visions to confront global challenges such as those of inequality, insecurity, economic constraints and environmental degradation. Today, urban leaders are expected to produce results by the use of techniques such as "commissioning", "enabling", "empowering", and "partnership working".3 Strategic planning is a systematic process of envisioning a desired future, and translating this vision into broadly defined goals or objectives and a sequence of steps and projects to achieve them. In contrast to long-term planning (which begins with the current status and lays down a path to meet estimated future needs), strategic planning begins with the desired-end and works backward to the current status.⁴ However, in reality too many 'strategic urban plans' have effectively imposed an entrepreneurial view of the city, promoting mostly economic prosperity through oversized architectural designs and mega-developments.⁵ In emerging or developing countries, these initiatives typically lead at times to massive displacement in order to make room for highways, skyscrapers or luxury shopping malls, at the expense of the habitat and livelihoods of the poor.6

Lagos State Development Plan

The Lagos State Development Plan (LSDP)⁷ provides overall direction for the growth and development of the state up to 2025. It provides a framework through which all sectors of the economy – public, private and civil society – can direct their energies and contribute to the improvement of the quality of life of people in the state. It provides the means through which their performance can be evaluated against the set goals and objectives. The plan is also a vehicle through which the state government can publicize to the general public the direction in which the state intends to advance development in the next fifteen years. Finally such a plan is also an important framework for international assistance. The LSDP is not drawn from new research and investigation. Rather, it is a document that seeks to capture past strategic development plans and statements to bring them into a harmonious, rational and coherent whole. To this extent the LSDP builds upon previous long-term strategic planning exercises such as the Strategic Management Framework (2009) and the Vision 20:2020 (2009).⁸ It also takes account of the previous shorter-term strategic documents such as the 10-Point Agenda 2003-2007 (TPA)⁹, and the Lagos State Economic Empowerment and Development Strategy 2005-2007 (LASEEDS).¹⁰ It also relies on the more recent Development Agenda for Western Nigeria (DAWN).

2 ibid.

5 UN Habitat, 2013, *ibid.*

6 ibid.

- 8 Lagos State government: Report on review of high level policy documents, 2010, Section Seven.
- 9 Lagos State government, 2010, *ibid*, Section Three, Section Seven.
- 10 Lagos State government, 2010, *ibid*, Section Four, Section Seven.

¹ UN Habitat, *State of the World's Cities 2012/2013. Prosperity of cities* (2013; Nairobi/ New York: Rout ledge), 129.

³ Adam Marshall and Dermot Finch with Chris Urwin, "City leadership. Giving city regions the power to grow (published by Centre for Cities, acessed on January 21, 2015, http://www.centreforcities.org/wp-con tent/uploads/2014/09/06-02-21-city-leadership.pdf.)

^{4 &}quot;Strategic planning," BusinessDictionary.com, accessed on January 15, 2016, http://www.businessdictionary. com.

⁷ Lagos State government, Lagos State Development Plan 2012-2025. Main Document (2013).

Box 5.1 Vision of the Lagos State Development Plan 2012-2025

By 2025, Lagos will be Africa's model mega city and global, economic and financial hub that is safe, secure, functional and productive.¹¹

Box 5.2 Mission of the Lagos State Development Plan 2012-2025

The vision will be achieved by poverty eradication and sustainable economic growth through infrastructural renewal and development.¹²

Box 5.3 Strategies of the Lagos State Development Plan 2012-2025

- 1. People and poverty alleviation;
- 2. Functionality and productivity;
- 3. Managing the growth and spread of Lagos metropolitan area;
- 4. Democracy and governance;
- 5. Safety and security;
- 6. Transformation;
- 7. National growth and global influence.13

In their own terms, Lagos State government emphasizes **three considerations** in planning the future growth and spread of the city.

- Recognition should be given to the special contribution made by all parts of Lagos to the city's development and efforts made to stimulate and support those special aspects of development that best suit those different areas. The historic division of Lagos into the five main geographical areas lkeja, Badagry, lkorodu, Lagos Islands, and Epe, known colloquially as IBILE continue to have a resonance today. Figure 4.6 illustrates the existing and potential strengths of each broad division of the city. Growth points, enterprise zones and other mechanisms to stimulate development will be deployed in an equitable manner in all five parts of IBILE.
- 2. This relates to the physical expansion of the city within the confines of the state. Lagos State government aims at developing the existing growth corridors; to the east along the Lekki peninsula and to the west in Badagry. In the long run, the main factor in expanding the Lekki Free Zone is economic development. How to fix the land scale of the free zone is depended on how the industrial land fixes its moderately developed city scale, so as to achieve the integration of production and city function.
- 3. This has to do with the need to maintain and develop a strong relationship with the neighbouring Ogun state to ensure a proper planned expansion of the Lagos metropolitan area across borders to the west and north of Lagos State. This expansion has been underway for some time and requires a comprehensive physical and administrative plan

- 12 *ibid*, 23.
- 13 *ibid*, 23-27.

¹¹ Lagos State government, Lagos State Development Plan 2012-2025. Main Document (2013),1, 23.

covering the whole area that the city of Lagos is likely to grow into over the planning period. In May 2009, plans by the federal Ministry of Transport were set to collaborate with Ogun state government, towards the actualisation of the gateway to the international airport, the Olokola deep seaport and the mono-rail projects (see also chapter 2 – Urban Mobility and Transportation).

Box 5.4 Assessment of LSDP

The Lagos State government has followed the Lagos State Development Plan 2012-2025 relatively consistently, though most of the timelines have lagged. Despite the change in administration in 2015, the progress of development has been seen to match the proposed objectives as the plan still has seven more years to go. The major changes can be observed in the method of approach and strategy to certain areas of development: the complete privatisation of the waste management sector with the launch of the Cleaner Lagos Initiative; or the establishment of "The Office for Overseas Investments" (Lagos Global) to replace the erstwhile Office of Public-Private Partnership, to name a few. Lagos Global is now responsible for prioritising private sector-led economic growth, increase the ease of doing business in Lagos, investment attraction and attractiveness and viability of different infrastructure projects in the state.

PPP-initiative by the Lagos State government under Gov. Fashola's administration

The Lagos State government embraced the delivery of infrastructure projects and services in the public sector through Public Private Partnerships in 2011 with the enactment of the Lagos State Public Private Partnership Law and the Public Procurement Law as the legal and implementation framework for PPP projects across the state. The concept of the PPP is a contractual agreement between public and private entities, with the private entity performing part of a government organization's service delivery functions, for a benefit or financial remuneration according to predefined performance criteria, which may be derived entirely from service tariffs or user charges e.g. tolls, from government budgets via availability charges or service charges or from a combination of both. According to the Lagos State law on Public Private Partnership (section 8.19), PPP is described as a contract in which the private sector is engaged by the public sector to manage public services and/ or to design, build, finance and operate infrastructure to enhance efficiency, broaden access, and improve the quality of public services.

Objectives of the Office of Private-Public Partnership

- To allow access to the substantial financial resources of the private sector
- To enable the public sector to benefit from the private sector's technical expertise, experience and efficiency
- To enable the public sector to transfer project-related risks to the private sector
- The objectives of the PPP initiative were geared towards increasing the availability of infrastructure services, and to do so with greater efficiency (at lower cost for the level of services provided) than could be achieved using the traditional public sector approach.

The legislative framework

The PPP office under Governor Fashola focused on concessions. Some existing state laws were enacted and/or amended to engender an attractive business environment for private sector-led growth, increase the attractiveness and viability of different infrastructure projects, as well as to ensure more efficient regulation in diverse sectors. These laws include:

- Lagos State Roads (PSP) Law, 2007 (roads, bridges and highways);
- Lagos Metropolitan Area Transport Authority (LAMATA) Law 2007 (rail, buses and taxis);
- Lagos State Waterways Authority Law, 2008 (water transportation services);
- Lagos State Water Sector Law, 2004 (public waterworks);
- Lagos State Urban and Regional Planning Law, 2005;

196

Table 5.5 Overview of the five development pillars

Vision and mission

Developmental pillars	Aims	Strategic direction
Pillar 1: Economic development	To create a dynamic, expanding economy, functional and visual- ly attractive city	Harnessing public and private investment to create a strong, mixed economy that can provide jobs for all and create the base for expanding social services and environmental sustainability
Pillar 2: Infrastructure development	To create an effective and efficient infrastructure capable of meeting of meeting future needs	Providing efficient power, effective mass transit systems and other key infrastructures essential to achieve a sound and growing economy and achieve social progress
Pillar 3: Social development and security	To create educated, skilled, healthy ans secure people	Ensuring a dynamic, progressive social and economic environ- ment that will result in a well-educated, healthy people able to fulfill their potential and meet the skill needs of new industries
Pillar 4: Sustainable environment	To create a green, clean and livea- ble city that can sustain its complex natural and man-made environment	Creating sound systems, regulations and public participation to maintain a healthy and sustainable environmental that can overcome the environmental deficit and meet future challenges posed by climate change
Pillar 5: Health development	To protect, promote and restore the health of the citizens and to facilitate the unfet- tered access to health care services with- out financial or other barriers	Institutionalise an evidence-based health system that pro- motes the delivery of quality, effective, affordable, accessible, acceptable, cost-efficient and equitable health services to the people of Lagos State.

(Source: Lagos State Development Plan 2012-2015, 130)

Table 5.6

IBILE: Existing and potential strengths



(Source: Mega Project Research Group, Heinrich Böll Stiftung, 2015, based on Lagos State Development Plan 2012-2025, 24.)

- Private-Public Partnership Law 2011;
- Lagos State Audit Law 2011;
- Lagos State Public Finance Management Law 2011;
- Lagos State Public Procurement Law 2011.

These laws and regulations set out the requirements for competition and private sector participation in all public procurement and also specified the necessary approvals required for PPP procurement. It is presumed that all contracts completed in compliance with these laws are legal and enforceable, and that investors would be able to recover their expected return subject to compliance with the terms of the PPP contract. The objectives of these laws are:

- To ensure that public authorities are empowered to enter into agreements for the implementation of privately financed infrastructure projects and that they can contract public services functions to private companies
- To ensure that the regulation and licensing of public service operators and operations is transparent, timely, and effective
- To provide appropriate remedies for protecting the safety and integrity of public infrastructure from vandalism and other criminal activity
- To ensure that there are no distortions created by existing tax, banking, company, or any other laws that would bias the investment decisions of public authorities for or against PPP as a procurement option, or would distort the commercial decisions of PPP investors, contractors, or operators
- To provide for transparent, efficient, and competitive procurement procedures for PPPtype contracts that encourage innovation from bidders, and allow dialogue to optimise the allocation of risks between the contracting parties
- To ensure that there is an effective dispute resolution process which can operate independently and in a timely manner to provide alternative procedures such as arbitration and expert determination
- To ensure that the proposed institutional and financial framework for PPP is consistent with the corresponding legislation proposed or enacted in Lagos State

Projects under the PPP

Some of the projects initiated under the PPP arrangement are:

- Bus Rapid Transit: private sector financed high capacity buses plying major routes on dedicated bus lanes and improving urban mobility
- Lekki-Epe Expressway (Nigeria's first ever toll road concession): 30-year concession for the expansion, operation and maintenance of the Lekki-Epe Expressway
- Akute Power Project: PPP between O and O Gas & Power and Lagos Water Corporation (LWC) to build and operate a 12.15MW natural gas-fueled power generating plant to supply electricity to LWC water plants at lju and Adiyan. The reliable power supply has increased the water produced by the two water plants.
- Island Power Project: which powers selected government offices and hospitals, the State House and street lights of over 20 streets in Lagos Island.

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198

e 5.7 Different types of delivery models of the PPP initiative

		,			
Contract type (duration)	Asset ownership	OSM	Capital investment	Commercial risk	Service and payment to private sector contractor
Service contract 1-3 years	Public	Public and private	Public	Public	A definitive, often technical service fee paid by the government to priavte sector for specific services
Management contract 3-8 years	Public	Private	Public	Public	Private sector manages the operation of a government service and receives fees paid directly by the government
Lease contract 5-10 years	Public	Private	Public	Private	Private sector manages, operates, repairs and/or maintains a public service to specified standards and outputs. Fees are charged to consumers/users and the service provider pays the gov- ernment for the use of facility.
Concession, BOT, BOO, etc. 10-30 years	Public and private	Private	Private	Private	Private sector manages, operates, repairs and/or invests in infrastructure to specified standards and outputs. Fees are charged to consumers/users. The service provider may also pay a conces- sion fee to the government.

(Source: Urban Mobility Research Group, Heinrich Böll Stiftung, 2018 based on PPP Manual for Lagos State)

The Lagos Global Initiative¹⁴

With the emergence of the new administrational dispensation in May 2015, the Office of Overseas Affairs and Investment, known as Lagos Global, was established as a unit in the Governor's Office. It took over the functions of the erstwhile Office of Public-Private Partnership. According to the Lagos State government, Lagos Global was established and tasked with the mandate to create an enabling environment for global competitiveness and to promote inward and outward Foreign Direct Investment in Lagos State.¹⁵

The creation of the Lagos Global highlighted the administration's desire to engage strategically with the international community and to source foreign direct investments for her projects. Hence, attracting as much of global resources as possible became the drive of the present administration as the government prioritized diversification of the Lagos economy in order to attract foreign investment.

Its mandate includes the following:

- Investment promotion;
- Identification and promotion of genuine and specific Foreign Direct Investment into Lagos States economy;
- Promotion of exports;
- Identification of foreign markets for goods and services;
- Promotion of Inter-ECOWAS Commerce;
- Enhance the global perception of Lagos State as a place to conduct business and live in
- Liaise with Lagos State MDAs to maximize and promote Lagos State export potentials, especially Ministry of Information and Ministry of Commerce and Industry;

15 http://www.lagosglobal.org/about-lagos-global/, accesses 4 May 2018.

¹⁴ Information sourced for this section was from online and secondary sources. Despite several requests and emails, there was no response from the LAGOS Global to provide information and/or verify secondary information



Figure 5.8 Entities of the institutional framework governing PPP Procurement in Lagos State

(Source: Urban Mega Projects Research Group, Heinrich Böll Stiftung, 2018 based on Lagos State PPP Manual 2011 and Lagos State Public- Private Partnership 2011)

- Liaise with The Federal Ministry of Foreign Affairs and other relevant Ministries and Agencies in promoting investments into Lagos State;
- Liaison with The Federal Ministry of Commerce and relevant Agencies on Trade Promotion and Facilitation;
- Initiate, formulate and evaluate policies relating to the promotion of inward and outward investments in Lagos State, in the following key sectors: transportation, power, tourism, health, agriculture and housing.

These activities are performed within the following departments and units of the Lagos Global Office:

- Global Outreach and Partnerships;
- Investment Management and Risk Analysis;
- Business and Marketing Strategy;
- Human Relations;
- Inter-Ministerial Coordination;
- Administration and Human Resources;
- Accounts.

Legal and Regulatory Framework Binding the Lagos Global Initiative

The establishment of the Lagos Global Initiative to ensure proper investment processes was tied to some legal reforms undertaken by the Lagos State government to ensure that investors are legally protected. The investment process of the Lagos Global is based on the Nigerian Investment Promotion Commission (NIPC) Act of 1998 which is the main investment law that administers Foreign Direct Investment into the country. The provision of this Act include:

- 100 percent foreign ownership of companies (except in the petroleum sector);
- Foreign companies are required to incorporate local subsidiaries or branches;
- Financial statements must be prepared annually and filed to Corporate Affairs.

Commission

The Act provides for recourse to arbitration in the case of dispute and this can take place either via the settlement mechanism or bilateral or multilateral investment protection agreement of which investors are parties of via other national and international dispute settlement mechanisms. However, the operations of the Lagos Global within the investment climate in Lagos State which focus on private sector led economic growth are guided and strengthened by the following existing laws:

- Public Procurement Law 2011
- Public Private Partnership Law 2011
- Public Finance Management Law 2011
- Lagos Metropolitan Area Transport Authority (LAMATA) Law 2007
- Debt Management Law 2009
- Lagos Court of Arbitration Law, 2009
- Limited Liability Partnership (LLP) Law, 2009
- Lagos State Bonds, Notes & Other Securities Issuance Law, 2008.

These laws are complemented by a range of other Federal Laws like the Nigerian Export Processing Zone Act (NEPZA) and Nigerian Investment Promotion Commission Act, 2005 amongst others.



Figure 5.9 The Lagos State PPP Institutional Framework



(Source: Urban Mega Projects Research Group, Heinrich Böll Stiftung, 2018 based on PPP Manual for Lagos State // Lagos State Public- Private Partnership 2011)

Figure 5.10 The key strategic investment areas targeted by Lagos Global

Health

- Increasing awarness of health services
- Huge marjet to be covered
- Opportuniy abound in medical tourism and establishment of health facilities

Retail

- Increasing demand for consumer goods
- Rising income level of consumers

Real estate

- Large and rapidly growing population
- Housing deficit
- Relatively low investment risk

E-commerce

- High-level internet penetration
- Increasing online purchases
- Viable and tested market

Agriculture

- Untapped opportunities in agro processing
- Large existing market for livestock feeds
- Modern abattoirs present great opportunity
- Opportunities abound in storage facilities
- Dairy farming and development of settlements

(Source: Urban Mega Projects Research Group, Heinrich Böll Stiftung, 2018 based on Office of Oversees Affairs and Investment)

Transportation

- Inadequate transport network
- Low transport capacity to cater for the current population

Power

- Increasing demand for electricity
- Inadequate support to meet demand
- High returns on investment with minimal risk

Waste management

- Huge quantity of waste generated
- Untapped market iwth high potential for profitability
- Untapped opportunites in the recycling business

Entertainment

- Third largest movie producer in the world
- Available supporting facilities for ease of set up

Box 5.11 Assessment of Lagos Global

The constitutionality of the Lagos Global office replacing the PPP office is questionable, as it has no documented legal status within the framework of the LSDP and usurps the responsibilities of the PPP office which was enabled by law.¹⁶ The opacity regarding the function of Lagos Global vis a vis the earlier PPP office has actually exacerbated challenges relating to the 'ease of doing business'. For example, the organisation has become the clearing house for all government interaction with the "outside world", with statutory ministries requiring approvals from Lagos Global before engaging with external consultants, financiers and other project implementors. This essentially limits the activities of ministries to pursuing projects with economic development objectives.

The Lagos Global office did not respond to numerous requests to shed more insight into their activities, hence two consultants who interacted with both the Lagos Global and the former PPP office were interviewed. They both stated that interfacing with the PPP office was more straightforward, with clear achievable guidelines, while the Lagos Global operations are more cumbersome. According to one consultant for an international investment firm, clients complain about the rigidness of the platform upon which biddings are made, and the absence of a "money-back" clause in case of project failure due to issues not caused by the bidder.

Another consultant stated that:

"Yes, the concept of the Lagos Global Initiative is a great move by the present administration but currently there have been issues with this initiative on the part of the bidder as terms of reference seem not achievable by them. It is too expensive, hence majority of the projects bidded for tend to get cancelled or aborted at the point of execution."

Furthermore, the consultant also pointed out that the relevant ministries were not active drivers nor key players in these projects, hence major decisions that may require specific expertise were taken at the Lagos Global office, rather than at the key ministry or agency concerned. These issues raise questions of corporate governance, institutional consistency and the premium placed on the 'ease of doing business' model. It further raises the question as to why the Lagos Global office is necessary in the first place, given that the vision of the LSDP should be allencompassing and should strengthen all facets of government life. The Lekki-Epe Expressway Toll Road was awarded to the Lekki Concession Company Limited (LCC), by the Lagos State government (LSG) in 2006 as a 30-year concession. LCC has a mandate to operate and maintain the road for the agreed period and handover the asset to Lagos State in good condition at the end of the concession term (LCC). The road works are in two phases. Construction of the phase 1 is undertaken under a turnkey, lump-sum, fixed price contract. To further assist in aligning the interests of the investors and the contractor, the contractor will take an ownership interest of up to 5percent in LCC in exchange for an agreed reduction to the Engineering, Procurement Construction price (LCC). LCC Monthly Reports (2010) and LCC Monthly Report (2011a) describe phase 1 works as being divided into four sections as follows:

- Section 1 (Km 0 to 6) Maroko. Widening to six lanes, including Mobil Bridge, Admiralty Toll Plaza (1); only operational toll plaza.
- Section 2 (Km 6 to 15) Express. Conservation Toll Plaza (2) at Km 13 (not in operation)
- Section 3 (Km 15 to 21.9) Ajah. Widening to six lanes;
- Section 4 (Km 21.9 to 49.36) Eleko.

Section 4 has not been constructed. Work in this section include a widening to six lanes with the proposed Toll Plaza No 3 (at km 23). The Toll Plaza at km 23 which was designed to be located at the vicinity of Pan Atlantic (Lagos Business School) has been cancelled as a result of multiple consultations with stakeholders from the host communities.¹

Phase 2 of the project entails the construction of a 20 km of coastal road from Lagos Bar Beach to Ogomgbo Beach with an option to construct the Southern bypass. The protection of the coastal road shorelines by the state government was, however, a precondition for the concessionaire to construct the coastal road, a venture which requires huge resources currently not within the reach of the Lagos State government. Due to large amounts of capital required for this project (phases 1 and 2) LCC will have to recover their capital, service their loans, operate and maintain the infrastructure assets, and make reasonable profit; end users are required to pay tolls.²

Box 5.12 Limitations of the research

- The scope and progress of the project are shrouded in secrecy and restriction of information. Access to maps, graphs, data and information on recent developments on the Lekki Epe Expressway from Lekki Concession Company limited the robustness and richness of the research.
- Various ministries, departments and agencies were not willing to disclose information as this information is not meant for public consumption.
- There is no adequate information on the buy back in public domain. This limited findings and substantial conclusion on buy back matters as it affect actors in the project, changes in implementation, financial and management structure.

History and development of the project

The choice of consummating the project through PPP was part of the Lagos State government's forward-thinking strategy to provide off-budget funding to implement the project. PPP as a tool for infrastructure development was still evolving in the country at that time, and as such there

² Ehonwa, 2013

was still much apprehension about its effectiveness and workability, especially in the midst of an uncertain and nascent political climate. Only a few companies comprising a consortium led by Asset Resource Management Limited (ARM), a company known as Denoi Konstruct and Messrs Warner West Africa Ltd, indicated an interest in the Eti-Osa Lekki Epe Road project. This eventually led to the signing of a Concession Agreement with Lekki Concession Company Limited (LCC), the Special-Purpose Vehicle established by ARM and a consortium of local and international investors, to execute the project. With the establishment of the LSG PPP institutional framework in 2008, the Expressway project was passed to the Office of PPP for implementation.³

Implementation and status

The project required the widening of the existing highway boundaries. The expressway is 90m (45 m left and right) with a slip road (road entering or leaving a motorway or urban carriage way) which runs parallel to the expressway which is a 30m road (15m left and right), making the ROW a total of 120m. Structures identified within the right of way were served acquisition notice, which was published in the gazette for public notice in which stakeholder meetings were held for them to see the proposal and the benefit for such acquisition. Affected buildings include banks, offices, schools, shops, place of worships with monetary compensations disbursed to affected persons rather than resettlement action plans.

The delivery of the right of way was carried out by the Ministry of Physical Planning and Urban Development and submitted to Lekki Concession Company based on agreement.⁴

Toll plazas

- 1. Admiralty Circle Toll plaza, km 3. (The only toll plaza in operation for now)
- 2. Conservation Toll Plaza, km 13. (Not in operation)
- 3. Campus Toll Plaza, km 23. (Cancelled)

Lekki-Ikoyi link bridge

The proposal to construct a new bridge across the Osborne Lagoon in Lagos was made in 2003 by the state government. It was conceived in 2008 to solve the traffic bottleneck in the Ikoyi, Lekki/Victoria Island axis. The tolled Lekki-Ikoyi Bridge crosses the Five Cowry Creek which is a 4-lane, 1.48 km lomng bridge connecting the burgeoning Lekki Eti-Osa Axis with the highbrow residential Ikoyi. Work began in 2009 and the bridge opened in 2013.

National framework

The Federal Ministry of Transportation obtained the power to apply road tolls under the Highways Act 1971. It did not permit private companies to impose tolls. Greater private sector involvement in public infrastructure projects was first promoted legally with the Public Enterprises (Privatization & Commercialization) Act in 1999. This Act provided the basis for full and part privatization of government undertakings, and greater commercialization of other institutions.⁵ The general PPP framework for Nigeria was established, at the federal level, by the Infrastructure Concession Regulatory Commission (ICRC) Act 2005.

Lagos State Legislative and Institutional Framework

The Lekki-Epe Expressway procurement largely preceded the establishment of the LSG

- 3 Brocklebank 2014; Lagos State government, 2014
- 4 The decree that empowers the government to carry out such exercise on matters of overriding public interest such as the ROW of the Lekki Epe Expressway is the Nigeria Urban and Regional Planning decree No. 88 of 1992 section 75 and section 75-78 of the Land Use Act of 1978 which emphasizes on matters as power to revoke acquired occupancy, compensation to the owners of right of occupancy in accordance with provision during (Land acquisition and compensation) and the Town and Country Planning Law 2010 (MPPUD, 2018)

Brocklebank, 2014

5

institutional framework. The 2005 ICRC Act, actually signed in November 2004 and the Lagos State Roads, Bridges and Highway Infrastructure (PSP) Development Board Law (The Infrastructure Law) of 2004 provided the legal basis for the Expressway procurement. It also established a Private Sector Participation Roads Agency, within the Ministry of Public Works, which had responsibility for the Expressway procurement. All project procurement, including toll rates, must be approved by the Office of the Executive Governor and ratified by the House of Assembly. The Office of PPP is defined as the procuring entity by the associated Lagos State Public Procurement Law 2011.

The Office of PPP coordinates government ministires, departments and agencies and private sector partners.⁶

Shareholders, investors, consultants and stakeholders of the Lekki Concession Company (LCC) consist of both local and international reputable equity holders such as

- Asset and Resource Management Company Limited (ARM) (31.9 percent);
- Larue Projects Company Limited (21.3 percent);
- African Infrastructure Investment Managers (AIIM) (which consists of strategic investors such as Macquarie Group (Australia);
- Old Mutual (South Africa) (45.9 percent), and;
- Hitech Construction Company Limited (0.9 percent).
- Figure 5.13 Stake- and shareholders in the Lekki-Epe expressway

Lekki Concession Company (LCC)

- ARM (31.9 percent)
- Larue Projects (21.3 percent)
- AllM (Macquarie Group and Old Mutual) (45.9 percent)
- Hitech Construction Company (0.9 percent)

EPCM Consultants

- Hitecch Construction Company
- BKS/Aurenco (SA)
- High Point Rendel (UK)
- Toll Infrastructure Service (SA)
- Compsis (Brazil)

Ministries, departments and agencies

- Ministry of Works and Infrastructure
- Ministry of Transport
- Ministry of Physical Planning and Urban Development
- Office of the Surveyor General
- Ministry of Lands Bureau
- Ministry of Environment
- Ministry of Waterfront Development and Infrastructure
- Lagos State Environmental Protection Agency

Lenders

- Lagos State government
- African Development Bank
- Standard Bank
- Local Lender Syndicate
- First Bank, UBA, Zenith Bank, Fidelity Bank, Diamond Bank

Public stakeholders

- Chairmen of Eti-Osa LGA, Eti-Osa East LCDA and Iru/Victoria Island LCDA
- Associations (Community residents, Lekki residents, youth and others)
- Traditional and community leaders (Eti-Osa, Oniru, Elegushi Chieftancy families, and others
- Eti-Osa Heritage Group
- Eti-Osa Leaders of Thought
- Eti-Osa Development Forum
- Coalition of Oodua Self Determination Group
- Civil Society Organization
- National Union of Road Transport Workers (Eti-Osa)
- Lekki indigenous people
- Neighbourhood watch
- Lekki Toll Road users
- Media

(Source: Urban Mega Projects Research Group, Heinrich Böll Stiftung, 2018 // Thewillnigeria 2012)

International technical advisers, consultants and contractors such as BKS/Aurecon (South Africa), Compsis Computadores e Sistemas Informatica (Brazil), Toll Infrastructure Services (South Africa) and High-Point Rendel (UK) among others, were engaged to support and underpin key aspects of the project.⁷

Sources of local project financing

The local lender syndicate comprises of five banks, namely: First Bank of Nigeria Plc, United Bank for Africa Plc, Zenith Bank Plc, Diamond Bank Plc, Fidelity Bank Plc. Private financing was made possible by a sovereign guarantee from the federal government. This was obtained in February 2008 and ensured termination compensation to lenders. Any political risk was covered by the Export Credit Insurance Corporation of South Africa. The contribution from the state government to the project apart from providing the Right of Way is the provision of a 20-years NGN 5 billion (US\$ 42million) mezzanine loan, with a 10-year moratorium to demonstrate government's commitment to the success of the project.⁸

Sources of international project financing

The African Development Bank and Standard Bank were identified as being a potential source of long-term financing. Furthermore, as the ADB is a dollar lending organization, Standard Bank was able to structure a swap facility whereby LCC's exposure to dollar denominated obligations to the ADB was significantly mitigated. They are the international commercial financier in this project. Lagos State government (LASG) provided two guarantees with respect to the Lagos Roads Infrastructure Project. The first guarantee is a bank guarantee issued by a commercial bank in favor of Lekki Concession Company (LCC) as a guarantee of LASG's obligations under the Concession Agreement. The second guarantee is not in the true sense a guarantee, but a Federal Support Agreement, issued by the federal government of Nigeria in support of the project. It is an Irrevocable Standing Payment Order (ISPO), whereby the FGN commits that in the event that LCC and the lenders have any claim against the Lagos State government under the Concession Agreement, and Lagos State does not meet its obligation, the FGN will make deductions from the federal statutory allocations to Lagos State government and pay over these sums to LCC and the lenders until the sums due are fully paid.⁹

Financial challenges implementing the project

- There were no privately financed toll road precedents to follow in West Africa. International
 organisations and contractors were not convinced that the environment in Lagos would
 support such a scheme.
- Local lenders had no real experience in long-term limited financing of infrastructure concession projects in Nigeria. This led to constrains on limited tenors.
- At the onset of the project, the state lacked a real procurement and regulatory framework.
- During its development phase, the project was faced with change in governance of Lagos State which threatened the implementation of the project.
- The costs of construction materials increased considerably between the time of submission of BOQ and the time of implementation.

Management structure

The private sector operator (LCC, the concessionaire) is responsible for the full delivery of services including operation, maintenance, toll collection, management, and rehabilitation of the road. The public sector is responsible for the ensuring that the concessionaire meets performance standards and the public sector's role subsequently shifts from being the service provider to regulating the price and quality of service.

- 8 Brocklebank, 2014; The WillNigeria, 2015
- 9 Riham Shendy et.al, World Bank & PPIAF, 2009; Brocklebank, 2014





(Source: Urban Mega Projects Research Group, Heinrich Böll Stiftung, 2018 // Thewillnigeria 2012)

Critical review

Buyback in 2013 and its implication on the project implementation

As at 2013, only 15 km of the 49.4 km road were completed and currently less than 25 km have been completed so far. Information from media sources suggest that about NGN 35 billion may have been expended to construct 15 km as at 2013, representing NGN 2.3 billion per km in construction costs. This sum up to 70 percent of the estimated total costs of the project to construct only 30 percent of the project. It seems that the only way to salvage the situation was to buy back the concession right of the equity holders such as ARM and Hitech Construction Company. At the buyout costs of NGN 25.3 billion the state government would have incurred a total of N30.3 billion on the road, including the NGN 5 billion (Mezzanine fund) officially committed at inception. It also inherited the total outstanding debt of NGN 32 billion on the project. So at the end of the buy back, the 15 km completed section as at 2013 of the Lekki-Epe road and the two alternative roads cost the state government about NGN 62.3 billion. That is NGN 4.15 billion per km of road in costs to the state government after purchasing the concession right. No one knows how much the state government has received in toll revenue so far. As a comparison, the 127.6 km Lagos-Ibadan Expressway reconstruction costs is expected to be NGN 167 billion which equals NGN 1.30 billion per km. The Lekki-Epe Expressway is poised to go down in history as the most expensive infrastructure projects using tax payers' money and making them pay for it again. The implication of this buyback clause on the ongoing implementation and construction of the expressway suggests that the Lagos State government will have to finance the remaining section of the road through additional debt, combination of tax payers' money and proceeds from toll collection. This could also have been the reason for a planned increase in toll charge. This assertion still contradicts information on the buyback as Lagos State government has not exercised the buyback powers.

Tolling

The imposition of tolling on a previously untolled highway created much opposition, mainly due to the toll rates but also because of long queues at the toll plaza. The concession agreement provided initially for three toll plazas. Tolling was planned to commence at the Admiralty Circle toll plaza on 3 January 2010 and was finally introduced on 18 December

2011.¹⁰ Section 2 of the concession was completed in March 2012. However, tolling did not commence at the second (Conservation) plaza because a 3.4 km untolled alternative route had to be provided first. But even after completion of the alternative route, tolling did not occur as Lagos State government announced again an indefinite suspension of tolling. Lagos State government provided shadow toll payments to LCC for lost revenue at the Conservation toll plaza.

Non-governmental organizations lending their voices on the toll hike

The toll hike has generated a lot of issues and has made various non-governmental organizations lend their voices on the matter. The various NGO's include Socio Economic Rights and Accountability Project (SERAP), Human Environment Development Agenda (HEDA) and the Eti-Osa Development Forum (EDF).

Findings from the Lekki Residents association on the toll hike

According to the Chairman of Lekki Residents Association, the latter was not consulted by LCC prior to fixing the new tariffs despite the fact that they are the biggest Association/ stakeholders involved in the project.

Box 5.15 Road users and residents perception on changes Activities on the road over time

Survey conducted by the Mega Project Research Group, Heinrich Böll Stiftung, 2018)

Vehicle type and road satisfaction

A cursory assessment of traffic along the Lekki toll road showed the dominance of private cars and a smaller percentage of commercial buses and saloon cars. Sampled opinions suggested that they were not satisfied with the progress and condition of the roads especially in the areas after Ajah and Sangotedo.

Frequency in the use of alternative route

The implication of the toll hike has made many of the road users and residents to ply the alternative routes regardless of their poor condition, length and volume of traffic. This was evident on the first day the toll hike was effected as the consequence has been persistent congestion on the alternative route. Road users ply it as a form of protest against the hike and anger at the Lagos State government and Lekki Concession Company (LCC).

Impact of roundabout removal on road users

Majority of the road users and residents said the removal of roundabouts has reduced traffic congestion and travel time, increased road capacity, reduced stress and fuel consumption respectively.

Willingness to pay

Majority of Road users and residents are willing to pay NGN 50 per trip, summing up to NGN 100 when making a return trip as this payment is more economical and will not cause any form of stress on their monthly spending. They went further to express their views insisting on a flat rate for toll charge at NGN 100 for cars, commercial buses (Danfo) and sport utility vehicle, while trucks (light and heavy) pay NGN 150.

Box 5.15 (continued) Road users and residents perception on changes Activities on the road over time

Reason(s) for Lagos State government's silence on toll hike

Road users and residents expressed their anger as the government has never altered a statement on toll revert. This suggests loopholes in the manner in which the PPP contract and buy-back clause were structured.

Toll roads targeting short distance travels

Toll roads only be used for long distance travels, commuting from states to states and not within a city. Local residents should not be subjected to paying tolls over making short trips eg trips from Lekki to Victoria Island. This makes LCC a monopoly service provider only seeking to make profit at all cost.

Value of the road before and after concession

The expressway project has opened up the Lekki corridor, bringing rapid development and increasing land and rental value. An appraisal of value added by concessionaire on the road has been overshadowed by persistent protests by road users against toll hikes, slow pace in construction on a road that was due to be completed in 2012. Butressing on this point that with the concessionaires were expected to add just a lane to an existing road at both sides, it has not done enough to justify added value. Tolling did not better the lives of the residents neither did it solve the problem of congestions, on the contrary – it brought even more hardship with persistent traffic along the corridor. The Lekki-Epe Expressway is the only principal arterial road connecting Lekki-Epe to the rest of Lagos whilst the alternative coastal road which has been part of the project is yet to be newly constructed. The road users said recent development on the coastal road is a mere rehabilitation rather than construction as nothing new is been done on the road.

Summary of findings

The Lekki-Epe Toll Road Concession Project is very much a first for West Africa. At the onset, many believed that the project was not feasible given the environment in which it was proposed to be undertaken. Achievement of the important financial close milestone is a testament to the faith and dedication of the sponsors, investors and advisors who worked on the transaction over many years. The project paved the way for the development of other PPP infrastructure projects within Lagos and Nigeria and it was the starting point for a new private sector highways services industry within the region.

Recommendations

- Incorporate communication with stakeholders (traditional and religious leaders, road users, residents, LGA, media) at every stage of the project (policy and program formulation) in order for them to have an input.
- Apply a clearer and transparent PPP framework: There is a need for the government and concessionaire to make the project's procurements, contracts, actors and finances transparent and clear to the public.
- Formulate a toll policy to guide the operations, cost, services, maintenance and other complementary services of the Lekki Toll road and other highways in the country.
- Shadow tolls should be encouraged along the expressway as this is a good option for a repayment to concessionaires over time from the state government. This will relieve road users from any form of first hand payment as this money can be gotten through state taxes.
- Fix toll prices only after due consultation has been done with public stakeholders
- Rehabilitate and upgrade alternative routes to decongest traffic along tolled roads and to
 ease financial burdens on road users who cannot afford to pay tolls
- Develop long term finance for infrastructure projects in the country: Government can support structural reforms to enhance local sources of infrastructure financing by developing the local capital, bond, equity market and insurance funds.
- Build capacity of MDAs as a critical component to the success of a PPP program: Capacity building programmes are important to establish a common base of PPP knowledge and best practices across key MDAs. Agencies such as the Lagos State PPP office, Urban Planning ministries should play supporting roles in the project development cycle such as procurement (bidding processes), financial management, and compliance.
- Initiate PPP projects with pilot and demonstrating projects to showcase a successful transaction to particularly create high visibility among international stakeholders. If this is successfully carried out, it will attract enormous attention from international advisors, investors, financiers, and other private sector participants to execute a PPP project.



⁽Source: Deji Akinpelu, 2018)

The city undertakes currently a series of market redevelopment or regeneration projects, which involve total transformations from age-old state to modern shopping centres or shopping malls. Some markets have been upgraded and improved to a so-called ultramodern state while some were demolished for the development of other land uses. There are about 425 markets in different parts of Lagos State.¹ Some of the recent demolished markets in Lagos State include:

- Jankara market demolition in December 2012, after a fire incident that gutted some buildings around the market
- Mushin Ajina market, demolished in September 2012;
- Sandgrouse market demolition on 3 February 2015;
- Owonifari Electronics market, Oshodi demolition on 6 January 2016;
- Daleko market demolished 28 February 2016;
- Alade market, Allen Avenue, Ikeja, demolished in July 2016
- Olorunsogo market, Oshodi, demolished in January 2017.

According to Mr. Hakeem Ogunniran, Managing Director of UACN Property Development Company (UPDC) in Nigeria, Lagos can effectively hold over 20 malls. He said, "Johannesburg, with a population of 4 to 5million people has substantially more malls than Lagos; Lagos with 17-20 million could presumably take up to 20-25 malls."²

The old Tejuosho market was a mix of traders from the low class and middle class, it was a thriving market that accommodated various people from different background and socioeconomic strata. It was a large urban market that served consumers from far and wide, the market space was identified with all sort of items especially fabrics and clothing materials. In December 2007 the old market was razed by a fire which destroyed goods and properties worth millions of naira, claimed lives and left some people injured.

Phase 1 of the new Tejuosho shopping complex occupies a larger area comprising 1,250 K-clamps and 2,622 lock-up shops. The K-clamps are in higher demand than the lock-up shops, according to the facility manager. During construction there was a review to increase the quantity of K-clamps to meet up with emerging realities. According to the facility manager, the average rental prices for lock-up shops is NGN 200,000 per annum while the K-clamps cost for NGN 120,000 per annum. The average sales price for a lock-up shop is NGN 6,000,000.

As a result of an agreement between the market management and the traders, the surrounding spaces of the Tejuosho shopping complex are currently being used as an open market. Traders display their wares and are allowed usage of the space from 6:00 am to 2:00 pm Monday to Saturdays. They pay daily for the spaces between NGN 300 and NGN 500. The arrangement was made as a solution for the growing rate of street traders within the area and to increase the footfall to the market.

Legislation and planning instruments

The Tejuosho market upgrade was delivered through the arrangement of Private-Public-Partnership. Phase 1 was developed by the concession between the Lagos State government and Stomberg Engineering Limited with First Bank Nigeria PLC being the financier. It was delivered on a Build Operate Transfer (BOT) arrangement for a concession period of 25 years.

Phase 2 was developed by the Tejuosho Property Development financed by Zenith Bank PLC and some other private investors. Deux Projects handled the finishing and fittings while DTV construction limited handled the structural engineering.

¹ G Komolafe, "The poor also must live; Market Demolition, Gentrification and the Quest for Survival in Lagos State," 2016.

² S M Ogwu, "Lagosians in the midst of shopping malls," Daily trust Newspaper, online https://www.dailytrust. com.ng/news/property/lagosians-in-the-midst-of-shopping-malls/136771.html, accessed February 2018.

Table 5.17	Summary of the PPP arrangement

PPP model	Build Operate Transfer (BOT)
Commencement	2008
Year of award Initial construction period	18 months
Final Construction period	48 months
Concession period (Years)	25 years
Estimated construction cost (US\$ million)	46 million US\$
Final construction cost	93 million US\$
Year of commissioning	15 August 2014
Status of project	Operational
Operational start	27 August 2014
Method of payment	Rental model

(Source: Urban Mega Projects Research Group, Heinrich Böll Stiftung, 2018)

Table 5.18	Involved stakeholders in the PPP arrangement
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Public sector authorities	Lagos State Ministry of Physical Development and Urban Development
Concessionaire	Stomberg Engineering Limited
Banks	First Bank Nigeria PLC
Consultants i.	Consol Associates (project manager) Agram Nigeria Limited (Architect) Pinconsult Limited (Structural Engineer) QTECH Engineering Limited (M&E Engineer) Costec Consultants (quantity surveyor)
Contractors	Main Contractor- Ugur Bas (UBA) Construction Limited
Subcontractors	M&E contractors – Hoten Engineering Limited Structural steel works – Eldorado Nigeria Limited Skylight Roof System – CSA interiors

(Source: Urban Mega Projects Research Group, Heinrich Böll Stiftung, 2018)
State institutions, departments, and agencies involved into the Tejuosho market development

- Lagos State Ministry of Physical Planning and Urban Development
- Lagos State Market Development Board
- Lagos State Ministry of Local Government and Chieftaincy Affairs
- Surulere Local Government Area Secretariat

Present stage

The field research revealed that 1,357 spaces or 60 percent of the built spaces (lock-up shops and K-clamps) have been sold or rented out but not all rented spaces are occupied. The shopping centre is still quite empty, which could be as result of these reasons:

- High rate of renting spaces;
- Low footfall within the market;
- The shops have been occupied but the owners decided to move to the surrounding spaces to trade as a result of the low sales;
- The rents have not been fully paid (a full year's rent have to be paid before occupying);
- Lengthy completion since 2007 most of the traders had already moved to other locations, and other spaces;
- The traders are apprehensive of losing their customers as they have established their businesses in surrounding plazas;
- The influx of trading activities around the market;
- The high rate of service charges especially on electricity bills.
- Inconsistence and inadequate power supply within the shopping complex;
- Early time of market closure.

Current finance and management structure

Phase 1 is managed by MRI Investment Nigeria Limited while Phase II is managed by the Tejuosho Property Development Company (TPDC). The structural components, remodeling activities, cleaning, maintenance of phase 2 of the market is currently being handled by Deux projects while for Phase 1 MRI Investment Nigeria Limited is in charge of maintenance. Information concerning the financial structure for both phases was not made available and no response was given upon inquiry. According to the facility manager of phase I such information is not available to them.

Pictures 5.19 Tejuosho shopping complex



(Source: Google Earth, 2018, adapted by the Urban Mega Projects Research Group, Heinrich Böll Stiftung, 2018)



(Source: http://www.jsrealtyonline.com/new/projects/Tejuosho-Market/)

Drawing 5.20 Layout plan





(Source: Deji Akinpelu, 2018)

Pictures 5.22-5.23 Locked shops inside the new mall and shopping complex from outside





(Source: Deji Akinpelu, 2018)

Table 5.24Attributes of the Tejuosho Market

Table 0.24 Attributes of the rejuosi		
Financier	First Bank Plc	Zenith Bank Plc
Concessionaire	Stomberg Engineering Limited	Tejuosho Property and Development Company Limited
Physical Construction	Ugur Bas (UBA) Construction Limited	DTV Construction Company Deux Projects
Facility Management	MRI Investment Limited Excellerate Property Services (EPS)	Tejuosho Property and Development Company Limited
Rental proposition	 2,622 Lock Up shops 1,250 K-Klamps for Petty Traders Over 600 car park spaces Over 20,000 shoppers are expected to visit the main Tejuosho Shopping Complex on a daily basis Store sizes from 9sqm to 150sqm Sections spaces (Frozen foods, pharmacies, vegetables, textiles, electronics, provisions, jewelry, offices, furniture, boutiques, maternity and children items, Curtains & Home Decorations, Books & Office Equipment, Hair & Beauty, Luggage & Sports Gear, Gift Items, General Goods, etc.) Spaces Available include four (4) Banking halls, Distribution Depots and Restaurants 	 Basement Parking (over 350 Spaces) 1,692 Individual Shops Over 24,000m² of Retail Space 4 Floors of Shopping Experience Store Sizes from 10.8m to 129.6m (Larger requirements can be accommodated) Trading 7 days a week Sectioned Shopping (Fashion, Textiles, Cosmetics, Gift Items, Furniture, Sports, Stationery, and Groceries etc.) Office Space Available Over 20,000 Estimated walk in customers' daily 342 Market Stalls Anchor Tenant – SPAR (Park n Shop) Food Court (18 Restaurants with open sitting area for +300 customers) Lounge/Bar Area Cinema (6 screens) Radio Station
Available facilities	 Experienced Facility Management Team Police Post 8 Elevators Escalators Wide Staircases and 2 ramps Waste Disposal System Steady Electricity and Water Supply Fully Equipped Fire Station Public Conveniences (Over 50 toilet locations with excellent finishing) Warehouses Water treatment plant with water reservoir of 350,000 liters' capacity Internet Services, Intercom and Telephone Facilities Excellent Public Address System Wide corridors to accommodate Shopping Trolleys Functional Electronic Security Network Facilities for Satellite Television Communications (DSTV, GoTV, Startimes etc.) 	 Competent Facility Manager Maintenance Team with Excellent Track Record 24Hr Security 24Hr Cleaning Services Delivery bay Parking Management Firefighting installation Fire Station within the complex Waste Management CCTV Security Banks & ATM gallery Adequate toilet facilities Internet/Video on Demand/DSTV Promotional Courts for events and functions Public address system Radio and TV station Central water system 24Hr Power 365 Days a year Smoke detector and water sprinklers Refuse Disposal Service Yard Landscaping Police Post Security post
	NGN 700,000 per sqm	NGN 600,000 per sqm
	NGN 50,000 – NGN 70,000 per sqm per annum	N/A

(Sources: Tejuosho Shopping Complex, online http://tejuosho.com.ng // Tejuosho Shopping Centre, online https://tejuoshoshoppingcentre.com/



(Source pictures 5.24-5.25: Deji Akinpelu 2018)

Pictures 5.25-5.26 Temporary spaces around the Tejuosho shopping complex

The Lekki Free Zone (LFZ) is located on the tip of the Lekki Peninsula to the Southeast of Lagos State. It borders Lekki Lagoon in the North and faces the Atlantic in the South with a coastline of about 5km stretch. In 2004, the Lagos State government initiated the Lekki Free Zone project with the vision to fully utilize the investment, business and tourism potentials of Lagos.

In addition of being part of a wider plan for the development of the Lekki sub-region, the Lekki Free Zone is one of the projects envisioned by the state government to foster the need for wealth and job creation through enhancing Lagos's role as an "economic and financial hub" with a vision to create at least 2 million jobs as well as promoting youth and woman empowerment.

Area (ha)

S/N	Land use	Area (ha)
1	Residential – Low and High Density (workers' houses, town houses and high rises)	2,266
2	Petrochemical Industries	1,800
3	Industrial land for manufacturing home appliances, textiles and garments	1,758
4	Storage and Logistics	1,129
5	Public facilities – Administrative office, culture and entertainment, health, sport, education centers, power and sewage treatment	1,668
6	Leisure and Tourism – Hotels, resorts and culture centers	508
7	Natural buffer – Green space, inter- nal ecological and vegetation	2,063
8	Recreation centers and parks	1,198
9	Roads – main, secondary and access roads	4,110
Total		16,500

Table 5.27 Land use in the Lekki Free Trade Zone

I and use

S/N

(Source: Urban Mega Projects Research Group, Heinrich Böll Stiftung, 2018)

Physical structure of the Lekki Free Zone

The proposed land use master plan of Lekki Free Zone subdivides the zone into four main quadrants and phases each having its own land uses and consequently its own theme.

- Phase 1 or South West Quadrant: Contains general mixed industries, including light and medium engineering with a large part dedicated for logistics and distribution, potentially serving both the international and national markets. In addition a new special residential area is proposed to the north of the industrial zone, with both low and high-density housing, largely intended for as a leisure and residential resort with tourist facilities.
- Phase 2 or South East Quadrant: Contains petro chemical related industries.
- Phase 3 or North West Quadrant: Contains housing for the workers in the Free Zone area where residential areas of different densities and house types would be provided to the north and south of the main industrial zones.
- Phase 4 or North East Quadrant:

Is a mixed-use area as a new waterside town providing a range of employment, commercial, residential, community and recreational uses. It will complement the role of the other three quadrants and act as the city, administrative, business and residential centre for the whole of the free zone.

Over the years, Lekki Free Zone has attracted some investors both local and foreign. In 2015, it was established that the South West quadrant had been averagely developed with basic infrastructure; also some industries had commenced operation. Presently, there are close to 48 enterprises and companies in the South West quadrant, though some industries are still under construction. It covers 3000 hectares of the total land area and in October 2006, the Lekki Free Zone Development Company (created in May, 2006) embarked on the development of the quadrant named "China-Nigeria Economic and Trade Co-operation Zone (CNETCZ)" which covers approximately 1,200 hectares of the quadrant.

The South East quadrant with the Dangote Group as its sole investor is home to four different projects: the refinery; fertilizer plant; petrochemicals plant; and gas pipelines and plant.

A portion of the North West quadrant will undergo a mixed-use land development for which Lagos State government signed a joint agreement has been signed with Rendeavour.

The North East quadrant is yet to be occupied.

The North West and North East quadrants occupy 8,600 hectares of the total land size of the zone. Initially, Rendeavour had an agreement to develop 250 hectares of land in the third quadrant in 2015 but the company proposed to an increment and it was granted by the state government.

Legislation and planning instruments

The Lekki Free Zone was established pursuant to the inherent powers conferred on the Nigeria Export Processing Zones Authority (NEPZA) by the Nigeria Export Processing Zones Act 63 of 1992.

- Nigerian Free Zone Act No. 63 of 1992: In 1992, the Nigerian Free Zone Act No. 63 of 1992 was passed establishing the Nigerian Export Processing Zone Authority (NEPZA). The NEPZA is responsible for the regulation of Free Trade Zone operations. Its tasks involve policy formulation, licensing and monitoring.
- Lekki Free Zone Regulations 2010: This is another important planning instrument in the development of the free zone as an establishment and a mega-project. The Act gives power



(Source: Master plan of Lekki Free Zone (Phase 1), 2010, by: Shanghai Tongji Urban Planning and Design Institute, Shanghai Xian Dai Architectural Design(Group) Co LTD, Assisted by LFZDC)



Map 5.29 Lekki Free Zone masterplan and land-use plan

(Source: Dar Al-Handasah)

to NEPZA, with the approval of the Honourable Minister of Commerce and Industry make regulations for the proper implementation of "the Act", which gave way to the formulation of the Lekki Free Zone regulations in 2010. This regulation is used as an internal regulatory framework for the free zone.

The Lagos Urban and Regional Planning and Development Law, 2010: This law applies to every development projects in the state.

Box 5.30 Incentives provided for the investors in the zone

- There will be a complete tax holiday from all Federal, State and Local Government taxes, rates, customs duties and levies.
- · One-stop approvals for all permits, operating licenses and incorporation papers
- 100percent foreign ownership of investment and joint venture entities allowed in the zone
- 100percent repatriation of capital, profits and dividends out of Nigeria
- Import or export licenses not required by enterprises operating in the Zone
- Customs duty-free and no quota restriction for all imported raw material products, machinery and equipment, consumer goods as well as any other goods for investment projects in the zone
- No strikes and lock-outs permitted in the Zone
- No restrictions on hiring foreign employees in the zone
- Full range of business activities permitted
- Permission to sell 100percent of manufactured, assembled or imported goods into the domestic market
- Waiver in all expatriate quotas for companies operating in the zone

Stage of implementation

The Lekki Free Zone has recorded some achievements in the development of some of its sections/quadrants since its inception.

South West quadrant

The development of this phase commenced in 2006 by Lekki Free Zone Development Company and efforts have been made in order to achieve the development plan for the zone to be fully operational in 15 years after its commencement, hence 2021. It includes:

- 32.74 km2 (3,274 hectares) of road network have been completed and opened for use
- Completion of customs office and four standard factories
- The One-Stop Service Center is fully operational with the availability of officials of relevant government agencies like customs, immigration and NEPZA to render assistance to prospective investors and enterprises.
- The construction of Customs Processing Centre (CPC) and Container Terminal is completed. These facilities are aimed at facilitating efficient coordination and execution of all logistics formalities.
- An independent power plant of 24 MW has been awarded to a company and its first phase at an expandable capacity of 12 MW has been completed and fully operational.
- The permanent water plant with daily capacity of 60,000 gallons of purified water is still in progress but there are several boreholes to supply water for the investors in the zone.
- Exhibition and trade center is completed to host expos and trade fairs in the zone
- Several companies and investors have started operations in the zone

South East quadrant

The development of this quadrant commenced in 2014, after the investor, the Dangote Group of Industries acquired the land and was introduced to the communities. The timeline of the completion of the refinery, fertilizer plant, gas pipeline and petrochemical plant is scheduled between 2018 and 2025. In preparation for the operations of this quadrant, 50 young indigenous engineers were sent by the Dangote Refinery to Bharat Petroleum Corporation, Mumbai in September,2017 to undertake training in refinery operations, maintenance and production, out of which 22 graduate trainees returned to the country in February 2018.





(Source: Shanghai TangJi Planning and Design Institute)



(Source: Shanghai TangJi Planning and Design Institute)

Figure 5.33 Completion timeline for the South East Quadrant

2014	2018	2019	2025
Commencement of the development	 Fertilizer plant to be completed and to come on stream Petrochemical plant to be completed Refinery to be completed First phase of the gas pipeline to be in implemented 	Refinery on stream	Second phase of the gas pipeline to be in implemented

(Source: Urban Mega Projects Research Group, Heinrich Böll Stiftung, 2018)

Communities impacted by the Lekki Free Trade Zone

In 2004, the Land Use Act enabled the Lagos State government to set aside 16,500 hectares of expropriated agricultural land from communities to develop the Lekki Free Zone. In April 2005, 7,540 hectares of land was acquired in the Lekki area, known as Lekki Coastal Zone which was marked as parcel A, another 8,500 hectares was acquired in the Epe axis, north of parcel A, known as Yegunda and Abomiti Zone which was marked as parcel B. There were 26 communities impacted by the implementation of the Lekki Free Zone – 12 communities from parcel A and 14 communities from parcel B.

Lekki Coastal Zone (Parcel A):

Idasho, Imobido, Ilege, Itoke, Magbonsegun, Okunraiye, Ilekuru, Tiye, Idotun, Okesegun, Olomowewe, and Alasia

Yegunda and Abomiti Zone (Parcel B):

Yegunda, Abomiti, Ojuolokun, Jaguna, Sabi, Biolorunpelu, Lamija, Meki, Itomu, Take, Imuago, Aba Oyinbo, Igbo Apawa, and Aba Onigbagbo.

Compensation process

The compensation process for the land acquired for Lekki Free Zone started in 2007 when a Memorandum of Understanding was signed on March 27, 2007 between accredited representatives of the communities (9 communities of Parcel A), Ibeju Lekki Local Government, Lagos State government and Lekki Worldwide Investment Limited. Subsequently, payments were made to communities in relation to the value of crops that were on the farmland. It was disclosed that members of the communities (Parcel A communities) got Đ10,000 each as compensations for their crops, according to Director of SERAC (Social and Economic Rights Action Center) – the legal counsel of the communities.

In 2009, a Certificate of Occupancy was awarded to the communities but it was discovered that the portion of land mapped on the Certificate of Occupancy extended into the Atlantic Ocean and it also encroached on other communities' properties, therefore the certificate was said to be invalid. Another Certificate of Occupancy of 750 hectares was presented to affected communities of Parcel A in 2014. The Lagos State government claimed that an initial payment of NGN 66 million was paid to owners of Parcel A lands, which houses Dangote Refinery and Phase 1 of the free zone, in the earlier month of 2016 while new compensation for host communities of Parcel B was approved. The approved compensation of NGN 740 million was paid to communities within the Parcel B (Yegunda and Abomiti zones) in September, 2016.

Findings show that the Lagos State government is yet to fully compensate the affected communities since the acquisition of the land. The Parcel A communities' members appealed to the government to expedite necessary action in the remuneration of its Memorandum of Understanding, signed in 2007, to enable them enjoy the benefits of investments the zone was attracting as a new commercial hub. It was gathered that apart from the formation of the resettlement committee, appointing a member as one of the Board of Directors of Lekki Worldwide Investment Limited and the award of Certificate of Occupancy of 750 hectares of land, the other agreements in the MoU are yet to be fulfilled.

Another major problem is inadequate compensation based on the stipulations of Land Use Act of 1978. Several authors opined¹ that the compensation process available in the Act is ineffective and imbalanced because government and private investors benefit a lot at the detriment of affected communities due to minimal compensation without room for negotiation. The land expropriation for the Lekki Free Zone caused the affected communities to lose pivotal access to farmland and natural resources needed for their subsistence. At the end of it all, they couldn't get substantial compensation. This injustice triggered social unrest and violent conflict which led to public disorder in October 2015 where the communities by barricading the entrance to the project site in protest of the expropriation of their farmland and failed attempts at discussing "employment and general welfare issues" with the necessary officials. In order to resolve the lingering dispute the Lagos State government inaugurated five different resettlement committees in November 2016. The committees were aimed at ending the differences between residents of communities as well as foster mutual relationship between communities and the state government. The committees include Abomiti Zone, Lekki Coastal Zone, Lekki-Epe Zone, Yegunda Zone and Abejoye Zone.

Shareholders

- China-Africa Lekki Investment Limited (CALI): Chinese consortium and investment holding company registered in China solely for the purpose of investing in the Lekki Free Zone. CALI holds 60 percent shares in Lekki Free Zone, consists of China Railway Construction Company (57.3 percent), China-Africa Development Fund (22.9 percent), China Civil Engineering Construction Corporation (17.2percent) and Jianging Development Zone (2.6percent). The influence of CALI is limited to phase 1 of the zone. The consortium has the exclusive right of 50 years to operate in the zone.
- Lagos State government is in charge of licensing, providing land, compensating displaced villagers and identifying potential investors. Individual ministries are involved in carrying out these duties.
- Lekki Worldwide Investment Limited (LWIL) is an investment company, owned largely by the Lagos State government, privately driven and attracting private placements to facilitate the development of Lekki Free Zone. Lagos State Development Corporation owns 40 percent shares of LWIL, 40 percent by IBILE Holdings and 20 percent by private entity.

Investors and enterprises

South West quadrant (Phase 1)

- Oil and natural gas: Harig Oil Supply and Trading Co, Rano Oil and Gas Limited, Puma Energy FZE, Northwest Petroleum and Gas FZE, SPOG Petrochemical FZE, IMAD Oil and Gas FZE, Giorgio Dredging Oil and Gas FZE, Plural Oil Marketing, MRS Oil and Gas, Pinnacle Oil and Gas FZE, Barbedos Oil and Gas FZE
- Solar energy: ZIKLAG
- Palm oil: KKL Industries Limited
- Other such as construction, steel, infrastucture, etc.: Lightview Investment Limited, CRCC Nigeria FZE, CCECC Nigeria FZE, LIFEMATE, CANDEL, Zhi Jiang Construction FZE, Sinotruck FZE, Loving Home Furnishings Co. FZE, H & Y International FZE, Boton Electric Nigeria FZE, Huachang Steel Structure Engineering FZE, ZCC Construction FZE, Bollore Transport & Logistics FZE, Golden Dream Commodity FZE, Aslan Nigeria FZE, Yulong Steel pipe FZE, Coral Beach estate, RWE Africa LPG Equipment FZE, CNSS FZE, St. Nicholas FZE, Jiangsu Geology & Engineering FZE, Crown Nature Nigeria FZE.

South East Quadrant (Phase 2)

- Dangote Industries is the sole investor of the south east quadrant of the zone. The company
 made the announcement to build refinery, petrochemical plant, gas pipeline and fertilizer
 complex in 2014.
- Contractors and associates: Standard Chartered Bank, UK and consortium of other banks, African Development Bank (AfDB), United States Trade and Development Agency, C&I, Jan De Nul Group, MAN Diesel & Turbo, Saipem of Italy.

North West Quadrant (Phase 3)

• Rendeavour is an African urban land developer, in charge of developing mixed-use land development in the North West quadrant of the zone.

Finance mechanism

The structure of financing Lekki Free Zone involves joint effort between the shareholders and the investors. The shareholders CALI, LASG and LWIL hold 60 percent, 20 percent and 20 percent of the shares, respectively. The equity share of Lagos State government is land but its financial investments are done through Lekki Worldwide Investment Limited. The investors contribute depending on the terms and conditions in their agreements. Lease prices for lots are US\$ 35/m2 for manufacturing; US\$ 300/ m2 for oil and gas sector (the space for this sector has been exhausted); and US\$ 200/m2 for real estate development. Tenants would pay for utilities through the management company so they don't have to deal with utilities directly.

Shareholders' finances

The shareholders made an initial start-up investment of US\$ 267million. CALI invested US\$ 200 million and Lagos State government invested US\$ 67 million in 2006. The Lagos State government released NGN 1.6 billion (US\$ 5.2 million) as counterpart funding to boost the ongoing infrastructural development in the Lekki Free Zone Development project. In 2017, CALI provided US\$ 49.88 million, while LASG provided US\$ 15.01 million to help in the construction of roads.

Management structure

The Lekki Free Zone Development Company is a combination of LWIL, CALI as well as the inclusion of the community leaders. Regulations and land policy adopted from the NEPZA act empower the LFZDC as the body in charge of granting permits and terms of lease. In order to grant permits, the 2010 Urban and Regional Planning and Development Law needed to be adopted; the LFZDC carries out the application process for investors and is in charge for the development, operation and management of the south west quadrant of the zone.

The South east quadrant is being managed, developed and operated by Dangote Group of Industries.

Critical review

Land expropriation

It is an established fact that in order to develop a huge project like Lekki Free Zone, there is need for a large expanse of land area which was acquired from 26 different communities in Ibeju-Lekki and Epe axis, by the power vested on the government in Land Use Act of 1978. The land area was mostly used, initially for agricultural purpose which means some people were deprived of their sole means of survival while some people lost their ancestral heritage, i.e. it caused social disruption and economic loss for the affected communities.

Reduction in biodiversity

In order to prepare the land for development, there was need for removal of existing vegetation which led to loss of biodiversity, medicinal plants, economic or food crops in the area as well as wildlife that used this vegetation for habitat.

Land reclamation

Due to the site close proximity, part of the Lagos Lagoon had to be sand filled in order to make the land suitable for development. It might lead to flooding at the long run whereby land reclaims its original nature.

Pollution

The project will lead to several forms of pollution like air, noise, land and water pollutions. High level of dust and vehicular emissions during construction, emission from fertilizer plants, storage facilities and fumes from power generators cause air pollution. Noise pollution is generated from construction vehicles, machineries, equipment, etc. Careless discharge of liquid effluents, solid

and hazardous wastes and accidental spillage of hazardous materials will lead to land and water pollution.

Increase in disease conditions, especially water-borne diseases

The zone has close proximity to Lagos Lagoon and the Atlantic Ocean. Consequent of disposal of wastes without proper adherence to sanitary guidelines, discharge of sewage into the water bodies, and the preponderance of disease vectors could lead to widespread increase in diseases.

Pressure on existing roads with possibilities of accidents

The activity of construction and development of any project would result in the increase of road usage. With the magnitude of this project, there would be fervent movement of personnel, equipment and materials and due to the incompletion of proposed sea port and the airport, the pressure falls on the road (Coastal Road and Lekki-Eleko road). The result of this pressure could destroy the road structure and could also lead to accidents.

Conflicts or agitations over breached agreements

There could be violent uproar, conflicts and agitation due to different reasons like late compensation. This was experienced in 2015 due to the communities' protests against breached compensation agreements that led to the death of personnel.

Environmental Impact Assessment (EIA) in Nigeria

The efficiency and effectiveness of the EIA as a regulatory tool is often restricted by the quality of governance in Nigeria as a developing country. Project proponents view the EIA process as part of the requirements for a licence to operate rather than as a decision-making mechanism. The application of EIA in practice remains at variance with the requirements and intention of EIA legislation.

Application of the EIA law in Lagos

In line with global practices, urban development should be guided by a planning and management vision that promotes and considers sustainability. It requires the joint efforts between all stakeholders at the government, individual and organisational levels. The general principle of development is that it should consider impact on all areas of the society whether economical, social and environmental. Thus saying, this places an obligation on individuals, private or public organisation to prepare an EIA for project development before the projects are commenced.² In Lagos State, the majority of the urban residents live and work along the coastal areas. More so, most of the developments in the state are concentrated along the same coast lines thereby creating additional pressures to the coastal areas and increasing their vulnerability to storm surges and sea level rise. However, studies show that most of these projects such as the Eko Atlantic City project, the proposed LFZ amongst others are in breach of the provisions of the EIA Regulations. For instance, reports indicate that Lagos State governemnt commenced dredging activities in respect of the Eko Atlantic City project in 2009, while the ElA report was completed in April 2011. This was in clear contravention of the EIA Act, the Urban and Regional Planning (URP) Act, Laws of the Federal Republic of Nigeria (LFN) 1990 and even the Lagos State Urban and Regional Planning Board Law of Lagos State (LLS), 2010 which provide that the EIA must be carried out before embarking on any developmental project. Thus, the government's failure to carry out an EIA prior to the commencement of dredging activities has defeated the purpose for the EIA because there was no collection of credible baseline data against which to bench mark the findings of the EIA.³ This misnomer is associated with the exclusion clause in the Act which

3 see section 4 EIA Act

² Section 3 of the EIA Act

appears to allow proponents to execute certain government projects without being subject to the EIA process. The combined effect of the above is that the Eko Atlantic City project has not fulfilled the requirement of the law as a category 1 project under the EIA Act, requiring full and Mandatory EIA.⁴

Provisions requiring the EIA for urban development

The EIA act expressly provides for an EIA before the commencement of any project whether by an individual, organisation, private or public institution⁵ while, section 4 of the EIA act, provides for the minimum contents of an EIA.⁶ The Urban and Regional Planning (URP) Act, 1992 spells out the three levels at which physical development plans can be made, these are at the federal, state and local government levels. Each level of planning carries the identification, "the commission", "the board", and the "authority" respectively.

The URP act makes it mandatory for each local government council to have a planning authority, whose duties, among others, is to prepare and implement:

- A town plan;
- A rural area plan;
- A local plan;
- A subject plan and;
- The control of development within their area of jurisdiction other than over federal and the state governments' land.⁷

It also stipulates that development control is an integral part of the master plan. In recognition of this, the URP act provides for the establishment of a development control department⁸ charged responsibility for matters relating to development control and implementation of physical development plans⁹ delineating control to the federal, state, and local government in respect of lands within their respective jurisdiction.¹⁰ Under part 2 of the URP Act, sections, 28, 29 and 30 made it clear that approval should be sought before any development commences. Importantly, section 33 indicates that a developer must submit an environmental impact statement before the commencement of any project. In the same vein, section 31 (1) of the Lagos State urban and regional planning board (LSURPB) law also provides that any application for development under the law must comply with all the requirements, regulations and standards of the operative comprehensive development plans where they apply. This means that where any regulation requires an environmental impact assessment, then the developer must comply with this requirement. This is further emphasized in section 38 of the LSURPB law.

- 4 Section 14 of the EIA Act
- 5 Section 2 of the EIA
- 6 Section 4 of the EIA Act
- 7 Part 1 Section 4 of the URP Act
- 8 Section 27
- 9 Section 27 subsection 2
- 10 Section 27 subsections 3, 4 and 5

Summary of findings

Inaccessible or not existing EIA report

Even though the existence of an EIA report for the LFZ was claimed to have been done, it was not made available throughout the research of this report. Also, the community heads have not seen the EIA report. Upon asking the LFZDC to make it accessible, they were told to get a copy from the local government. Getting to the local government they were told that LFZDC has not submitted any EIA report to them. By their own account, the intentions of the Lagos State government in improving and sustaining the living condition of the communities include the provision of alternative locations for farming, the provision of jobs within the zone, youth and woman empowerment through skills acquisition and the provision of basic physical and social infrastructures, e.g. schools, portable water supply and health facilities. The state governmentis yet to fulfil these pledges.

Defective compensation procedure

From the onset of the development, there have been several issues raised on the delay in compensation of the affected communities. This hasn't really changed due to agitations and uproar from the affected communities, especially Parcel A host communities, on government's refusal and delay in implementing the Memorandum of Understanding signed in 2007.

Influence of Lagos State government

At the conceptualization stage of Lekki Free Zone, the influence of the state government was very high but with the progress of the project the interest, influence, and power of the government falls off a cliff but the tide seems to have changed with the new administration because of the keen interest that has been showcased since 2016. It is the belief of the new administration of the state that there is need for its contribution and immense support for the various management of the zone by providing an enabling environment to attract potential investors since the Lekki Free Zone has been declared as a tool or vehicle of industrial development which will add to the GDP of the state and the country as well also pave way for more job opportunities, by past administrations. The efforts of the government are majorly being carried out by Ministry of Commerce, Industry and Cooperatives, Lekki Worldwide Investments Limited and the newly formed Office of Transformation (Lagos Global).

Influence of the Chinese investors

The major shareholder in the development of the Lekki Free Zone is a Chinese consortium known as China-Africa Lekki Investment Limited (CALI). It was discovered that the influence of the consortium begins and ends at the South West quadrant of the zone and CALI has exclusive right of 50 years to operate in the zone.

Ambiguity of China's role in Nigeria

The LFZ is one of eight Chinese special economic zones (SEZ) approved by the Chinese Ministry of Commerce in 2006. China's motives seem to be clear: It is to increase Chinese multinational companies' Nigerian market share; to expand the Nigerian market for Chinese manufactured goods; to increase China's presence in Nigeria's oil and gas sector; and to leverage its investment in Nigeria as a gateway for entering the ECOWAS market. China strives to secure themselves strategic shares in Africa's natural resources. The reliability of China and the longterm outcome for Nigeria are difficult to predict. Reflecting the fact that the large majority of the investors and sponsors of the LFZ project are Chinese leads to the sober finding that Lagos has outsourced the development of some of the largest projects to China. Even the applied planning instruments were imported from China, despite of the fact that Lagos State possesses their own instruments that could have been developed further, if necessary. As it becomes obvious, Chinese investors are interested in the economic benefit and can hardly be hold accountable for any social or environmental negative impact their projects may cause. Another impression of such Chinese

engagement in Africa^{11 12 13 14} is that they tend not to employ locals but prefer to bring their own. According to Léonce Ndikumana, professor of economics at the university of Massachusetts Amherst, if looking at the gains of China-Africa relations in terms of employment creation, very little is coming to Africa.¹⁵ So why do African governments still prefer the Chinese as partners? Ndikumana suggests that for China, business is business – they would make their investment but not care about other conditions such as governance, democracy and so on. Others, perhaps more cynically, suggest that African governments prefer the Chinese because "(...) they do not only bid cheap, they cut the government agents in big."¹⁶

Ineffective public participation

Planning is a process that involves working along with the people and other factors in the environment, especially if these set of people will be beneficiaries or adversely affected by it. The development of the Lekki Free Zone affected 26 different communities which belonged to several families in Ibeju-Lekki and Epe axis. The people were not permitted to fully participate in decision making of a project that directly concerns them. Although, the state government under the present administration formed 5 communities' zones (Abomiti Zone, Lekki Coastal Zone, Lekki-Epe Zone, Yegunda Zone and Abejoye Zone) to serve as representative and to reduce the conflict in the area. A representative from the Lekki Coastal Zone was appointed as one of the Board of Directors of Lekki Worldwide Investments Limited but the communities' have not been involved in any decisions since the inception till now.

Lack of skills, jobs and income for the masses

Labour productivity in Lagos manufacturing would benefit from large-scale investment in skills training to enhance managerial roles in industry and build the productivity of machinists, maintenance engineers, welders and other industrial workers. If job creation and investment promotion are the core motivation for establishing free trade zones like Lekki, it is unclear whether or not and in what time frame these would result having waived taxes, levies, exchange controls, customs duties, rules and other opportunities to raise government revenue. The conceiving and the process to which the LFZ started had all the written intent of how the zone would be most beneficial to the communities and its immediate environs. What appears more certain is that attempts would continue to be made to dispossess host communities of their lands and deals (whose terms are unknown) will further be struck in order to try to increase uptake of the idea. The adjacent communities are the least benefiting from such a mega project. There has been no sign that shows the improvement of the living condition of the affected communities but rather it has deprived them of their means of livelihood.

11	Naiwu Osahon, "China Is Africa's Worst Enemy In The World Right Now", Modern Ghana, accessed February 2, 2016, http://www.modernghana.com/news/449082/1/china-is-africas-worst-enemy- in-the-world-right-no.html.
12	Barry Sautman and Yan Hairong, "Myths about employment in Africa should be dismissed," accessed February 2, 2016, http://www.globaltimes.cn/content/929299.shtml.
13	Leonce Ndikumana, "China invests in building Africa's infrastructure, but fails to employ local labor. The Rise of Chinese Influence in Africa," accessed February 2, 2016, http://therealnews.com/t2/index.php?option=com_content&task=view&id=31<emid=74&jumival=10535.
14	lan Taylor, "Sino-Nigerian Relations: FTZs, Textiles and Oil," accessed February 2, 2016, http://www.jamestown.org/programs/chinabrief/single/?tx_ttnewspercent5Btt_newspercent5D=4197&tx _ttnewspercent5BbackPidpercent5D#.VINOSK4rLdQ
15	Ndikumana, <i>ibid.</i>
16	Osahon, <i>ibid.</i>

5.6 The Case of Eko Atlantic City

Eko Atlantic City – a Free Trade Zone, a new financial center, providing housing for 500,000 people – is being built right on the Lagos' Atlantic coast. The development is to be the "Dubai of Africa" and being understood by the responsible project developers as a modern, progressive new town development. The approximately 10 km2 large area is claiming to be a measure against the increasing coastal erosion and as a protection against storm surges. It is questionable whether Eko Atlantic City, a privatised and gated luxury neighbourhood is the right answer to the tremendous housing crisis, especially given the fact that a significant number of people lives below the poverty line.

Background

It is certainly true that Lagos has to cope with several challenges, among them the strong population growth, which has led to a large city expansion since 1900. The rapidly growing city can hardly live up to this growth. Deficits have arisen in the areas of health care, waste disposal, energy and water supply, as well as infrastructure and hygiene conditions. Densily populated neighbourhoods and a high percentage of informal city production make reforms and upgrading measures difficult. However, the government's motivation to change the current situation seems relatively low and investments in major new town projects such as Eko Atlantic City appear to be the more attractive way.

Strategy

The major argument of the investors and the government for the project was the "Great Wall of Lagos" and the linked landfill that are supposed to protect the city against the advancing coastal erosion. It is unclear if or how in the long run the artificial repelling of the Atlantic has consequences for the neighboring areas. The district is to become the "most sustainable city in Africa", but the guidelines for climate-friendly construction are very vague and inadequately formulated. The resulting Free Trade Zone and a new financial district are to bring in highly qualified professionals in the country and boost the economy. However, the project is more likely to appeal to foreigners and possibly wealthy Nigerian expats than the local population that can hardly afford to live in Eko Atlantic City.



Map 5.34 Eco Atlantic City: reclaimed land in front of Victoria Island

(Source: Google Earth, during land filling, 2016)



(Source: Mega Project Research Group, Heinrich Böll Stiftung, 2018)



(Source: Mega Project Research Group, Heinrich Böll Stiftung, 2018)

Special Economic Zones

As discussed earlier in this report, a Special Economic Zone is a geographically defined area with legal and administrative facilities. Obstacles such as tariffs and import quotas are abolished, which is usually a great incentive for foreign investors. The positive effects of this SEZ are often linked with economic growth, infrastructure development, increased productivity and new labour. In Nigeria, and especially in the Lagos region, some of these SEZs have emerged in recent years. Eko Atlantic City is one of them. In fact, FTZ have become a popular planning instrument to manage urbanisation through the attraction of (foreign) capital.

Urban design

"Fine quality materials, world-class, chic and exclusive, and curated sophisticated community:" This is how the urban design project of the Eko Atlantic City is described. Glazed skyscrapers with modern, luxurious apartments, private pools and sports studios for the upper classes of Nigeria and international expats are expected to make up a large part of the future residents and users. The cost of the smallest apartments starts at around US\$ 200,000. Renderings and visualizations suggest ground floor areas with shops, restaurants and other public uses with 5-meter-high glass facades. The wide streets between the skyscrapers are said to be reminiscent of the boulevards of Paris or New York and are sometimes even air conditioned to achieve a better quality of stay.¹



(Source: Mega Project Research Group, Heinrich Böll Stiftung, 2018)

Picture 5.38 Scheme of the "Great Wall"



(Source: Sales Office, Eko Atlantic City, 2017

visit at the Eko Atlantic Sales Office and tour on the construction site in September 17 // Eko Atlantic Sales Office:https://www.ekoatlantic.com // Bukky Oyedeji, "Auf Sand gebaut: Eko Atlantic City, http://www.boell.de/de/2015/06/11/auf-sand-gebaut-eko-atlantic-city.11.06.2015, accessed October 2017 // Fabian Urech, "Das Hongkong Afrikas", http://www.nzz.ch/international/nahost-und-afrika/eko-atlantic-city-bei-lagos-das-manhattan-afrikas-ld.114354.2016, accessed October 2017.



Rendering, Azuri Peninsula



(Source: Sales Office, Eko Atlantic City, 2017

Drawing 5.41 Street section, Azuri Peninsula



(Source: Mega Project Research Group, Heinrich Böll Stiftung, 2018)



(Source: Mega Project Research Group, Heinrich Böll Stiftung, 2018)

232

Pictures 5.39-5.40

Critical review

Climate-responsive urban design and architecture

With its large glass surfaces and the dense construction, the planned development is not suitable for Lagos' year-round hot and humid climate. The harsh climate highly stresses building structures and subsoil. A fast decline due to the environmental influences is therefor likely which will decrease the purchase value of the plots and buildings. Therefore, it is unclear how the landfill in the open sea will perform in the long run. Does it increase or decrease the risk of flooding in neighbouring areas and along the shore? Against the backdrop of the impacts of the expected man-made climate change it might be more sustainable, economically and ecologically, to build outside of acute flood zones. In addition, the proposed urban design scheme does not seem to make provision of a waste disposal scheme, which again would increase Lagos' environmental pollution.

Society

The project is likely to widen the gap between rich and poor, creating a divided city. Gated communities lead to social separation. The new district is therefore reserved to a small segment of the population: a wealthy enclave with its own supply and its own security apparatus. It might be attractive for those living there but certainly not contribute to a inclusive city for all.

Project financing

As discussed, there are only a few potential buyers and residents for the apartments offered. As a result, there is a risk of vacancy, which has already occurred in similar urban development projects in the region. On the other hand, there are major infrastructural shortcomings in Lagos. The question is whether funds would not be better invested in those large-scale projects instead of only improving and providing infrastructure in and to a very limited area.

Urban design

There seems to be no real urban design concept. As it is, there are empty plots for sale. Program, design rules or guidelines, thoughts on open spaces and typologies are obviuosly left to the land owner. In addition, there is no real connection to the rest of the city of Lagos. The gated community has a few, monitored gates. The large beach promenade is thus only accessible for the residents.

Picture 5.43 Constuction site



(Source: Mega Project Research Group, Heinrich Böll Stiftung, 2017)

Centralised and top-down

Unfortunately, the vision described in the Lagos State Development Plan 2012-2025 (LSDP) is yet to be well articulated. It is inadequately shared among stakeholders, the policy makers, local government administrations, professionals and most importantly, the residents. The vision of future Lagos is still determind among selected individuals at the political level and planning processes happen secretly. As the analysis has shown, the planning procedures suffer from serious democratic shortcomings. Against this backdrop, the development will happen too slowly compared to the needs of the ever-growing metropolis. As long as broad segments of society remain excluded from participation and planning processes are steered centrally by and through Lagos State government, social and economic development will hardly be satisfying. The goals, formulated in the LSDP – people and poverty alleviation, functionality and productivity, democracy and governance, safety and security, transformation, national growth and global influence – will remain empty shells.

EIA: Poor accountability

The governance structures in Nigeria often interfere and influence the effectiveness of EIA process in Nigeria. For instance, the act's exclusion clause allows proponents to execute certain government projects without being subject to the EIA process. Furthermore, overlapping responsibilities amongst environmental agencies, insufficient inter-agency co-ordination as well as a lack of transparency greatly diminish the credibility of the entire EIA system and thereby hamper the effectiveness of EIA implementation as a result of existing weak governance structures. Generally, these comprise the challenges associated with the implementation of the EIA in Nigeria. This has had a trickledown effect on the implementation of the EIA process particularly for Lagos State with the state's aspiration to acquire a mega city status come 2020. Recognising this fact, it is therefore - again - the recommendation of this chapter that public participation should be intensified. There should be a clear delineation of the roles and responsibilities of the different authorities responsible for ensuring compliance with EIA. The provisions of the EIA act which is a federal legislation should be seen as overriding any other legislation. There is also the need to reform the urban and regional planning act, 1992 whose provisions on requirement for EIA appear to have been usurped by the provisions of the Lagos State urban and regional planning law. Along this line, people should be more educated and enlightened on the use of laws in regulating, guiding and directing development generally whether urban or rural.

Onesided perspective on economic benefits

It is also the submission of this chapter that government at all levels in Nigeria should be proactive in not preferring financial and economic benefits over environmental concerns. Healthy people and an intact environment may just be the best investment for the future. In addition to ports and airlines, local private businesses the Lagos State government need to focus on the priority sectors that develop skills and transfer technology and the benefits of foreign investment, from China and elsewhere. These will help diversify the economy, create jobs, reduce poverty, and spur economic development.

Local researchers and research assistance

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Despite the status of Lagos as Nigeria's largest city and commercial hub¹, more than half of its residents currently survive below the poverty line of US\$ 1.25 per day.² The Lagos State government's mission to make Lagos Africa's model megacity and global economic and financial hub³ has resulted in various projects aimed at overhauling the city infrastructure and attracting foreign direct investments.⁴ However, these projects have achieved varying degrees of success, with unfettered global market forces exerting increased downward pressure on the most vulnerable. This has resulted in recurrent tensions and a wide disconnect between the developmental policy thrust and the pursuit of survival of the population, a situation emblematic of African urbanism.⁵ Vanessa Watson referred to this as a conflict of rationalities, a situation that arises at the interface between politicised technical and managerial efforts to direct human conduct towards ends, and the messy and complex reality of human efforts to survive and thrive.⁶ In Lagos, the major conflicting rationalities are those between formal and informal systems, globalisation and localisation development approaches, governance processes and survival strategies, as well as government's desires for global ranking and citizens need for a city that works.

Conflict of rationalities: Formal vs informal

Informality is a pervasive mode of survival in Lagos today, with the sector housing 66 percent of residents, and employing 68 percent of the working population.⁷ However, the Lagos State government, rather than recognising and promoting the inherent potentials of the sector, often sees it as an economic parasite which should be stifled to engender development. For example, the penchant for centralised governance based on a business case model that emphasizes technocratic expertise, private sector participation and large public infrastructure investments is indicative of the state-owned Lagos Waste Management Authority which recently transited to the Cleaner Lagos Initiative. By discountenancing the the value provided by informal and small-scale PSP actors, the state government has once again reinforced the typical African government posture of continually strengthening policies that restrict the access of the poor to informal enterprises.⁸ A similar scenario plays out in the Bus Reforms which the study revealed is geared towards replacing informal danfo buses with a new formal bus system in which a franchise licence is hinged on a commitment to operate a minimum of fifty buses.⁹ A more inclusive alternative would have been to integrate the informal operators into the new system, thus creating innovative formal-informal linkages for efficient mobility across the city as is being

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- 2 UN HABITAT (2012) World Urbanisation Prospects. Nairobi: United Nations
- 3 (LASG (2013). Lagos State Development Plan: 2012 2025. Lagos State Ministry of Economic Planning & Budget.
- 4 (Lawanson T (2015) Potentials Of The Urban Poor in Shaping a Sustainable Lagos Megacity; in Allen A., Lampis, A., and Swilling, M. (eds) Untamed Urbanisms. Routledge Advances in Regional Economics, Science and Policy Series. London &New York: Routledge. 108-118
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- 9 Lagos State government, "DANFO: WE'LL KICK-START BUS REFORM INITIATIVE WITH N30BN- AM BODE," lagosstate.gov.ng/blog/2017/03/12/danfo-well-kick-start-bus-reform-initiative-with-n30bnambode

done in a city like Johannesburg.¹⁰

Conflict of rationalities: Globalisation vs localisation

A major challenge facing cities is the articulation of the globally oriented economic functions of the city with locally rooted society and culture.¹¹ This is particularly evident in Lagos, especially regarding mega development mega projects. Based on strong private sector investments and modernist thinking, projects such as Eko Atlantic City and Lekki Free Trade zone have been largely applauded by international organisations and business communities.¹² However, these projects have resulted in unwitting consequences for city development trajectories, with local businesses and the poor most impacted. It is often argued that mega-development projects benefit vulnerable groups through trickledown economics (creating employment opportunities and improving urban indicators).13 In Lagos, the reality is that the increase in large-scale government supported - private sector led mega-projects in sectors such as real estate, infrastructure provision, industrial development, under the guise of leapfrogging development¹⁴ has resulted in negative socio-spatial, environmental and economic consequences.¹⁵ While the state has grown to become the 7th largest economy in Africa, her Gini coefficient of 0.64 indicates a significantly high level of inequality.¹⁶ Furthermore, the case studies also highlight the disproportionate advantage international investors wield over local small and medium scale businesses in accessing government concessions, tax-breaks and operational licences.

Conflict of rationalities: Governance processes vs survival strategies

The 1999 constitution makes the provision of basic services the responsibility of both local and state governments, with no clear legal delineation between the relative roles of these two sub-national tiers of government.¹⁷ With state governments exerting fiscal control, most local governments function as mere administrative extensions of the state, a situation which cuts across the entire country.¹⁸ In Lagos, the public service operates through a highly centralised administrative structure. As such, urban services are increasingly being subjected to privatisation and generic large-scale models that ignore contextualised needs. The challenges attending the roll out of Cleaner Lagos model is an example.¹⁹ The immediate consequence of this is that citizens often resort to unsustainable and counterproductive measures such as dumping waste along the road, in drainage channels and/or burning. A pragmatic alternative would have been the consideration of practicing "Urbanisation at scale."²⁰ This is a situation specific and needs based approach to urban service delivery that empowers communities and local

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- 19 https://ng.boell.org/2018/01/15/inside-cleaner-lagos-initiative
- 20 Lawanson. T (2017) Exploring Alternative Urbanisms for Lagos Nigeria. Urban Talks Public Lecture delivered at Technical University, Berlin. November 2017

governments to develop sustainable, replicable local level interventions, that can be scaled up. The advantage of this approach is that such interventions are culturally compliant, sustainable and often profitable. The value chain created by local recycling MSMEs such as Wecyclers, who use modified tricycles to access hard to reach communities is indicative of the potentials for innovation in a decentralised urban service delivery approach.²¹ The operational capacity of agencies and parastatals charged with the implementation of the Lagos megacity vision is quite problematic. Rather than charting an integrated development paradigm that allows for all service sectors to feed into one central governing philosophy, there are many agencies and parastatals, carrying out similar functions, without recourse to one another. As such, these agencies generate and rely on variant data sets to make projections and develop policies, resulting in overlap of functions, conflicting implementation strategies and lack of definition and organisation in the delivery of services. The unsatisfactory results of the housing sector is indicative of this, where the Lagos State Ministry of Housing, LSDPC, LASURA and LBIC rather than synergising for effective housing delivery are operating in silos. In bridging this gap, citizens continually patronise the informal sector for most land and housing transactions²², with informal settlements growing from 42 to 100 in 2013.²³ Other studies estimate at least 200 slums in Lagos.²⁴

Conflict of rationalities: Governments wants vs people's needs

Governance is generally described as the processes through which public and private resources are coordinated in the pursuit of collective interests.²⁵ The success or otherwise of the urban development process is closely related to the quality of governance and relationships amongst the various stakeholders. Combined with increasing global integration, neoliberalism has created a tendency towards a paradigm shift from people-driven to market-driven urban development approaches with consequent transitions from "City for People" to "City for Profit."²⁶

In Lagos, the vision to be "Africa's model megacity" has resulted in many projects that have essentially left the citizens behind. Large scale replacement of forcefully evicted local communities and markets with expensive gated communities and modern shopping malls is prevalent.²⁷ Oftentimes, demolitions and forced evictions are justified in the name of the broader public good and given developmental process names such as "infrastructural development", "urban renewal" and "inner city regeneration" and in the case of Lagos – "transiting to a world class model megacity."²⁸ While urban modernity aspiration may not be wrong, development aspirations ought to accommodate the livelihood realities of the majority.²⁹ After all, the World Bank, responding to Africa's leapfrogging development quest stated that: "Lavatories before Laptops: A country (or city)'s capacity to absorb and benefit from new technology depends on the availability of more basic forms of infrastructure."³⁰

- 22 Lawanson T (2015) Potentials Of The Urban Poor in Shaping a Sustainable Lagos Megacity; in Allen A., Lampis, A., and Swilling, M. (eds) Untamed Urbanisms. Routledge Advances in Regional Economics, Science and Policy Series. London &New York: Routledge. 108-118
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²¹ http://wecyclers.com/

Reconciling conflicting rationalities: revising the development approach for Lagos

All the chapters have revealed large gaps between the development approach and realities of daily life in Lagos. The resultant effects are increased rates of socio-spatial inequalities and lingering tensions between the government and her citizens. Lagos must therefore revisit her vision, address conflicting rationalities and outline a strategic approach that puts LAGOSIANS at the centre of her development policy. The development thrust of the government, manifesting in her regulations, policies and partnerships must be such that translates into improved incomes, quality of life, social structures and environment for residents and local businesses, reinforcing Camagni's definition of sustainable urban development as the process of synergistic integration among great subsystems making up a city (economic, social, physical and environmental), which guarantees the local population a non-decreasing level of well-being in the long-term.³¹

Camagni. R (1998), Sustainable urban development: definition and reasons for a research programme: International Journal of Environment and Pollution [Int. J. Environ. Pollut.], vol. 10, no. 1, pp. 6-27, 1998.

31

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