



## URBAN GOVERNANCE AND THE ENVIRONMENT IN ABA AND ONITSHA

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*Manuscript Received: 20/03/2019      Accepted: 12/02/ 2020      Published: March 2020*

### ABSTRACT

Governance capacity determines the effectiveness of urban environments and systems. Thus, unplanned landscapes and poor land management as commonly observed in Nigeria's cities, are a reflection of poor governance. This has led many researchers to conclude that these spaces are characterised by the "absence" of public sector governance. Following the 2016 World Health Organisation declaration of Aba and Onitsha amongst the world's 20 worst cities by air quality, this paper reviews environmental problems in these functionally similar locations to ascertain the "presence" or "absence" of governance in their respective environments. Data for the study was obtained from secondary sources: published literature, substantive news articles, the archives and from the authors' field observations. The findings are that the public authorities have tended to be ineffective, and therefore absent, leaving these urban spaces virtually unregulated; that urban services are deficient or inadequate; cityscapes unappealing; the city environments critically challenged by air pollution, flooding, sanitation, and waste management issues. Recommendations of the study include reformation of environmental administration for functional clarity and continuity; the prioritization of urban interventions; improvement in urban services and managerial capacity; effective development control; and the abatement of nuisance and pollution-causing activities.

**Keywords:** Environmental challenges; Government presence and absence; Local government; Systemic constraints; Urban governance

## INTRODUCTION

Governance determines the effectiveness of urban environments and systems. Thus, instances of inadequately planned landscapes, ineffective land use management and an indifferent administrative system are reflective of poor governance. The challenges of Nigeria's urban area extend across environmental planning, environmental management and the provision and administration of services. The manifestations and persistence of these challenges have led some researchers to describe these spaces as being characterised by the "absence" of governance. According to the UN (2012), "Urban governance is the hardware which enables the urban software to function ... to enable the local government response to the needs of citizens". Urban planning and management are tools which make governance effective and purposeful. Whilst urban planning's concern is with well-being founded on policies for the promotion of good sanitation, decent housing and the minimisation of pollution. (Hphp, 2015), urban management ensures that the desired outcomes are achieved in accordance with set objectives.

Since most cities do not have the advantage of being planned from scratch, urban planning concerns itself with managing that initial disadvantage. For this reason Roberts (2000) believes that the planner's role is to seek improvements in the use of land in the public interest. Lohmann (2006) supports this view in regarding city planning as a continuing effort at providing the best possible environment for urban dwellers. With the exception of Abuja no other Nigerian city has had the advantage of being comprehensively planned. Nigerian cities such as Kano, Katsina, Zaria, and Sokoto predate colonialism and emerged from influences such as trade and politics. Other old cities are Ibadan, Ife, Brass, Benin and Bonny. Some others, mainly Kaduna, Jos, Lagos and Port Harcourt either came into being or prominence through colonialism.

The challenges of these cities are basically attributable to a failure to manage their initial disadvantage of being unplanned. Weak monitoring and control effectively left private interests to influence urban growth unduly, thereby producing non-rational patterns of land use (Aluko, 2011) and deficiencies in urban land management (Ikejiofor, 2009) which meant development taking place outside the regulatory framework. Omuta (1988) identifies weaknesses in administration and managerial capacity coupled with unplanned land use and uncontrolled physical development as being principally responsible for the state of Nigeria's urban centres.

Urban governance is a public sector responsibility, but Ikejiofor (2009) gives instances in which this responsibility has been "absent" in land development in Enugu City. The result has been an "... overwhelming dominance of the urban landscape by informal (unauthorised) development".

The concept of "absence" has been also been used for the Lagos metropolis. According to Koolhaas as reported by Michael (2016), Lagos in the 1990s was "the ultimate dysfunctional city" and an example of: "what happens to a society where the state is absent. At that point the state had really withdrawn from Lagos; the city was left to its own devices, both in terms of money and services". The import of governance "absence" is an abandonment of the stage to the *laissez faire* operations of private interests. This renders the urban space vulnerable to the exploitative tendencies of unrestrained adventurers who are motivated only by private gain. The main consequence is an unsustainable urban environment. Practical evidence of this exists in the forms of: buildings which obstruct storm water drainage channels, non-compliance with set-backs and site coverage rules, the non-separation of incompatible land uses and the disregard of development densities.

The World Health Organisations's (2016) survey presents another justification for this study. The 3000-city survey reveals that four Nigerian cities (Onitsha, Kaduna, Umuahia and Aba) are amongst the 20 most polluted in the world by air quality. That study is of relevance here because Aba and Onitsha are respectively the 6th and 1st most polluted cities.

### Aim of the Study

The study reviews the major environmental challenges of Aba and Onitsha with a view to establishing how these can be explained by the concept of 'absent' urban governance as associated with Lagos of the 1990s.

#### *To achieve this aim, the study will:*

- (i) Define the guiding concepts of "presence" and "absence" in relation to urban governance;
- (ii) Establish from literature the subsisting environmental challenges of the study areas;
- (iii) Ascertain by field inspection the true environmental state of the study areas;
- (iv) Determine the extent to which the identified and subsisting environmental problems of the study areas are attributable to the "presence" or "absence" of urban governance.

## CONCEPTUAL DEFINITIONS

### The Presence of Governance

In this study, it is taken that governance is "present" when physical infrastructure is kept in good repair, services are available and functional; and physical development monitored and controlled; urban laws enforced; public transport organised, available and affordable; nuisance controlled, and sanitation and environmental order maintained.

### The Absence of Governance

Conversely, governance is taken to be "absent" if the opposite of governance presence obtains and persists.

Additionally, it means the abandonment of the urban stage to private players to pursue their own agenda regarding land supply, land development and urban sanitation and services.

The agency responsible for the delivery of governance is the local government council as created by the 1976 reform. The body is led by a chairman and councillors who the law requires to be elected to handle governance for a given period.

## MATERIALS AND METHODS

This study evaluates environmental challenges which have their origins in the post-civil war years, particularly from the 1980s. The sources of data are primary and secondary. First, secondary data was assembled from published literature, the media and the archives. Secondly, field inspections were carried out to assess the state of these two urban environments in order to confirm or refute the issues revealed by secondary data. The approach is comparative with the identified challenges of each study area being classified in order to provide bases for comparison. The classifications are: cityscape, drainage, roads, transportation, flooding, sanitation, energy, pollution and water. The findings from inspections are reflected in the results and discussion; incorporated in the tables of comparison of extant problems; and form the bases of final assessment of governance "absence and presence". Being an evaluation of challenges which are historical, extant and environmental, the archives and field observations were considered to be appropriate for interpreting how effectively governance has impacted, and is impacting, upon the physical environment and services in the two cities.

### The Study Areas

Aba had a population of 534,265 in the 2006 National Population Census, but according to Population. City (2016), "The last known population of Aba was 1, 277, 300 in year 2015 and if the growth rate was the same as in period 2006-2015 (+5.57%/year) its 2016 population would be 1, 348, 389. Aba remains the commercial hub of eastern Nigeria, housing famous markets like the Ariaria International Market, New Market and others. It is a trading and manufacturing centre, noted for the production of footwear and clothing. Historically, Aba is important in Nigeria's development, a province and trading outpost of colonial times, a railway collection point for export produce from the hinterlands and a preferred investment location for the first wave of major foreign companies like John Holt, Lever Brothers, the United Trading Company and Paterson Zochonis.

### Onitsha

The city is located on the eastern bank of the Niger River in present day Anambra state. The population of Onitsha, according to the 2006 census, was 509,500. By this population size, it would appear to be a small

urban area considering there were seven Nigerian cities of approximately that size in that same census. On the contrary, Onitsha is the most congested urban centre in Nigeria with a density per square kilometre of 14,078 persons crammed into a land area of 36.19 square kilometres. The closest city to Onitsha in regard to density of population is Zaria with a figure of 13, 566, but with a far lower overall population of 406,990. The last known population of Onitsha was 1,109,300 as at year 2015 and if population growth rate was the same as in period 2006-2015 (+9.03%/year), Onitsha's population in 2016 would be 1, 209,451 (Population. City, 2016).

Onitsha's high density of population imply significant environmental and urban challenge especially as it is metropolitan in nature and a hub for commerce and industry. The famous Onitsha Main Market and other specialised markets with patronage across West Africa, can be found within its boundaries. Like the case of Aba, the colonial era merchants such as John Holt and urban software the United African Company, had warehouses and representation in Onitsha.



Figure 1: Location of Aba on the Map of Nigeria

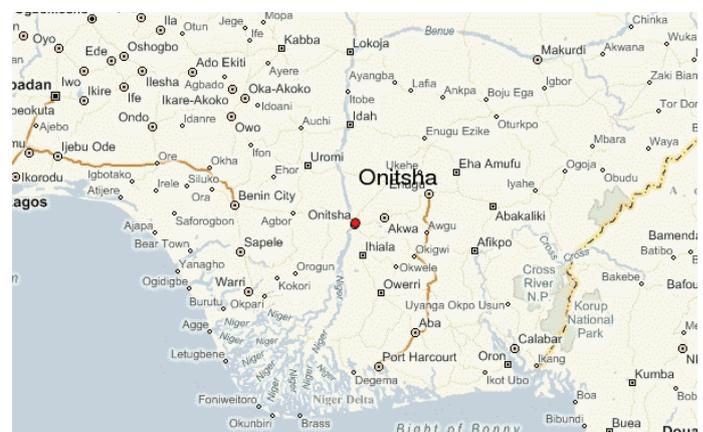


Figure 2: Location of Onitsha on the Map of Nigeria

NB: Aba and Onitsha are cities of the south between which there is a travelling distance of 152 kilometres.

**RESULTS AND DISCUSSION**

Evaluations of Aba and Onitsha

This discussion basically uses as a guide and reference the contents of Tables 1 and 2. Table 1 presents side-by-side salient background facts on Aba and Onitsha. The reason for choosing these two cities as case studies is evident in their identical functions as centres of regional significance for business, trading, industry and manufacturing, but also, as the first and second cities of the region in this regard.

Table 1: Basic Facts on Aba and Onitsha

	ABA	ONITSHA
Age	Started as a market town; date unrecorded.	Circa 1500s; became an important trading port of the British Royal Niger Company in the mid-1850s.
Location	Abia State/South East/Nigeria	Anambra State, South East Nigeria
Acreage	72 square kilometres	36.19 square kilometres
Population	534,265(2006) Density 7,400/km <sup>2</sup>	509,500(2006) Density: 14,708/km <sup>2</sup>
Economy & Significance	Leading commercial city of Nigeria; regional commercial hub; hosts the Ariaria and other large markets; centre for footwear & clothing industry.	Port on River Niger eastern bank; second to Aba in commercial status; hosts the regional Onitsha and Ochanja Main markets; manufacturing centre for industrial & general goods.
Administration	Aba North & Aba South Local Government Councils	Onitsha North & Onitsha South Local Government Councils

Source: Authors' Research, 2017

Urban Environmental Problems of Aba and Onitsha

Table 2 presents side by side, and on a three-point

Table 2: Comparative Urban Challenges in Aba and Onitsha

Environmental Challenges	ABA Scale of Challenge				ONITSHA Scale of Challenge			
	Insignificant	Moderate	Acute	Comments	Insignificant	Moderate	Acute	Comments
Cityscape			Yes	Poor zoning; Environmental nuisance			Yes	Overcrowded markets/Streets/ nuisance
Drainage			Yes	Drains blocked by structures and debris			Yes	Drainage channels blocked by illegal structures/debris
Energy			Yes	Inadequate			Yes	Inadequate
Flooding			Yes	Yearly flood damage/deaths			Yes	Yearly flood damage/deaths
Pollution			Yes	World's 6th most polluted city (WHO,2016)			Yes	World's most polluted city (WHO,2016)
Roads			Yes	Many pot holed and unpaved			Yes	Inadequate network/potholed
Sanitation/Waste			Yes	Waste disposal problems			Yes	Waste disposal problems
Transportation			Yes	No urban mass transit system			Yes	No urban mass transit
Water			Yes	No public supply			Yes	No public supply

Source: Authors' Field Study (2017)

scale of severity, the urban challenges in both cities, applying nine (9) criteria for comparison: cityscape and environment, drainage, energy, flooding, pollution, roads, sanitation and waste, transportation and water. These are issues which relate to the capacity of these cities to function effectively as centres of production and specialisation and places in which decent conditions of living obtain. The extent of each problem is categorised as insignificant, moderate or acute in each city. For Aba, the problems are judged to be acute in all the eight areas of assessment. The same assessment obtains also for Onitsha. The two urban areas are, therefore, experiencing acute urban problems which have persisted for years, without any significant intervention. The environmental problems of Aba and Onitsha are not only visible from physical inspection, but they have been well-documented over the years in academic research, many media reports and photographs. The discussion considers the challenges as they affect both cities.

**On Cityscape and Environment**

**Aba:** The decline of environmental conditions in Aba was profusely recorded over the years pictorially and verbally by the media. For instance, Offoaro (2012) states situation that: "Aba is now a shadow of its old self. The industries that made Aba tick have all relocated or gone under. ... There are zero signs of government presence in Aba. The stinking streets are even narrower, ill-maintained and dirty". The defining feature of the landscape is the sanitation/waste challenge which everywhere confronts and assaults the onlooker. Pictures of the situation are displayed by Wikipedia (2016) and waste.org.ng with the observation: "it is shocking to know that the environment has been abandoned to decay".

**Onitsha:** "Presently, the city of Onitsha is densely populated with gigantic buildings with barely any trace of "greening "or vegetation, natural habitat and natural ecosystem" (Nwokeji, Obarisiagbon *et al* (2015).

### On Drainage/Flooding

**Aba:** Nwogu's (2016) report that the Abia state government has, for the first time in over twenty years, decided to tackle the flood problem in Aba depicts the nature of the so far intractable flood problem. However, environmental problems are often linked. In this case, the poor roads are directly linked to the flooding problem which in turn is linked to the drainage and sanitation problems. Improper refuse disposal and inadequate drainage systems result in blocked drainage channels. This increases surface run-offs, erosion and flooding. The result is leading the washing off of the roads, producing siltation of drainage channels which usually remain uncleared. One of the consequences is the inaccessibility of parts of the city. At the root of it all is the high population and congestion which give rise to high levels of waste generation. The causes and consequences of Aba's experience of flooding over the years are captured by Akintoye *et al.*, (2015) admit that poor drainage is a major cause of flooding in the city, but list other contributory factors as waste improperly disposal into drainage channels, population growth and poor road networks. Intense rainfall dislodges gutter debris, overflows inadequate drainage channels, leads to flooded roads, submerged structures, accidents and so on. Other consequences identified by the authors are: restriction of free flow of communication and movement within the city, impact on physical health through the spread of disease vectors and on psychological health through losses incurred and displacements suffered by victims.

**Onitsha:** The Nwa Ngene lake which afforded an avenue for de-flooding has been blocked with waste and cannot serve this purpose any longer during the rainy season; some outlets to the River Niger have been blocked by structures (houses and shops) exacerbating the flooding problem for people living in Onitsha South LGA (Nwokeji *et al.*, (2015). The UN-Habitat (2012) associates the problem of flooding and erosion with blocked drainage channels.

### On Energy

#### **Aba and Onitsha:**

The problem of electricity generation, transmission and distribution affects the entire Nigerian space and has so been for decades. Reforms are in progress to redress the issue through the policy on Independent Power Projects (IPP). In the case of Aba, the arrangement is for an Independent Power producer to build a dedicated power plant which would supply all its energy needs. Yes, this is a sign of government response, but it is coming after many years of neglect. This intervention is not yet functional, although it is near fruition.

### On Pollution

#### **Aba and Onitsha:**

Both cities are affected by poor zoning controls as a result of which air and noise pollution levels are high, but the energy problem exacerbates the situation. The situation is so bad that WHO ranks Aba and Onitsha respectively as the 6th most polluted and the most

polluted cities in the world by air quality (World Economic Forum, 2016). The assessment is based on the level of PM10 particles in the atmosphere which, in the case of Onitsha, amounts to about 30 times the WHO-recommended levels. Contributory factors to pollution in these cities and Nigeria as a whole are a reliance on using fuel wood for cooking, the burning of waste and traffic pollution from second-hand vehicles imported from the West after having seen their best years.

Three other factors serve to worsen the situation. First, due to unreliable electricity supply, there is a reliance on generators, which spew out noxious fumes, often in unventilated areas. Second, petrol-filling stations and industrial activities are often located in residential areas. Third, industrial activities in these two cities are poorly regulated considering that many such industries (such as textiles, rubber and plastics) are not using the most modern technology leading to a high level of emissions. A further important factor is the absence of greenery in Onitsha which denies the city residents the benefits of the eco-system services of trees and vegetation. The driving force of commerce places a premium on the commercial use of land and a disregard for seemingly idle land which all vegetated land space would appear to be to the uninformed. The World Bank (2015) reports that 94% of the Nigeria's population is exposed to air pollution levels that exceed WHO guidelines compared to 72% on average in Sub-Saharan Africa in general.

### On Roads

**Aba:** Poor road conditions have been a major problem which still persists in spite of repairs to some key roads (Offoaro, 2012).

**Onitsha:** Major roads have improved in the last eight years, but many inner city roads remain undone. UN-Habitat (2012) confirms that many roads are impassable. Also, the inadequacy of parking space means that motorists are left to park on the roads. There is a lack of street footbridges, road signs and lane markings. The roads tend not to be wide enough due to the encroachment by the stalls and activities of traders.

It is a fact that in both cities the interventions tend to come more from the respective state governments than local governments whereas it is the latter which should be in charge of city administration. This anomaly reflects the quality, capacity and functionality of municipal governance in these two systems.

### On Sanitation/Waste

Common to both cities due to their identical industrial-commercial functions is that solid waste is generated from domestic, commercial, industrial and many other activities, but disposal is unplanned, unco-ordinated, poor, and therefore, inadequate. The visibility of heaps of waste at various locations is indicative of an enduring problem which has defied solution so far.

**Aba:** Offoaro (2012) captured the situation by the reference to "the stinking streets".

**Onitsha:** Refuse is dumped and burned in open

spaces in the absence of an ideal sanitary landfill or dump sites. Effective and co-ordinated arrangements for waste collection in a segregated form have tended to be lacking” (Emelumadu, Azubuike et al., 2016). According to Obi (2009), poor planning over the years is responsible for the chaotic situation resulting from the combination of uncontrolled street trading, waste generation and poor sanitation to create a deteriorated road network.

Having established the nature and extent of the environmental challenges of the cities, the main issue of what these challenges signify in terms of the presence or absence of governance is approached. This is presented in Table 3. The approach is to list out each environmental problem and categorise it as to the level of severity at the time of inspection.

- (1) **Presence:** indicates that there is an effective presence of governance in the affairs of the city.
- (2) **Absence:** indicates that governance is not effectively present in the affairs of the city.
- (3) **Partial Presence** (which also stands for Partial Absence) indicates that the impact of governance is weakly felt in the affairs of the city.

The nine (9) classifications of urban problems are considered. Each category is described as it exists in the environment and then given an assessment which is classified overall into three categories: Presence, Absence and Partial Presence and Absence of Governance. The verdict on Aba is :Presence: Nil; Partial Presence/Partial Absence:2;Absent:7. For Onitsha, the verdict is: Presence: Nil; Partial Presence/Partial Absence:3;Absence:6. The overall verdict for both cities is that government has been more absent than present in their affairs over the past 30 years. This fact accounts mainly for the decline in the environmental conditions of the cities.

In effect, government absence has been double-pronged in the following ways. First, the failure to regulate the environment has led to illegal development, urban expansion in the wrong areas, zoning infractions especially in the location of pollution-causing land uses, contravention of building regulations, dumping and wrong disposal of waste, blocked drains, building without approval, unapproved building conversions amongst others. Second, lack of urban services and funding create a situation in which local government exists in name but remains absent in function.

Table 3: Environment and Governance: Government Presence and Absence

Issue	ABA	ONITSHA		
	Evidence	Interpretation	Evidence	Interpretation
Cityscape	Ineffective zoning/ many demolitions	Absence	Poor zoning	Absence
Drainage	Usually blocked with debris	Absence	Channels usually blocked	Absence
Energy	Not steady/Load Shedding policy	Partial P/A	Not Steady/Load Shedding policy	Partial P/A
Flooding	An ever-present threat during rains	Absence	Regular in rainy season	Absence
Pollution	World’s 6th most polluted city	Absence	World’s most polluted city	Absence
Roads	Some recently improved, many unpaved	Partial P/A	Many in poor condition for years	Absence
Sanitation/Waste	Unsatisfactory refuse collection & disposal	Partial P/A	Poor refuse collection/disposal	Partial P/A
Transportation	Absence of mass transit system; congestion	Absence	No mass transit	Absence
Water	Long moribund water works	Absence	No public water supply	Absence

Source: Field Study (2017)

From this study, the following findings have arisen:

- (1) It is not strictly correct that Nigeria’s cities, including Aba and Onitsha, have developed without regard to planning legislation because there was good planning and management under colonial rule and up to the civil war period.
- (2) It is correct to claim that there has been more of an absence than presence of government in these two cities. The identified problems have persisted for over 30 years without any significant intervention by either the state or local governments.
- (3) The environmental problems of the two cities are identical in nature and require identical solutions.

The discussion now considers the findings above-mentioned.

**Urban Governance**

Taking a cue from the UNDP Internet Conference Forum (2015) which defines governance as “the exercise of political, economic and administrative authority in the management of a country’s affairs at all levels”, urban governance may be seen as the exercise of such authority over the urban environment. Aba and Onitsha attained the status of townships under British colonialism and were governed by town councils. The functions of the councils covered civic issues such as public health, building control,

registration of births and deaths and burial of the dead amongst others as were set out under the Township Ordinances. Orderly physical development and sanitation were under council control and councils were able to use the revenue raised from levies to discharge their duties. Indeed, the towns of Onitsha and Aba were very commercially important to the British. Even though Onitsha was not linked by railway to the ports, it was accessible by river navigation up to Baro in the North. This was important to the British for the transportation of raw materials down to the coast for export. Aba, on the other hand, was linked by railway from the North to Port Harcourt. The importance of these towns was reflected in the environmental planning attention given to them by the British. Evidence of this exists in Aba in the grid iron lay out of its road network which, to this day, bears British names such as Tennant, Cameron and Pound. Regarding Onitsha, Uchegbu (2019) asserts that it was once a well-planned city with green areas and public utilities, properly designated markets and uncongested streets. Then it hosted the offices and warehouses of colonial era merchants such as the United African Company, G.B. Ollivant John Holt and Paterson Zochonis, just the same as Aba Town.

This urban governance system continued after independence, but changes, both local and national, were to come with advent of the military in 1966 bringing about the displacement of federalism for unitarism; regionalism for the state system; and the dissolution of all local administrations. After the distractions of the crises and war years of 1966-70 a major effort was made to address issues of local administration and urban governance through the introduction of the 1976 local government reform.

Local government reform had implications for urban governance because it resulted in towns previously run by councils coming under the control of local governments whose jurisdictions was often not as wide as those of the displaced councils. Councils were to be run under by councillors led by a chairman. The number of councils in the country was last increased in 1988 from 453 units to the present level of 774 units under the 1999 constitution. In the case of Aba, Onitsha and other urban centres hitherto managed as single entities by either town or city councils, multiple jurisdictions were created, resulting in a fragmentation of authority. Town and city councils were superseded by local government councils. Aba and Onitsha each transformed from having one administrative authority to having two. Ordinarily, this development should enhance governance and was probably its intended purpose. However, the new system, having created multiple authorities, failed to ensure their adequate funding in spite of reform legislations in 1989, 1991 and 1992 aimed at empowering the system through funding and operational authority for performance. It cannot be gainsaid that the colonially-established system of

single councils for each town or city had the potential for more effective environmental governance because the jurisdictional units were clear and there was no risk of overlaps.

### **Impact of Urban Governance**

According to Agbodike et al. (2014), the numerous reforms in local administration have not delivered improved services and supported sustainable development at the local level. A range of factors have been adduced for this outcome such as corruption, the lack of autonomy, leadership, unskilled workers, inefficiency, accountability (Shamsuddin and Siddiq (2014); Agbodike et al. (2014); Ebohon et al. (2011).

Research findings seem to tally with public impressions that the local government system has been ineffective in spite of all the reforms of the 1980s and 1990s. The feeling is that urban governance has suffered, still suffers, and will continue to suffer, under the present system in the absence of a solution to the challenges of service delivery and funding.

### **Systemic Constraints to Effective Urban Governance**

There are real constraints which make difficult the achievement of effective urban governance and these relate to capacity, political and work culture and the administrative structure of the Nigerian system.

First, there is the problem of incapacitation and poor performance of Nigeria's local government system as a whole (Agbodike et al.; Ebohon et al.). It has tended to be unaccountable to the people, misapplied project funds and produced hardly any positive impact on local welfare. Local governments are not financially accountable (Human Rights Watch, 2007). Additionally, local government work is poorly regarded, has low prospects of job satisfaction and lacks incentives. Thus, local government secretariats tend to be staffed by people of low qualifications who are poorly motivated and highly challenged to deliver service. The combined effect of internal corruption, waste, unimaginative leadership, low internal revenue generation, the pilfering of their federally-allocated funds by state governments through whom remittance is monthly made is that local governments tend to be cash-strapped and habitually unable to pay staff salaries or deliver service effectively.

State governments are perceived as not being adequately supportive of grassroots development of local governance. States are accused of using the system and its resources for political patronage; failing to give financial support and effective supervision; having a preference for appointing pliable persons as caretaker chairmen rather than allowing chairmen to emerge through regular balloting. The effect is to deny this government tier the opportunity of building the capacity to deliver governance. According to Maja-Pearce (2014) local administration is seriously handicapped by a systemic inefficiency and corruption whereby it is financially tied to the apron strings state governments.

Secondly, there is a tendency for the urban functions of local governments to overlap with those of their state governments, creating a situation in which urban laws exist, but neither party ensures implementation on a continuous and consistent basis. This serves to create a governance absence in urban areas. The situation is not helped by the practice of setting up state to deal with responsibilities such as waste, parks, sanitation and building control which belong to local governments. In the case of building approval and control, the states benefit from income derived from levies to the detriment of local governments.

Third, the conditions of service and quality of personnel in local administration have to be improved. Currently, the country-wide trend is that local administrative offices (both chairmen and councilors) are manned by cronies of state governors, political godfathers and party stalwarts who neither have an interest in a career at that level nor appreciate the essence of local administration.

Fourth, there is a general problem of service delivery in the Nigerian public service at the federal, state and local government levels (Igbuzor, 2015; Asiodu, 2012). The former asserts that there is an identified pattern of decline in public service quality which is probably worse at the sub-national levels (state and local government). The latter attributes the poor state of the service to political interference originating from the 1975 civil service staff purge by the military government, leading to the destruction of: “the professional, non-partisan, fearless, prestigious, merit-driven Civil Service and Public Service inherited from the British Colonial Administration. In

the process, the nation lost a great deal of institutional memory and valuable international connections”. Igbuzor (2015) believes that the public service needs to reform its processes of planning, policy making, budgeting, human resource management and performance management. Coincidentally, the constraining issues here mentioned number among the eight weaknesses identified by UN-Habitat (2012) in a Strengths, Weaknesses, Opportunities and Threats (SWOTs) analysis of Onitsha.

## CONCLUSION

This study first of all introduced botnets with particular emphasis on Peer-to-Peer botnets. The work then provided survey on the propagation mechanisms used by the botnet malware. The study equally introduced survey on botnet detection approaches and detection evasive techniques found in literature. This research emphasized that unlike other categories of malware, botnets use Command and Control Server to launch and propagate their attacks and therefore requires adaptable detection approaches. For us to achieve adaptive security models against botnet malware, the suggestion of Zhou, Kantarcioglu and Thuraisingnam (2016) which claimed that for all machine learning models that deal with an active adversary, it is important to actively understand the adversary’s attack strategy. That is, the learning models for the detection of botnets have to be adaptive intelligently so as to identify the various detection evasion strategies being used by new variant of botnets. It is believed that identifying such moves will enable security researchers and experts to come up with improved identification and mitigation schemes.

## REFERENCES

- Agbodike, F.C., Igbokwe-Ibeto, C.J., Nkah, B.C. (2014). Local government administration and challenges of sustainable development in Nigeria. *Review of Public Administration and Management* 3 (6) 95-105.
- Agboola T. and Agboola, (1997). The development of urban and regional planning legislation and their impact on the morphology of Nigeria’s cities. *The Nigerian J. of Economic and Social Studies* 39(1)123-144.
- Akintoye, O.A. A., Digha, O.N., Uzochukwu, D.C, D.C., Harrison, U.E.(2015). The consequences of flood on occupational trips duration and flood risk assessment of Aba north local government area of Abia State Nigeria. *Journal of Environment and Earth Science* 5 (11)153-165.
- Aluko, O. (2011). Functionality of planning authorities in effecting urban and regional planning laws and control in Nigeria-the case of Lagos State. *African Research Review* 5(6) 156-171.
- Asiodu, P. (2012). The public service and the transformation agenda: redefining the rules of engagement. *Mohammed Lawal Uwais Public Service Lecture Nigerian Institute of Advanced Legal Studies*. Retrieved from <http://www.nials-nigeria.org/>.
- Chigbu, N., J.I., Orisakwe, J.U. (2011). Analysis of land use and land cover changes of Aba urban. [www.fig.net](http://www.fig.net).
- Ebohon, S.I., Osemwota, O., Agbebaku, P. (2011). Autonomy and local capacity: an analysis of the performance profile of Edo state local government councils (June 1999 to December 2006). *The Social Sciences*. 6(3)235-240
- Emelumadu, O.F., Azubuike, O.C., Nnebue, C.C., Azubike, N.F., Sidney Nnebue, Q.N. (2016). Practice pattern and challenges of solid waste management in Onitsha metropolis, Nigeria. *American J. of Public Health Research*. 4(1)16-22 DOI: 10.12691/ajphr-4-1-3.
- Eso, H. (2012). Onitsha and the looming land ownership crisis. *Kwenu.com*. February 19 Available at: [www.kwenu.com](http://www.kwenu.com). (Accessed 24 July, 2016).

- Ezeomodo, I., Igbokwe, J.I.(2013).Mapping and analysis of land use and land cover changes. [www.fig.net/.../TS03B\\_ezeomodo](http://www.fig.net/.../TS03B_ezeomodo).
- Healthy Parks Healthy People (2015).Urban planning and the importance of green space in cities to human and environmental health. Available at: [www.hphpcentral.com](http://www.hphpcentral.com)(Accessed 19 September,2017).
- Human Rights Watch (2007). Chop fine: the human rights impact of local government corruption and mismanagement in Rivers State, Nigeria, Eldis. 19 (2 a).
- Igbuzor, O. (2015). Public service quality, Administration reform, *The Guardian*, March 22. (Accessed 28 September, 2015).
- Izueke, E.M.C. and Eme, O.I. (2013). Urban planning problems in Nigeria: a case study of Onitsha metropolis. *Singaporean J. of Business, Economics and Management Studies*.1(12)41-59. [www.singaporeanjbem.com/pdfs/SG](http://www.singaporeanjbem.com/pdfs/SG)
- Ikejiofor, U.C. (2009).Planning within the context of informality: issues and trends in land delivery in Enugu, Nigeria. Case study prepared for revisiting urban planning: Global Report on Human Settlements 2009.1-22 Available from <http://www.unhabitat.org/grhs/2009>.(Accessed 2 February, 2017).
- Lohmann, K.B. (2006).Principles of City Planning. New York: McGraw Hill
- Maja-Pearce, A. (2014). In Nigeria, politics isn't local. *The New York Times*,March 9 .Available at: [www.newyorktimes.com](http://www.newyorktimes.com) (Accessed 24 March, 2016)
- Michael, C. (2016). Lagos shows how a city can recover from a deep, deep pit. *The Guardian*, 26 February. Available at: [www.the-guardian.com](http://www.the-guardian.com).(Accessed 17 December,2017)
- National Population Commission (2006). Available at: [www.npc.gov.ng](http://www.npc.gov.ng)
- NESREA (2016). About Nesrea. National Environmental Standards and Regulations Enforcement Agency (NESREA). Available at: <http://www.nesrea.gov.ng/about/index.php>(Accessed 17 May, 2016)
- Nwogu, M. (2016).Abia government tackles perennial flooding in Aba. *Leadership*, March19. Available at: [www.leadership.ng](http://www.leadership.ng)(Accessed 18 May, 2017)
- Nwokeji, P. A., Obarisiagbon, O., Akatah, H.A., Enodiana, O.I. 2015).The role of environmental impact assessment in environmental sustainability of Onitsha metropolis in Anambra State, Nigeria. *International J. of Technology Enhancements and Emerging Engineering Research*.3 (11)109-114.
- Obi, P. (2009). Onitsha on global stage. *The Nigerian Voice*, October 19, 2010. Available at: [www.thenigerianvoice.com](http://www.thenigerianvoice.com). (Accessed 24 July, 2016).
- Offoaro. G. (2012).Ojukwu's bumpy ride to Aba. *NBF News*.February27.Available at: [www.nigerianbestforum.com/blog/ojukwu](http://www.nigerianbestforum.com/blog/ojukwu).(Accessed 19 March, 2017)
- Omuta, G.E.D. (1988). Environmental planning, administration and management in Nigerian cities: the example of Benin City, Bendel State. *Public Administration and Development*.Vol.8 No.1 pp1-14.
- Population. City (2016).What is the Population of Aba? Available at:<http://population.city/nigeria/onitsha>. (Accessed 31 August, 2016).
- Population. City, (2016).What is the population of Onitsha? Available at:<http://population.city/nigeria/onitsha>.(Accessed 31 August,2016).
- Shamsuddin, B. and Siddiq, B.I. (2014).Challenges of local government administration in Nigeria: an appraisal of Nigerian experience. *International J. of Science and Research*.3 (7) 562-568.
- Uchegbu, A.C. (2019).Onitsha and Aba: The beauty of leadership failure. *The Sun*.24th October. Available at [www.sunnewsonline.com](http://www.sunnewsonline.com)( accessed 17 May,2020)
- UNDP Internet Conference Forum (2015). Public Private Interface in Urban Environmental Management"
- UN-Habitat (2012).Nigeria: Onitsha urban profile. United Nations Human Settlements Programme, Nairobi, Kenya.[www.unhabitat.org/publications](http://www.unhabitat.org/publications)
- Vuvuzela News (2015).Onitsha: Reclamation of a lost paradise. January 4th.Available at: [www.vuvuzelanews.com](http://www.vuvuzelanews.com)
- ikipedia (2016) Aba, Abia. waste management. <https://en.wikipedia.org/wik>.
- World Bank (2015).A plea for action against pollution in Nigeria. [www.worldbank.org](http://www.worldbank.org)
- World Economic Forum (2016).Which are the world's most polluted cities? <https://www.weforum.org/>
- World Health Organisation (2016).Urban ambient air pollution database 2016 Update