# Manuscript Type: Original Article

**Title of Manuscript**: An analysis of urban policies and strategies on health and nutrition in Nigeria

# Authors' name and affiliation:

Obinna Onwujekwe<sup>1,5</sup>

Email: obinna.onwujekwe@unn.edu.ng

Prince Agwu<sup>1,2</sup> (*Corresponding author*) Email: <u>prince.agwu@unn.edu.ng</u> Phone no: +2347034437569

Julianna Onuh<sup>1,7</sup>

Email: juliana.onuh@unn.edu.ng

Benjamin Uzochukwu<sup>1,6</sup>

Email: <u>bscuzochukwu@gmail.com</u>

Chukwuedozie Ajaero<sup>1,7,9</sup>

Email: chukwuedozie.ajaero@unn.edu.ng

Chinyere Mbachu<sup>1,6</sup>

Email: chinyere.mbachu@unn.edu.ng

Charles T. Orjiakor<sup>1,4</sup> Email: <u>tochukwu.orjiakor@unn.edu.ng</u>

Aloysius Odii<sup>1,3</sup> Email: <u>aloysius.odii@unn.edu.ng</u> Tolib Mirzoev<sup>8</sup>

Email: tolib@mirzoev@lshtm.ac.uk

<sup>1</sup>Health Policy Research Group, College of Medicine, University of Nigeria Enugu Campus, Enugu, Nigeria

<sup>2</sup>Department of Social Work, University of Nigeria, Nsukka, Nigeria

<sup>3</sup>Department of Sociology and Anthropology, University of Nigeria, Nsukka, Nigeria

<sup>4</sup>Department of Psychology, University of Nigeria, Nsukka, Nigeria

<sup>5</sup>Department of Health Administration and Management, College of Medicine, University of Nigeria Enugu Campus, Enugu, Nigeria

<sup>6</sup>Department of Community Medicine, College of Medicine, University of Nigeria, Enugu Campus, Enugu, Nigeria

<sup>7</sup>Department of Geography, University of Nigeria, Nsukka, Nigeria

<sup>8</sup>Department of Global Health and Development, London School of Hygiene and Tropical Medicine, London, UK

<sup>9</sup>Demography and Population Studies Programme, Schools of Public Health and Social Sciences, University of Witwatersrand, Johannesburg, South Africa

# Acknowledgement

The research reported in this paper was supported by the Research England through the QR GCRF, grant number 95598105. The views are of the authors only.

#### An analysis of urban policies and strategies on health and nutrition in Nigeria

#### Abstract

Urban policies on health and nutrition among fast-rising urban populations as experienced in Nigeria are much in need. To underscore the reality of such need, we conducted a review of selected urban health and nutrition policies and strategies. We used an appropriate framework by Bandauko et al (2020) for an objective assessment. Our review discovered neglect of urban health in Nigeria, evidence by a lack of urban health-focused policies. On urban nutrition, policies and strategies are rather aimed at enhancing the political-economy of a few, than improving nutritional levels of the people. Overall, the policies were barely effective owing to how they are developed, implemented and evaluated.

Keywords: Urban development, health, food and nutrition, sustainability, social inclusion

#### Introduction

As the population in urban centres increases, residents are inevitably forced to compete for resources, such as health and nutrition or adopt survival lifestyles and living arrangements that negate good health. Rapidly growing urban populations in low- and middle-income countries (LMICs) are threatened by insufficient health and nutrition resources (Farrell, 2018). In Nigeria, urban spaces are facing a lot pressure which will likely worsen in the coming years as the urban population will keep increasing. Therefore, it is important to weigh how conscious Nigerian policymakers are about this reality, represented by how they have reflected urban needs in policy documents.

Urban health as a concept recognizes the difficulties and inequities in health and nutrition that could be caused by urban population increase and seeks to address them through committed policies and programs (Ramirez-Rubio et al, 2019). Health and nutrition are key developmental resources that are in high demand. The competition for health and nutrition resources in rapidly urbanizing areas can be managed by effective and sustainable urban-focused policies and strategies (Tripathi & Mahey, 2017). Over 50% of the world's population reside in urban areas, and there are projections of the figures reaching 70% in 2050 and 100% in 2092 (Freire et al, 2016; Wu et al, 2014; UN Habitat, 2014). UN Habitat (2015) advocates for the formulation and implementation of urban policies to achieve sustainable urban development through equitable access to vital resources such as quality healthcare and nutrition.

In Nigeria, there are more than 10 urban locations having populations of over one million (Ajaero & Madu, 2013; Farrell, 2018). With the current urban population growth rate in Nigeria at 4.3% (The World Bank, 2019), there is much need to improve equitable access to health and nutrition resources. The United Nations (2014) has predicted that by 2050, Nigeria will witness an additional 226m to its urban population. Realizing the implications of this prediction, the country's national urban development policy was revised in 2019 (Essen, 2019), yet its implementation has been a source of worry (Bandauko, Annan-Aggrey & Arku, 2020). Questions about Nigeria's clarity and plan for the sustainability of its urban development agenda have dominated literature (Olajide et al., 2018; Plecher, 2020; Rosemond, 2019). Even though questions around the country's effort in urban health and nutrition are barely asked.

Current indices on the state of health and nutrition in Nigeria are not impressive. Aregbeshola et al (2017) discuss high out-of-pocket payments for health services in urban areas. This is further compounded by a proliferation of the normatively expensive private health facilities in Nigeria's urban centres (Adewoyin, Chukwu & Sanni, 2018).

Nigeria is listed as among the countries with high diet-related non-communicable diseases, with urbanization implicated as a causative factor (United States Agency for International Development [USAID], 2018). United Nations Children's Fund [UNICEF] (2017) reports high rate of malnourishment and undernutrition among children in Nigeria, which is one of the highest on the globe. Poor dietary diversity has also been identified among urban low-income households in Nigeria (Obayelu & Osho, 2020).

Owing to the paucity of information on the state of health and nutrition in urban areas of Nigeria, our study provided answers to the following questions: (a) How progressive is urban health and nutrition in Nigeria amidst relevant policies and programs? (b) What advances or militates against the progress of urban health and nutrition in Nigeria? (c) What lessons exist so far within the spaces of urban health and nutrition in Nigeria?

#### Methodology

We conducted a desk review of policy documents, plans and strategies in Nigeria with urban health and nutrition in focus. We targeted specific documents published from 1999-2020. They were written in English language. To ascertain if documents aligned with the scope of this review and selection criteria, we were careful to scan through the documents by reading abstracts, foreword, preface, or executive summary where necessary, or the first two paragraphs of the article's body and conclusion. All members of the team participated in the search and the screening process, which provided rigour and made the search exhaustive.

Search terms were keyed into several search engines that include Google, Google Scholar, Directory of Open Access Journals, ScienceDirect, Scopus, Web of Science, Hinari and PubMed. We also searched the websites of relevant agencies such as the African Development Bank (AfDB), Federal Ministry of Health (FMoH), Federal Ministry of Agriculture and Rural Development (FMARD), Niger Delta Development Commission (NDDC), to mention but a few. A total of 16 policies and strategies met the inclusion criteria and were reviewed in line with qualitative content analysis while adopting a framework by Bandauko et al (2020). See Appendix 1 for the list of search terms we applied to arrive at 16 policy documents that we reviewed. Figure 1 shows the schematic process we followed in identifying and reviewing the documents.



Figure 1: Flow chart showing detailed steps for extraction and evaluation of policy documents

## **Conceptual framework**

Bandauko et al (2020) in their evaluative study of national urban policies across 8 African countries provided insights into what should be considered while appraising urban policies and strategies. This is because they believe that in most of Africa the gap between policy and practice is often too wide, consequent on several policy irregularities even from the designing stage. The authors stated vital criteria that should be present before any urban policy is considered to be good. They believed that good urban policies should reflect the actual needs of the population, be realistic to fund, involve a committed group of implementers, and should integrate the grassroots from the formulation to evaluation stages. Other criteria mentioned by Bandauko et al. include a detailed action plan that must be available to the public to deepen accountability, less reliance on external financing, strong institutional reforms, involvement of local actors, and blend of high-level policy expressions with impact (see Figure 2). Thus, in this study, we checked for the presence of these criteria across the reviewed policies and strategies to determine their effectiveness in scaling up urban health and nutrition in Nigeria. A thematic presentation of each of the policies and how they connect with the conceptual framework is presented in Table 4.



Figure 2: Composition of a good urban policy adapted from Bandauko et al (2020)

## Results

Our search produced 31 documents, of which 16 (12 nutrition-related and 4 health-related) met our scope and selection criteria. We had more policies and programs under the nutrition category which could be because of the strong relationship nutrition shares with agriculture – a strong investment priority for oil-dependent countries hoping to diversify their economies. Policies with close interests in agriculture were merged. Table 1 and 2 categorizes the policies and strategies as reviewed, while Table 3 provides a summary of each policy and the lessons to learn. Subsequent discussions assess the contributions of the reviewed policies and strategies to the improvement of urban health and nutrition in Nigeria.

S/N	Healthcare
1	National Integrated Infrastructure Master Plan [NIIMP] (2012)
2	Nigerian Urban Reproductive Health Initiative [NURHI] (2009 & 2015)
3	National Road Map for Making Nigeria Open-Defecation Free [ODF] (2016)
4	National Health ICT Strategic Framework (2014)

#### Table 2: Reviewed policies and strategies on nutrition

S/N	Nutrition
1	National Policy on Food and Nutrition [NPFN] (2016)
2	National Plan of Action on Food and Nutrition [NPAFN] (2005)
3	Zero Hunger Nigeria Strategy [NZHSP] (2017)
4	National Home-Grown School Feeding Program [NHGSFP] (2016)
5	Joint Rapid Response Mechanism to supply food, nutrition, and health in the North East [RRM] (2016)
6	Gender and Markets Initiative (2017)

7	Agricultural Transformation Agenda [ATA] (2011)
8	Agricultural Transformation Agenda Support Program [ATASP] (2013)
9	Agriculture Promotion Policy [APP] (2016)
10	Livelihood Improvement Family Enterprise [LIFE] (2016)
11	Special Agro-Industrial Processing Zones [SAPZ] (2020)
12	Nigeria Rural Access and Mobility Project [NRAMP] (2018)

## Healthcare

## 1. National Integrated Infrastructure Master Plan (NIIMP - 2012)

NIIMP targets an increase in access to primary healthcare services from 33% in 2013 to 61% in 2023; build 40 primary healthcare centres per LGA as against the current 28; ensure 2 general hospitals per state; increase hospital beds per 100,000 people from 53 to 200 in 2023 and 450 in 2043, and to ensure financial access to health services through an inclusive health insurance scheme (National Planning Commission [NPC], 2015). The plan is part of the response to increasing urbanization in Nigeria. It was developed by the NPC which commenced work on the plan in 2012. It aims to close up infrastructure gaps by 2045 in some identified critical areas that include health.

There are several questions about the success of this policy. First, it was not until 2017 that the Federal Government constituted a technical group to follow up the plan with an operational model (Onuba, 2017). This means that the plan should have lost some 2 to 3 years from its inauguration. Also, the COVID-19 pandemic seems to have stretched health systems including those of high-income countries. However, it is widely acknowledged that the pandemic met weak and unready health system in Nigeria grossly lacking infrastructure and human resources (allAfrica, 2020; Dixit

et al, 2020; Ebenso & Otu, 2020), as well as corruption and accountability problems (Onwujekwe et al, 2020). More worrisome was that the pandemic in Nigeria sits strongly in the country's urban areas known to have been in dearth of health resources (Assessment Capacities Network [ACAPS], 2020). Moreover, there is the absence of working documents and media reports regarding the progress of the plan, which is suggestive of abandonment or poor communication about it.

## 2. Nigeria Urban Reproductive Health Initiative (NURHI – 2009 & 2015)

NURHI was introduced to tackle supply and demand barriers to contraceptive use in Nigeria, and to encourage family planning. The project consists of two phases: the first phase was scheduled to run from 2009-2014 in six cities (Ibadan, Abuja, Ilorin, Kaduna, Benin, and Zaria) while the second was scheduled to run from 2015-2020 in three states (Kaduna, Lagos and Oyo States). Contraceptives have both economic and health significance, and they play important roles in urban sustainability, especially concerning the management of population growth (Agarwal, 2020). Poor uptake of family planning was disclosed in Mohammed et al (2020) as a leading cause of maternal deaths resulting from multipara and grand-multipara cases. Interestingly, Nigeria expects to achieve 27% Contraceptives Prevalence Rate (CPR) by 2020 (Family Planning Goal, 2020) and should be relying on the gains of NURHI, even though the programme is expected to end in 2020.

One recorded success of the program is that there are reports about the decline in Nigerian women who don't utilize family planning services, especially the use of contraceptives (Austin, 2015; NPC & ICF, 2014). The community-oriented nature of NURHI and the strategic combination of economic benefits and advocacy enhanced the success of the program. It is reported that NURHI devised a means of participatory implementation involving community members who championed the campaigns of CPR (NURHI, 2011).

Notwithstanding the gains, NURHI appeared to have faced some challenges, particularly from religion (Mohammed et al, 2020). The program also did not effectively capture the reformation of the attitudes of health workers, as some of them were caught selling NURHI-supplied contraceptives which otherwise should be free (The Challenge Initiative [TCI], 2020).

## 3. National Road Map for Making Nigeria Open-Defecation Free (ODF - 2016)

ODF envisages building toilet facilities in public places, intensify community-led total sanitation (CLTS) program, hand out ODF certificates to local governments that have successfully combated open-defecation and build partnerships with the organized private sector and international agencies (Federal Ministry of Water Resources, 2019). Around 46 million people defecate openly in Nigeria, and many are from urban informal settlements. The figure is estimated to hit 56 million by 2025 (Federal Ministry of Water Resources, 2019). Nigeria proposes to get rid of open defecation by 2025 through its Federal Ministry of Water Resources, with the timelines – preparedness and period of transition (2016-2017); assessment (2018); consolidation and moving forward (2019-2021), self-assessment (2022) and final assault (2023-2025).

There are complaints from the Minister of Water Resources who decried poor implementation of the roadmap, as only 14 of 774 LGAs had gotten certified as ODF free (Tyessi, 2019). Currently, Nigeria only delivers about 100,000 toilets each year as against the set objective of 2 million to meet the 2025 ODF target (Adepoju, 2019). It is reported that as of 2019, state governments were yet to key into the plan, as they all had their peculiar policy priorities which barely included putting a stop to open defection (Premium Times, 2019).

#### 4. National Health ICT Strategic Framework (2014)

Health ICT Strategic Framework is among the visions put together to help Nigeria attain Universal Health Coverage by taking advantage of the advancement in information and communication technology (ICT). The strategy targets to strengthen the delivery of health services and the Nigerian health system generally. Its development could be traced to 2014/2015. It hopes to improve the accessibility of urban health services for a fast-growing urban population. The framework provides a template for investment in technology within the national health system and the digitalization of health services by 2020 (Owobu, 2017; WHO, 2016).

Notwithstanding this policy, Nigeria experienced many difficulties in maintaining health services communication during coronavirus-induced lockdown across the urban centres, as many persons were deprived of healthcare (Adeboyejo, 2020). In December 2019, the health minister lamented the absence of a strong ICT presence in Nigeria's healthcare (Vanguard, 2019). A strong pointer to the failure of this policy is the high reliance on out-of-pocket payments for health services in Nigeria, with a recent value of 77.22% (The World Bank, 2020). What this means is that Nigeria is yet to apply the gains of ICT to its payment mechanism for health services, inclusive of urban centres.

## Nutrition

## 1. National Policy on Food and Nutrition (NPFN - 2002)

In 2016, Nigeria reviewed its 2002 National Policy on Food and Nutrition to address malnutrition, extreme hunger and achieve optimal nutritional status for Nigerians by 2025. The policy places emphasis on the nutritional levels of vulnerable groups such as the urban poor (Ministry of Budget and National Planning, 2016). It is as well decentralized across the federal, state, and local government levels and coordinated by the Ministry of Budget and National Planning.

Despite the NPFN, the National Nutrition and Health Survey (NNHS, 2018) reveals that Nigeria is still stagnant with regards to child and adult nutrition, with many indicators being worse than global rates. The National Population Commission (2013) in the Nigeria Demographic and Health Survey [NDHS] reveal high levels of stunted growth and gross deficiencies in micronutrients, with children, women and the elderly severely affected. Present realities in Nigeria reveal sporadic inflation of prices of food items, currently at 16% (Trading Economics, 2020). Double inflation figures of food prices have gone on for more than three years since 2016 when the NPFN was revised. The implication of this is that food availability remains a priority challenge against food nutritional levels. Policymakers in Nigeria acknowledge the high rising food crisis in the country, especially in the urban areas where there are limited opportunities to indulge in subsistent farming at least (Udo, 2020). NNHS (2018) reveals the north and south contrast in nutrition indices, with the north being worse off and requiring more intervention.

## 2. National Plan of Action on Food and Nutrition (NPAFN - 2005)

Following the NPFN in 2002, the NPAFN was produced in 2005 to provide the propeller for the achievement of NPFN. NPAFN just like NPFN recognized the problems of hunger and nutrition in Nigeria. The action plan rested on the goals of NPFN, as it introduced no new goal, but actionable solutions that will enable Nigerians to benefit from the NPFN, some of which include reducing poverty, hunger levels and diet-related non-communicable diseases. The plan indicates that progress in nutritional levels of Nigerians should begin to manifest from 2 to 10 years after its formation (WHO, 2005). As at the time of this review, indices of Nigeria in terms of poverty, nutritional levels, diet-related non-communicable diseases, and hunger, have worsened, making the NPAFN look like mere rhetoric on paper.

It was within the operation of the NPAFN that the NDHS showed disturbing figures about gross deficiencies in micronutrients consumed by Nigerians (National Population Commission [NPC], 2013). Failure of the NPFN led to its review in 2016.

On poverty, Nigeria as at the time of writing has more poor people than any other country in the world (World Poverty Clock, 2020). This is amidst double-figure inflation of food prices. Global Hunger Index (2021) ranks Nigeria 98 of 107 countries, with a score of 29.2 which indicates that hunger level is grave in the country. These statistics berate not just the NPFN and NPAFN, but the **Nigeria Zero Hunger Strategic Plan** (NZHSP) (2017-2030) whose goals are similar to those of the NPFN and NPAFN. The only exception to the NZHSP is that it emphasizes school feeding program for school pupils and the need to scale up food availability under emergencies (International Institute of Tropical Agriculture [IITA], 2017). Yet these dual areas remain deeply questioned, evidence by the inconsistencies in the current school feeding program (Food and Agriculture Organization [FAO] & World Food Program [WFP], 2018), the food crisis in the northeast (WFP, 2017), and the scramble for food palliatives in most Nigerian urban areas during COVID-induced lockdown which was an emergency (Kalu, 2020).

## 3. National Home-Grown School Feeding Program (NHGSFP - 2016)

In 2016, the administration of President Buhari commenced the use of locally grown foods by smallholder farmers to feed an estimated population of 5.5m public school pupils. The program is designed to be a combination of efforts of the Federal and State governments. The Federal Government is to feed children from Primary 1-3, while the State governments will do the same from Primary 4-6. The nutritional level of the children who attend these schools (most you can find within urban centres), is the main target of the policy, among other targets not directly

connected to nutrition (Federal Government of Nigeria, 2017). In retrospect, WFP lamented the under-nourishment of school children in Nigeria which led to the first trial of the NHGSFP in 2004, but the program failed almost immediately it started (FAO & WFP, 2018). In the second trial from 2016, state governments were asked to participate, but must do so on their volition (Federal Government of Nigeria, 2017).

There are strong concerns over the inconsistencies marring the program, with more blames being passed on state governments (FAO & WFP, 2018). An evaluative study by Spaces for Change (2018) confirmed that the NHGSFP improved attendance rate of school pupils. The study argued that education of children shares a strong connection with nutrition and hygiene. The study also showed that parents appreciated the program. However, in the same study, the quantity and diversification of the meals were questioned. Cummings and Kulutuye (2017) advocated for the intensification of the supervision of the program to facilitate the achievements of the program's objectives. These inconsistencies in part accounts for the corruption the program has been largely associated with (Amake, 2019).

# 4. Joint Rapid Response Mechanism (RRM) to supply food, nutrition and health in the North East (2016)

The rise in urban population in the northeast has compounded the food crisis in the region alongside the rate of unemployment. All these are happening at a time when food prices have consistently been on the increase. Addressing food crisis in the northeast necessitated the establishment of RRM in 2016 in Adamawa, Borno and Yobe states by the WFP in partnership with the affected state governments (WFP, 2020). Northeastern Nigeria has witnessed many conflicts of late propelled by the deadly Boko Haram terrorist group. The attacks have majorly been within the hinter areas of the region, forcing a rise in rural-urban migration since the urban areas are considered safer.

As of 2017, WFP (2020) reported that the program has impacted the lives of 1.2 million people in the three affected states. However, fears resulting from the continued onslaught of Boko Haram in the northeast, the nosediving of Nigeria's economy into recession, the impact of COVID-19, sporadic inflation of food prices, increased unemployment, hunger and poverty levels, might have eroded the gains of the RRM. This could account for the silence of the program in recent years.

Following RRM, WFP (2017) is introducing the **Gender and Markets Initiative** in Boko Haramravaged urban areas to scale up the availability of nutritious foods for cheap prices through funding unemployed women to commence food vending. The program which is yet to be implemented for undisclosed reasons is expected to improve the nutritional levels of residents in the affected areas. It also has in place a plan to protect women from associated sexual risks with food vending. Chukuezi (2010) believes that with food vending, food and nutritional crisis in urban areas can be addressed. It is hoped that the **Gender and Markets Initiative** will resurrect and sustain the gains of RRM.

#### 5. Agricultural-focused Policies (2011 – 2020)

Besides the diversification of the economy and improving employment scores in Nigeria, nutrition and achieving a hunger-free Nigeria are supposed vital propellers of government policies and programs in agriculture. From the review we did, we discovered six policies that are focused on improving agriculture to scale up nutrition in urban settlements. They include: (a) Agricultural Transformation Agenda (ATA - 2011) (b) Agricultural Transformation Agenda Support Program (ATASP - 2013) (c) Agriculture Promotion Policy (APP - 2016) (d) Livelihood Improvement Family Enterprise (LIFE - 2016) (e) Special Agro-Industrial Processing Zones (SAPZ - 2020), and (f) Nigeria Rural Access and Mobility Project (NRAMP - 2018).

ATA was established in 2011 to help achieve a hunger-free Nigeria. While the policy recorded increase in the yield of agricultural products as well as in the income and quality of life of farmers, its contributions to nutrition and achieving a hunger-free Nigeria have been poor (Meludu et al, 2017). This could be attributed to the policy's emphasis on the economy as against nutrition. One expects that the coming of ATASP in 2013 will correct the deficiencies in ATA as regards nutrition, yet ATASP sought after scaling up human resources for agriculture and improving the value chain (Alhassan et al, 2019). Both ATA and ATASP are recounted to have enhanced the agricultural value chain, as against improving nutrition and ending hunger (Felix, 2013; Alhassan et al, 2019).

In 2016, APP was introduced. The policy is to run through till 2020. APP took a different direction away from economy to nutrition by emphasizing household food and nutrition security. However, nutrition- and food-related statistics since 2016 have proven that the policy remains rhetoric on paper, with 2020 recording the worst-case scenario (Kalu, 2020; Trading Economics, 2020; Udo, 2020).

The same economic-focused model for investment in agriculture is replicated in LIFE (2016-2026) and SAPZ (2020) (International Fund for Agricultural Development [IFAD], 2017; Udegbunam, 2020). The former and the latter seek to improve agricultural value chain, while increasing the quantity of foods in targeted regions. Although the former focuses on the 774 LGAs in Nigeria with special attention given to the Niger Delta (most likely as compensation for the exploitation of the region's oil resources), while the latter focuses on brownfield areas (urban areas that lost

urban features). The Federal Ministry of Agriculture and Rural Development [FMARD] (n.d.) believes that the LIFE project has contributed 14,000,000 tons of food to the country. Yet food crisis in Nigeria persist.

A complete drift from the reviewed agricultural policies as discussed above is the NRAMP. The policy is advocating for the building of good roads to connect rural areas known for the cultivation of food items to urban centres. It is to be implemented at state levels with support from the Federal Government. It realizes that many food items grown in the rural areas tend to waste because of the lack of good road networks to bring them to the urban areas (African Development Fund, 2018). NRAMP is expected to facilitate timely distribution, prevent food wastage, and curb the addition of mark-ups to food prices resulting from the longer time food-transporting vehicles spend on the road during delivery. The NRAMP appears to be a good policy that can guarantee food availability, accessibility, and nutrition for the urban population. However, it is yet to be embraced by a good number of states in the country. In a survey conducted by the NOIPolls in 2018, 71% of Nigerians believe that Nigerian roads are unsafe, and of the 71%, 72% trace the lack of safety on Nigerian roads to bad road networks and lack of maintenance (NOIPolls, 2018). Unsafe roads make the transportation of food items difficult. This means that NRAMP is yet to live up to its objectives.

Table 3 below shows a summary of our findings to assist with a quick understanding of the policies, their aims, gains, failings, and lessons to learn.

# Table 3: Summary of policies and strategies and key lessons

S/N	Policies	Aims	Gains	Failings	Lessons
1	National Integrated Infrastructure Master Plan	To close infrastructure gaps in Nigeria's health sector by 2045	<ul> <li>Recognizes that urban centres in Nigeria do have infrastructure problems</li> </ul>	<ul> <li>The implementation of the plan kickstarted 2 years after it was formulated</li> <li>COVID-19 pandemic exposed overwhelming infrastructure problems in Nigeria's health sector</li> </ul>	Urban policies should take into consideration the timelines that were drawn when they were formulated, as a show of commitment. They must have to do what they state on paper and provide landmarks to measure their milestones. This would help improve accountability mechanisms around the policies. Overall, this policy and the way it has fared shows weak government involvement in urban health infrastructure.
2	Nigeria Urban Reproductive Health Initiative (NURHI)	To address barriers around the use of contraceptives in urban centres	<ul> <li>Improved CPR</li> <li>Decline in number of women who do not use family planning services</li> <li>Encouraged community ownership of program</li> </ul>	<ul> <li>Did not address the attitude of healthcare providers who sold NURHI- supplied contraceptives that should otherwise be free</li> </ul>	To improve the viability of policies, there is a need to encourage and intensify grassroots ownership of policies and programs, as this was instrumental to the success of NUHRI. Also, the attitudes of those that would help in the implementation phase are of essence to the success of the policies and programs. Their attitudes can be reformed through the initiation of attitudinal training and sanctions in the event of rule-breaking. It could be safe to say that the success of NUHRI could be attributed to the less involvement of the Nigerian government.
3	National Road Map for Making Nigeria Open-	To get rid of open defecation by 2025	<ul> <li>Engages government at different levels</li> <li>Conducts assessment of local governments before</li> </ul>	<ul> <li>Targets on paper appear as mere rhetoric as just 14 of 774 LGAs are certified ODF free</li> </ul>	Government must imbibe the consciousness to do as they write on paper, or work on their targets to stay within what they can achieve. While it seems that there is poor communication between the coordinating ministry of the ODF and state governments, it

S/N	Policies	Aims	Gains	Failings	Lessons
	Defecation Free (ODF)		handing in the ODF free certificate	• State governments are yet to sufficiently key into the plan which could be because ODF is not listed as a priority or that communication between the coordinating agency and the state governments tend to be weak	equally looks like public health is of less priority to the state governments.
4	National Health ICT Strategic Framework	To leverage the advantages of ICT to strengthen the delivery of health services and health system in Nigeria by 2020	<ul> <li>Somewhat digitalization of the National Health Management Information System</li> </ul>	<ul> <li>Has not improved electronic/mobile health</li> <li>Out-of-pocket payments persist with grave implications for UHC</li> </ul>	Urban health policies in Nigerian will benefit from connecting to global health goals like the UHC and also imbibe similar passion used in chasing these global health goals. Not sufficiently achieving the digitalization of Nigeria's health system in general and urban health in particular by the 2020 timeline is suggestive of weak passion around healthcare in Nigeria or the setting out of non-feasible health goals.
5	National Policy on Food and Nutrition (NPFN)	To address malnutrition, extreme hunger and achieving optimal nutritional status for Nigerians by 2025	<ul> <li>Achieves policy decentralization</li> <li>Interested in urban poor</li> </ul>	<ul> <li>NNHS and NDHS reveal poor indices in child and adult nutrition</li> <li>The policy failed to consider economic capacity in accessing nutrition which questions food availability</li> </ul>	Government should offer a holistic approach to nutrition policies by not just considering attaining lofty and ambitious goals of ending malnutrition and hunger, but pay attention to the provision of food in the first place. Again, they should be committed to stated timelines or rather be strategic with setting feasible timelines.

S/N	Policies	Aims	Gains	Failings	Lessons
6	National Plan of Action on Food and Nutrition (NPAFN) and Nigeria Zero Hunger Strategic Plan (NZHSP)	To provide actions to the achievement of the NPFN including the emphasis of the school feeding program and provision of food supplies during emergencies	<ul> <li>Both policies are offshoots of the NPFN and carry similar gains</li> </ul>	<ul> <li>They Introduce nothing new and seem duplications of the NPFN</li> </ul>	The policies appear to be unnecessary duplications of the NPFN. Given such unwarranted duplicity, one could argue that the political-economy that emanates from the formulation and driving of policies is the focus here, as against nutrition. Especially, since the indices to measure progress in nutritional and food satisfaction levels remain disappointing both in non-emergency and emergency times (e.g. COVID-19 lockdowns). Therefore, it will do the country well to provide holistic nutrition policies and give in their best to see to the realization of such policies and avoid unwarranted duplicities which signal incompetence and corruption.
7	National Home-Grown School Feeding Program (NHGSFP)	Using locally grown foods to feed 5.5m public school pupils	<ul> <li>Educated the workforce that should drive the program through a capacity building program</li> <li>Improved school attendance which is an opportunity to teach nutrition and hygiene</li> </ul>	<ul> <li>Poor quantity and diversification of meals</li> <li>Weak supervision and monitoring</li> <li>Inconsistencies marring the program in some states</li> </ul>	Educating the workforce that drives policies and programs is important. The school feeding program indicates government interest in the nutrition of children, however, that the program is dotted with inconsistencies, complaints about the quantity and diversification of meals, and corruption imply that nutritional concerns of the children do not suffice entirely as the bane of the policy. There is a need for strong communication with state governments and other implementing agencies to set the nutritional levels of the children as a priority.

S/N	Policies	Aims	Gains	Failings	Lessons
8	Joint Rapid Response Mechanism (RRM) to supply food, nutrition and health in the North East and Gender and Markets Initiative	Addressing food crisis in the northeast following years of Boko Haram insurgency	<ul> <li>1.2 million lives reported having benefitted from the program</li> <li>Considers community ownership of the program</li> </ul>	<ul> <li>Weak support from the government, especially given the multi-faced nature of the policy</li> </ul>	Crisis prone areas should benefit from the government in terms of rapid response in quelling the crisis and supportive measures to make foods available at cheaper costs for the population who are most likely to move into areas that are secured, which for the most are the urban centres.
9	Agricultural- focused policies: (a) Agricultural Transformation Agenda (ATA) (b) Agricultural Transformation Agenda Support Program (ATASP) (c) Agriculture Promotion Policy (APP) (d) Livelihood Improvement Family Enterprise	Scaling food production, sufficiency and distribution to urban centres	<ul> <li>Improved food yields and local production should reduce price of goods since importation markups will not be added to prices</li> </ul>	<ul> <li>Unwarranted duplications</li> <li>Focuses on the economy as against nutrition</li> <li>Yet to adequately address the transportation challenges that will impede food distribution</li> </ul>	The too many agricultural policies indicate unwarranted duplications and also points to the gratification of political-economy by the privileged few as against scaling up nutritional levels of the urban population. This is evidence by the emphasis on agriculture as an economic concern, and barely for nutritional purpose.

S/N F	Policies	Aims	Gains	Failings	Lessons
S I F Z F F F	(LIFE) (e) Special Agro- Industrial Processing Zones (SAPZ), and (f) Nigeria Rural Access and Mobility Project (NRAMP)				

Table 3 shows the several aims, gains, failings and important lessons on each of the policies we reviewed. On the gains, it is interesting to find the recognition of urban problems, leading to the formulation of policies and programs to address them. Also, it is exciting to see that some of the policies and programs could somewhat achieve their objectives, such as NURHI, ODF, National Health ICT Strategic Framework, NPFN, NHGSFP, etc. However, from the table, it is obvious that there were more failings than gains, which is instructive that something right is yet to be done within the frames of urban policies and development in Nigeria. Therefore, this review presents key lessons that have the potentials to scale up urban development in the country.

We identified inconsistencies between what most of the policies had on paper and what was obtainable in reality. This accentuates the possibility of these policies being crafted for political rather than development reasons (Olajide et al, 2018). Tracking the progression of the policies was also difficult because of the absence of timelines and milestones. Thus, evaluative efforts were affected, and sometimes impossible, which is never good for any policy or program.

The involvement of local actors in urban development strategies is keenly emphasized by the conceptual framework. It aims at improving ownership of development strategies in line with the bottom-top approach that places emphasis on driving development with the leadership of the grassroots (Onwujekwe et al, 2021). Our review shows a conspicuous absence of grassroots ownership, which partly is a cause of some of the failings that are listed. In contrast, NURHI is one of the programs we found great involvement of local actors which partly influenced the success of the program. It is expected that with the involvement of local actors, transparency could improve, which is an antidote to corruption within policies and programs (Onwujekwe et al, 2019). To further improve anticorruption, we discovered that effective use of sanctions and building attitudinal capacities would be helpful.

An important lesson this review brings forward is the need for effective coordination of government and its agencies within urban policy frames (Bandauko et al, 2020). Coordination is needed to do a feasibility assessment of resources and capacities before embarking on the processes of policies and programs. Such will improve communication, determination, and consideration of priorities. Also, aligning these policies and programs with global goals like the UHC provides an evaluative framework; intensifies the vision, and could inspire passion.

The unnecessary duplicities across the policies and strategies, particularly those on nutrition, are suggestive of more politics than governance, and implies a lack of focus and drive to achieve tenable goals with/within feasible resources and timelines, respectively. It also suggests the wastage of resources. Overall, urban nutrition in Nigeria yearns for the need to advocate for a holistic nutrition policy that should be pursued vigorously, as well as harmonized agricultural policies that will satisfy both nutrition and economy (Onwujekwe et al, 2021).

Sequel to the foregoing lessons from the reviewed policies, our conceptual framework provides further assessment. It was shown that the policies and strategies barely had an accountability system in place, had an opaque financing strategy, weak involvement of local actors, and poorly reformed institutions to run them. They also had non-feasible and unrealistic goals and timelines, which we believe is responsible for the many obvious failings. Poor coordination between different levels of governments and differing priorities equally made the policies and strategies not to benefit the people. Importantly, the usual top-bottom approach to policymaking in Nigeria and the use of policies and programs to enhance political-economy of elites are also responsible for the failure of the urban policies and strategies. Therefore, a combination of these shortcomings resulted in weak impacts across the policies and strategies, except for NURHI which showed contrasting results. Table 4 reveals further. Table 4: Assessing reviewed policies based on the demands of the framework as adapted from Banduko et al (2020)

Policy or strategy	Any available action plan in public domain?	Is there excess reliance on external financing?	Any strong institutional reform?	Are local actors involved?	Are high-level policy expressions linked with impacts?
National Integrated Infrastructure Master Plan (NIIMP)	Goals are ambitious and no clear action plan in public domain making for weak accountability.	The financing plan of the policy is not captured in the policy document.	The health sector is notable for corruption and not so much is done about it.	The policy document did not spell the need for grassroots engagement.	There are no clear impacts on urban health resulting from the policy. This has been further exposed by the COVID-19 pandemic.
Nigeria Urban Reproductive Health Initiative (NURHI)	There are clear goals with timelines and even roles of actors toward the goals.	NURHI is donor-funded	The program failed to capture the reformation of health workers' attitude. There are cases of sharp practices which implicated health service providers.	NURHI is community- driven	The presence of increased uptake of family planning services suggests impacts.
National Road Map for Making Nigeria Open-Defecation Free (ODF)	Timelines and action plans are clear and in public domain.	The financing plan of ODF is not so clear in the policy document but there are more pointers to budgetary appropriation	The policy is domiciled in one of Nigeria's Ministries and faces poor commitment of the involved government actors.	The policy appears to be top-bottom.	With less than 5 years to the end of the policy, below 3% of 774 LGAs in Nigeria have been certified as ODF free.
National Health ICT Strategic Framework	No action plan in public domain.	The policy document did not capture the financing plan.	Generally, there is the problem of suboptimal usage of allocated funds	The policy made no provision for end-users	There are gains in the management of basic health data using ICT, as

Policy or strategy	Any available action plan in public domain?	Is there excess reliance on external financing?	Any strong institutional reform?	Are local actors involved?	Are high-level policy expressions linked with impacts?
			to the health sector which stalls investments.	and the public to make contributions.	against other areas of advanced data capture and management, health insurance, etc.
National Policy on Food and Nutrition (NPFN)	Action plans are available.	Was designed to rely on budgetary appropriation.	No efforts to reform the Ministry that should run the policy.	There is the provision for the local government to help play roles in execution.	There are no real impacts, especially owing to the rising food crisis ongoing in Nigeria.
National Plan of Action on Food and Nutrition (NPAFN)	Duplicates the action plan of NPFN	Should be funded from budgetary appropriation.	No efforts to reform the Ministry that should run the policy.	The local governments have roles to play.	Food prices are steadily on the increase regardless of the policy.
National Home- Grown School Feeding Program (NHGSFP)	There is an action plan in public domain.	It is funded from budgetary appropriation of the Federal and State governments	There are issues of corruption in the course of the delivery of the program.	Local actors are involved, such as farmers, cooks, etc. However, they barely partake in the decision making.	It is believed that the policy has increased school attendance rate, however, the quality, diversity, and quantity of the meals are questioned.
Joint Rapid Response Mechanism (RRM)	There is an action plan in public domain.	It is more donor-funded.	The presence of WFP represents a strong institution but their efforts could be limited by corrupt regimes.	The program is community-driven.	Report from the WFP shows that over one million persons have benefitted from RRM.

Policy or strategy	Any available action plan in public domain?	Is there excess reliance on external financing?	Any strong institutional reform?	Are local actors involved?	Are high-level policy expressions linked with impacts?
Agricultural-focused policies	The policies lack action plans	The policies rely more on external funding.	No clear reformation of the institutions responsible for the policies	The policies are majorly top-bottom.	They suffer from unnecessary duplications without real impacts. Sometimes, the impacts are only felt by a few elites.

## Discussion

Our review of 16 policies was driven by an explicit focus on policies that either emphasize urban health or nutrition. Policies that superficially dealt with the duo were ignored. However, we discovered that the tone of most policies appeared generic, often adopting an all-in-one outlook on issues.

Our review is unique as an academic piece because it engages in policy critique which is scarce in the body of literature on urban development in Nigeria. Ideas for evaluation of the reviewed policies only existed in the policy documents and in media and technical reports published by reputable sources like the WHO, WFP, UN, Global Hunger Index, etc. Although we found a few peer-reviewed articles (Ebenso & Otu, 2020; Kalu, 2020; Mohammed et al, 2020, Obayelu & Osho, 2020, etc.) that provided some basis to appraise these policies and strategies. Academic or any other thorough analysis or a systematic follow-up of the policies by either the media, the academic community or CSOs were grossly missing.

In some instances, it seemed as if the policymakers also doubled as the lead in ascertaining if their policies were working or not. Hence, we tried to be critical enough by looking out for reports from trustworthy sources that disprove claims of success where necessary. For instance, the NHGSFP which is judged by the Federal Government of Nigeria as a success is criticized to be poor in coverage, food dietary composites, and quantity of meals for the school pupils (Cummings & Kulutuye, 2017; FAO & WFP, 2018; Spaces for Change, 2018). Equally, the NZHSP is regarded as one policy that has revolutionized the food sector, yet Nigeria ranks 98 of 107 in Global Hunger Index (2021) with a very low score of 29.2.

As our review confirms, the competing demands for health and nutrition in urban areas could be fierce in those countries that are rapidly urbanizing, such as Nigeria. It is for this reason that Bandauko et al (2020) mentioned that urbanization in low-resource settings presents more challenges than opportunities, which is in contrast to the supposed expectation. The authors also argued that urban policies and strategies must rise to the challenge of mitigating these challenges while seeking ways to bolster opportunities. In contrast, the urban policies on health and nutrition that we reviewed were far from this expectation.

A remarkable outcome of our review is the evidence that shows that policies and programs were not comprehensive and distant from the objectives they set. For instance, connecting roads that are expected to help in the evacuation of food items from where they are produced were reportedly in poor conditions. Yet some of the policies claim to have improved access to foods. The NNHS funded by the Federal Government, USAID, UNICEF, and UKAid reported worse health and nutrition performance in 2018 compared to 2015 despite the policy initiatives to tackle nutrition and health problems in several policies such as the NPFN (2016), NHGSFP (2017), NIIMP (2015), etc.

We found the need for interventions through policies and strategies that will help make urban health and nutrition available and accessible amidst these rising competing demands caused by the increase in urban population. While the country had long considered food and nutrition in urban areas as demanding attention, probably because of its economic potentials, and provided several policies and strategies for it, urban health on the other hand seems to have been abandoned over the years. However, we found that urban health is recently emerging as a concern for the country. The four (4) policies that we reviewed under health accentuate the need for rapid response to urban health needs in Nigeria. Perhaps, harmonizing all urban health-related policies into a National Urban Health Policy will be beneficial, especially when pursued vigorously with accountability and transparency at the fore. There were a few studies or media analyses that had made efforts toward examining the efficacy of these policies (Adepoju, 2019; Austin, 2015; Onuba, 2017; Tyessi, 2019). This also indicates the need for scholars in health systems and policies to offer attention to understanding health policies that can be applied to urban populations.

Also, neglected urban populations like informal settlements and brownfield areas face health inequities owing to their geographical locations and socioeconomic status. They are equally prone to attacks from various diseases because of their too close living arrangements, and often uninformed health-seeking behaviours. Thus, they are deserving of focused urban health policies which our review has identified as lacking. In addition, the review showed weak or no mention of ambulatory healthcare services, informal healthcare provisions, as well as a well-structured/committed policy on disease control and prevention, especially for these neglected urban populations.

We discovered that policies that had less reliance on the government tend to have fared better. An instance is NURHI whose positive strides has resulted to the decline of women who do not use family planning services, especially contraceptives (Austin, 2015; NPC, 2013). NURHI has equally contributed to the marginal increase in CPR, although not yet good enough or close to the 27% CPR national goal for 2020 (Family Planning Goal, 2020). It is unlike the ODF policy whose reliance is more on the government, that since 2016 only achieved certifying just 14 of 774 LGAs as ODF free (Tyessi, 2019). It could be said that NURHI made much progress, especially in phase 1, due to the strategy of contextualizing the processes depending on the city or state of

implementation. Although our conceptual framework argues the need to be less reliant on external financing, which can only happen when regimes are not corrupt. With corruption said to be rife in Nigeria, institutions are weak and barely poised to committedly fund policies and strategies, even when such funds are available. Therefore, the reliance on external financing to fund NURHI and the positive outcomes that have followed, suggests the need to reform institutions in Nigeria to be corrupt-free, so they can take up the responsibility of funding policies of this kind and see them through to a good end.

On nutrition, we underscored multiple policies with little or no results. The policies on nutrition were usually repeated, suggesting more of politics than governance. For instance, the NPFN, NPAFN and NZHSP have no difference, and it is the same for ATA, ATASP, APP, LIFE and SAPZ. Yet they must have been formulated through funding from the nation's treasury. Despite the many policies on nutrition, statistics on nutrition and food accessibility in recent years keep nosediving into the worst-case scenario (Kalu, 2020; Trading Economics, 2020; Udo, 2020; WFP, 2017). The results are parallel with the objectives and goals of the policies, and the outbreak of COVID-19 made matters worse. A plethora of policies in nutrition and agriculture with poor results to show could be because of the economic potentials in agriculture and not the need to scale up nutritional levels of the urban population. In corroboration, Peric (2020) and Smiley and Emerson (2020) believe that in LMICs, urban policies and strategies are often made in the direction of the political-economy of the political class, as against the sincere wishes of the public.

We found that policies on nutrition had state governments and the federal government at two extremes, which could be because of differing priorities and political-economy. The inclusion of both tiers of government should have been leveraged to sustain the policies. But it appears that interest is a driving factor since states could only commit to a policy if there are political-economic benefits for them. For instance, the NRAMP and NHGSFP which would demand counterpart funding from state governments were met with weak cooperation. Aligning urban policy priorities across all levels of governments in Nigeria is needful for priority spending and accountability. That way, the governments can have clear-cut, committed, and realistic financing plans for these policies and strategies, which was absent in almost all the reviewed policy documents.

On political-economy still, an agricultural project which should expectedly target an increase in nutritional levels of citizens could be used as political settlement because of the economy that is involved. That seems to be the case with the LIFE program which is targeting the Nigeria Delta region because of the several agitations for resource control in the region.

Hence, within the sector of agriculture and nutrition, governments seem to be on the lookout for what they would take from the largesse as against what they will committedly invest to better the lives of urban residents. This is evidence by the too similar agricultural/nutrition policies established just within the 2016 year. Again, the one nutrition policy (RRM) with less reliance on the government seems to have fared better than the rest. The policy which hopes to address the food crisis in the Boko Haram-ravaged northeast also has a buildup plan in the Gender and Markets Initiative.

An analysis of these policies provides lessons for Nigeria on the need to strengthen the health and nutrition sectors, as well as instructive to policy formulation and implementation in general. We equally believe that the review will become a source of stimulation of interests for academics, the media and Civil Society Organisations to intensify involvement and follow-up of policies and strategies in Nigeria, which will create the needed awareness about these policies and what they should be achieving. Such involvement and participation will also cause relevant stakeholders to be 'up and doing', knowing the amount of attention the policies and strategies must have generated. The "outside-in" as against the "inside-out" concept of urban policies and strategies is advanced in Boonstra and Boelens (2011). The authors believe that citizens engagement in urban policies has led to the success of urban planning in European countries, and it is an important lesson for other parts of the world. Involvement of citizens must not only be captured in the formulation of these policies but could be used as an instrument to hold the policy formulators and implementers accountable. Our conceptual framework shows that most of the reviewed policies and strategies lacked public accountability and poor involvement of local actors across the formulation, implementation, and evaluation processes.

## Conclusion

Our review has underscored germane gaps in urban health and nutrition which is compounded by the country's poor response to its growing urbanization. We found evidence indicating the absence of clear-cut urban policies and ineffectiveness of existing ones. While urban health is yet to form a core agenda for governments in Nigeria, nutrition of urban populations in the country is traded for the economic potentials in agriculture. As such, we found policies on agriculture gearing toward the political-economy as against actually contributing to the nutritional enhancement of urban populations or even improving access and affordability of foods. Also, the health of neglected urban populations is yet to be firmly captured in relevant urban policy actions and programs, as they were poorly expressed in the reviewed policies and programs. Thus, the implication is that urban health inequities in Nigeria might grow deeper going forward. COVID-19 pandemic has placed at the fore the need for countries to strive toward an integrated and sustainable urban healthcare system, and we hope that Nigeria will draw on lessons from the experiences of the pandemic.

In all, Nigeria is yet to realize the need to pursue an urban sustainability agenda, especially paying attention to equitable distribution of key resources like health and nutrition (Olajide et al, 2018). This shortcoming makes policies and strategies on urban health and nutrition in Nigeria less effective. Our review has shown that Nigeria is not just challenged in implementing policies as commonly believed. It has also revealed that the problem goes beyond implementation to formulation, coordination, and accountability. Thus, the buildup processes to urban policies and strategies in Nigeria as concern health and nutrition were found largely defective as our conceptual framework reveals. Therefore, efforts should be channelled toward making sure that policies and strategies are designed in context, paying attention to institutional reforms, public accountability, financing, sustainability through local actors, and pursuit of impacts as against high-level policy expressions. More so, the policies should be galvanized toward squarely addressing the issues for which they were formulated. Here, we found exceptional roles the academia, media and CSOs must play in the areas of following up on these policies and strategies from conception.

## Limitation of the study

Finally, despite the findings from this review, we recognize limitations in the areas of not conducting financial or cost-benefit analysis on the policies and strategies, as well as stakeholder analysis. We recommend that future reviews should take into consideration these limitations. We also advise the need to commence empirical studies on these policies to assess the feelings, opinions, and perspectives of citizens. A key challenge we faced is that most of the policies and programs have received no critical evaluative or assessment attention either from the academia or the media. So, for some of them, we relied on analytical provisions in the policy documents and comparing against statistics and information from reputable sources like the UN, WHO, NOIPolls, WFP, Spaces for Change, etc., and a few peer-reviewed studies.

## **Disclosure statement**

No potential conflict of interest was reported by the authors.

## References

- ACAPS (2020). COVID-19 in Nigeria: Vulnerabilities to COVID-19 and containment measures. Retrieved from https://www.acaps.org/sites/acaps/files/products/files/20200526\_acaps\_thematic\_report\_ COVID19\_in\_nigeria.pdf
- Adeboyejo, A. (2020). *How COVID-19 lockdowns affect healthcare of non-COVID cases*. Retrieved from https://africanarguments.org/2020/04/14/how-COVID-19-lockdowns-affect-healthcare-of-non-COVID-cases/
- Adewoyin, Y., Chukwu, N., & Sanni, L. (2018). Urbanization, spatial distribution of healthcare facilities and inverse care in Ibadan, Nigeria. *Ghana Journal of Geography*, 10(2), 96-111
- Ajaero, C.K. and Madu, I.A. (2013): Analysis of the Impacts of Rural-Urban Migration on Socioeconomic Development of Rural Communities of Southeastern Nigeria.
   *International Journal of Research in Arts and Social Sciences*, 6: 433-450.
- allAfrica (2020). Nigeria: COVID-19 Only 169 ventilators in 16 States. Available at: https://allafrica.com/stories/202004010571.html (accessed Apr 1, 2020)
- Amake, D. (2019, February 14). How sustainable is the school feeding program? *BluePrint*. Retrieved from https://www.blueprint.ng/how-sustainable-is-the-school-feeding-program/

- <u>Aregbeshola</u>, B., (2019). *Health care in Nigeria: Challenges and recommendations*. Retrieved from https://socialprotection.org/discover/blog/health-care-nigeria-challenges-and-recommendations
- Bandauko, E., Annan-Aggrey, E., & Arku, G. (2020). Planning and managing urbanization in the twenty-first century: content analysis of African countries' national urban policies. Urban Research and Practice, <u>https://doi.org/10.1080/17535069.2020.1803641</u>
- Boonstra, B., & Boelens, L. (2011). Self-organization in urban development: towards a new perspective on spatial planning. *Urban Research & Practice, 4* (2), 99-122
- Dixit, S., Ogundeji, Y., & Onwujekwe, O. (2020). *How well has Nigeria responded to COVID-*19? Retrieved from brookings.edu/blog/future-development/2020/07/02/how-well-hasnigeria-responded-to-COVID-19/
- Ebenso B and Otu A (2020). Can Nigeria contain the COVID-19 outbreak using lessons from recent epidemics? The Lancet, <u>https://doi.org/10.1016/S2214-109X(20)30101-7</u>
- Ejike, E. C. C. (2016). Malnutrition affects the urban-poor disproportionately: a study of Nigerian urban children socio-economic statuses. *Children*, 3(17), 1-10. doi:10.3390/children3040017
- Essen, C. (2019, November 4). FG plans new national urban development policy. *The Guardian*. Retrieved from <u>https://guardian.ng/property/fg-plans-new-national-urban-development-policy/</u>
- Family Planning Goal (2020). *Why Nigeria's attainment of Family Planning 2020 Goal will be a miracle*. Retrieved from https://www.familyplanning2020.org/news/why-

nigeria%E2%80%99s-attainment-family-planning-2020-goal-will-be-miracle-%E2%80%94expert#:~:text=AGAINST%20the%20backdrop%20of%20Nigeria's,CPR% 20of%2012%20per%20cent.

Farrell, K. (2018). An inquiry into the nature and causes of Nigeria's rapid urban transition. Urban Forum, 29, 277-298

Federal Ministry of Water Resources (2019). Making Nigeria open-defecation-free by 2025. Retrieved from https://www.cleannigeria.ng/wpcontent/uploads/2019/03/NATIONAL\_ROAD\_MAP\_FOR\_ELIMINATING\_OPEN\_DE FECATION\_IN\_NIGERIA.pdf

Freire, E. M., Hoornweg, D., Slack, E., Stren, R., & Global Dialogue Institute. (2016). Inclusive Growth in Cities: Challenges & Opportunities. Ediecuatorial, C.A: Corporación Andina de Fomento

Global Hunger Index (2021). *Nigeria*. Retrieved from https://www.globalhungerindex.org/nigeria.html

International Institute of Tropical Agriculture [IITA] (2017). Synthesis report of the Nigeria Zero Hunger Strategic Review. Ibadan: IITA

Kalu, B. (2020). COVID-19 in Nigeria: a disease of hunger. *The Lancet Respiratory Medicine*, 8(6), 556-557

- Lawanson, T., & Fadare, S. (2015). Environment and health disparities in urban communities: focus on Eti Osa, Nigeria. City, Culture and Society, 6, 43-52.Doi.org/10.1016/j.ccs.2014.12.003
- MEASURE Evaluation (2019). Improving Nigeria's national health information system. Retrieved from <u>https://www.measureevaluation.org/our-work/health-information-</u> systems/measure-evaluation-improves-nigeria2019s-national-health-information-system
- Mohammed, A., Agwu, P., & Okoye, U. (2020). When primary healthcare facilities are available but mothers look the other way. *Social Work in Public Health*, *35*(1-2), 11-20
- National Bureau of Statistics [NBS] (2019). 2019 Poverty and Inequality in Nigeria: Executive Summary. National Bureau of Statistics.
- National Planning Commission (2015). *National Integrated Infrastructure Master Plan*. Federal Republic of Nigeria.
- National Population Commission (2013). *Nigeria Demographic Health Survey 2013*. Abuja: NPC and ICF International
- Nigerian Urban Reproductive Health initiative (2011). *Advocacy strategy*. Retrieved from http://www.nurhi.org/#phase
- Nigerian Urban Reproductive Health Initiative (n.d. a). *NURHI story (2009 2014)*. Retrieved from <u>http://www.nurhitoolkit.org/bridging-gap-family-planning-nigeria#.XpkQC8hKhPY</u>
- Nigerian Urban Reproductive Health Initiative (n.d. b). *NURHI 2 overview*. Retrieved from <u>http://146.66.97.188/~nurhi363/index.php/2-uncategorised/42-nurhi-2-overview</u>

- NOIPolls (2018). *Nigerians blame recent spate of road accidents on bad roads*. Retrieved from https://noi-polls.com/nigerians-blame-recent-spate-of-road-accidents-on-bad-roads/
- NPC & ICF International. (2014). *Nigeria Demographic and Health Survey 2013*. Abuja, Nigeria, and Rockville, Maryland, USA: NPC and ICF International.
- Obayelu, O., & Osho, F. (2020). How diverse are the diets of low-income urban households in Nigeria? *Journal of Agriculture and Food Research, 2,* 1-8
- Olajide, A. O., Agunbiade, E. M., & Bishi, B. A. (2018). The realities of Lagos urban development vision on livelihoods of the urban poor. *Journal of Urban Management*, 7, 21-31.
- Onwujekwe, O., Agwu, P., Orjiakor, C., McKee, M., Hutchinson, E., Mbachu, C., Odii, A., Ogbozor, P., Obi, U., Ichoku, H., & Balabanova, D. (2019). A systematic review of the types of corruption in health sectors in Anglophone West Africa and the factors that drive them. *Health Policy and Planning*, 34(7), 529-543, https://doi.org/10.1093/heapol/czz070
- Onwujekwe, O., Mbachu, C., Ajaero, C., Uzochukwu, B., Agwu, P., Onuh, J., Orjiakor, C., Odii,
  A., & Mirzoev, T. (2021). Analysis of equity and social inclusiveness of national urban development policies and strategies through the lenses of health and nutrition. *International Journal for Equity in Health, 20*(101), 1-10,
  https://doi.org/10.1186/s12939-021-01439-w
- Onwujekwe O, Orjiakor C., & Agwu P (2020). *Coronavirus: corruption in health care could get in the way of Nigeria's response*. Available at: https://theconversation.com/coronavirus-corruption-in-health-care-could-get-in-the-way-of-nigerias-response-136913

- Owobu, E. (2017). A review of the National Health ICT Strategic Framework 2015-2020. Retrieved from https://africaehealthhubblog.wordpress.com/2017/03/06/a-review-of-thenational-health-ict-strategic-framework-2015-2020/
- Peric, A. (2020). Public engagement under authoritarian entrepreneurialism: the Belgrade waterfront project. *Urban Research & Practice*, *13*(2), 213-227
- Plecher, H. (2020). Urbanization in Nigeria 2018. Retrieved from https://www.statista.com/statistics/455904/urbanization-in-nigeria/
- Premium Times (2019, January 30). FG urges states to key into open defecation-free roadmap. *Premium Times*. Retrieved from https://www.premiumtimesng.com/news/morenews/308902-fg-urges-states-to-key-into-open-defecation-free-roadmap.html
- Ramirez-Rubio, O., Daher, C., Fanjul, G., Gascon, M., Mueller, N., Pajin, L., Plasencia, D.,
  Thondoo, M., & Nieuwenhuijsen, M. (2019). Urban health: an example of a "health in all policies" approach in the context of SDGs implementation. *Globalization and Health*, *15*(87), 1-21
- Rosemond, O. (2016). AfDB approves USD 250 million loan and EUR 5 million grant for rebuilding, recovery and stabilization in North East Nigeria. Retrieved from <u>https://www.afdb.org/en/news-and-events/afdb-approves-usd-250-million-loan-and-eur-</u> 5-million-grant-for-rebuilding-recovery-and-stabilization-in-north-east-nigeria-16567
- Smiley, K., & Emerson, M. (2020). A spirit of urban capitalism: market cities, people cities, and cultural justifications. Urban Research & Practice, 13(3), 330-347

- Teitz, B. M. (2001). Urban policy: north America. International Encyclopedia of the social & behavioural sciences, 16070-16076. Doi. <u>10.1016/B0-08-043076-7/04466-1</u>
- Tripathi, A., & Mahey, K. (2017). Urbanization and economic growth in Punjab (India): an empirical analysis. *Urban Research & Practice, 10*(4), 379-402
- The Challenge Initiative (2020). Urban Reproductive Health. Retrieved from https://tciurbanhealth.org/urban-reproductive-health/

The National Nutrition and Health Survey (NNHS, 2018). <u>https://www.unicef.org/nigeria/media/2181/file/Nigeria-NNHS-2018.pdf</u>

- The World Bank (2019). Urban population growth (annual %) Nigeria. Retrieved from <u>https://data.worldbank.org/indicator/SP.URB.GROW?end=2017&locations=NG&start=1</u> <u>960</u>
- The World Bank (2020). *Out-pocket-expenditure (% of current health expenditure) Nigeria*. Retrieved from https://data.worldbank.org/indicator/SH.XPD.OOPC.CH.ZS?locations=NG
- Trading Economics (2020). Nigeria Food Inflation. Retrieved from https://tradingeconomics.com/nigeria/foodinflation#:~:text=Looking%20forward%2C%20we%20estimate%20Food,according%20t o%20our%20econometric%20models.
- Udo, B. (2020, September 9). Nigeria's economic group, CBN bicker over policies to curtail COVID-19 impact on Nigerians. Premium Times. Retrieved from

https://www.premiumtimesng.com/business/business-news/413452-nigerias-economicgroup-cbn-bicker-over-policies-to-curtail-COVID-19-impact-on-nigerians.html

- United Nations. (2014). World urbanization prospects ST/ESA/SER.A/366. In *Department of Economic and Social Affairs*. New York: United Nations Accessed 1 October 2017
- Vanguard (2019, December 16). Minister says effective health information system crucial to quality healthcare. Retrieved from <a href="https://www.vanguardngr.com/2019/12/minister-says-effective-health-information-system-crucial-to-quality-healthcare/">https://www.vanguardngr.com/2019/12/minister-says-effective-health-information-system-crucial-to-quality-healthcare/</a>
- WHO (2005). National Plan of Action on food and nutrition. Retrieved from https://extranet.who.int/nutrition/gina/sites/default/files/NGA%202005%20National%20 Plan%20of%20Action%20on%20Food%20and%20Nutrition.pdf
- WHO (2016). National Health ICT Strategic Framework. Retrieved from https://www.who.int/goe/policies/Nigeria\_health.pdf?ua=1
- World Poverty Clock (2020). Nigeria. Retrieved from https://worldpoverty.io/map
- Wu, J.G., Xiang, W-N, Zhao, J.Z. (2014) Urban ecology in China: Historical developments and future directions. *Landsc Urban Plan* 125:222–233
- UN Habitat (2015). *Habitat country program document Nigeria: 2015-2017*. Retrieved from <a href="https://mirror.unhabitat.org/downloads/docs/13237\_1\_595875.pdf">https://mirror.unhabitat.org/downloads/docs/13237\_1\_595875.pdf</a>
- UN-Habitat (2014). The evolution of National urban policies: a global overview. United Nations Human Settlement Program

UNICEF (2017). Nutrition. Retrieved from

https://www.unicef.org/nigeria/nutrition#:~:text=Nigeria%20has%20the%20second%20h

ighest, is%20currently%20reached%20with%20treatment.

USAID (2018). Nigeria: Nutrition Profile. Retrieved from

https://www.usaid.gov/sites/default/files/documents/1864/Nigeria-Nutrition-Profile-

Mar2018-508.pdf

## **Appendix 1**

## List of search terms

(("Sustainable" OR "Sustainability" OR "Sustainable") AND ("Urban" OR "Urbanization" OR "Urbanisation" OR "Urban inclusion" OR "Urban inequality" OR "Urban inequities" OR "Urban governance" OR "Urban slums" OR "Urban renewal" OR "Urban welfare" OR "Urban planning" OR "Urban development" OR "Urban sprawl" OR "Urban health" OR "Urban nutrition" OR "Urban area" OR "Urban agriculture" OR "slums" OR "City" OR "Cities" OR "Informal settlements") AND ("Health sector" OR "Hospital" OR "Healthcare center" OR "Health facilities" OR "Health service" OR "Food and Nutrition") AND ("Social inclusion" OR "Health" OR "Health sector" OR "Hospital" OR "Healthcare" OR "Health care center" OR "Health systems" OR "Health policy" OR "Health facilities" OR "Health service" OR "Access to health" OR "Wellbeing") AND ("Food" OR "Food security" OR "Nutrition" OR "Nutrition" OR "Malnutrition" OR "Agriculture") AND ("policy" OR "strategies" OR "plan" OR "framework" OR "stakeholder") AND ("FCT" OR "Abuja" OR "Abia" OR "Adamawa" OR "Akwa-Ibom" OR "Anambra" OR "Bauchi" OR "Bayelsa" OR "Benue" OR "Borno" OR "Cross River" OR "Delta" OR "Ebonyi" OR "Edo" OR "Ekiti" OR "Enugu" OR "Gombe" OR "Imo" OR "Jigawa" OR "Kaduna" OR "Kano" OR "Katsina" OR "Kebbi" OR "Kogi" OR "Kwara" OR "Lagos" OR "Nasarawa" OR "Niger" OR "Ogun" OR "Ondo" OR "Osun" OR "Oyo" OR "Plateau" OR "Rivers" OR "Sokoto" OR "Taraba" OR "Yobe" OR "Zamfara")).