
Case Study Report

Everyday Urbanism, Liveability and Health Exposure of Precariously Housed Population in Nigeria

OLUFEMI, Olusola Ph.D. MCIP RPP, Independent Consultant (Urban and Regional Planning), Oakville, Ontario, Canada, solaoluf@yahoo.com

Abstract

Everyday urbanism of the precariously housed in Nigeria is shaped by the make-do culture embedded in how they live, work, play and learn. Hazardous spatiality, poorly constructed and ventilated housing expose them climate pollutants and make them vulnerable to ill-health. Entrenching the ethic (s) of care in planning is crucial to having a healthy people, environment, and a sustainable future.

Key words

Everyday Urbanism, Climate Crisis, Precariously Housed, Ethic of Care, Healthy Governance

1.0 INTRODUCTION

Planning is a set of interdependent processes that, acting together, seek to create more livable, life-enhancing cities and regions (UN-Habitat, 2005). Planning deals with the environment in which we live, work, play and learn and the way the built environment is planned and designed in turn impacts on the health outcomes of its inhabitants (Olufemi, 2020). The multiple intersections and co-benefits of planning with health, governance, liveability, infrastructure, education, gender, economy and the interconnectedness and complexity of the built environment and health cannot be overemphasised. Certain characteristics of the built environment, such as location, density, mixed land use, walkability, green space, and threshold population can impact on well-being and ill-being of its inhabitants. The living environment of the precariously housed expose them to vector borne diseases, water and food borne diseases or illness and these impact on their well-being and quality of life. Their hazardous spatiality and poorly ventilated housing make them vulnerable to personal, occupational, and environmental ill-health. Poor access to water, poor air quality and pollution from liquid and solid waste management (black water) which are made worse by climate crisis, often have dire health consequences for these residents. Greenhouse gas emissions from burning or incinerating waste or waste dumping in the rivers, exposure to fossil fuels, particulate matters, hydrofluorocarbons, short-lived climate pollutants cause anxiety, mental health, stress, ill-health, sickness, disease, and death among the precariously housed.

Bad governance and poverty continue to subject people to unhealthy living environments in Nigeria and elsewhere globally. WHO (2007:5) noted “failure of governance in today’s cities has resulted in the growth of informal settlements and slums that constitute an unhealthy

living and working environment for a billion people. National government institutions need to ... undertake healthy urban governance". Additionally, "urban poverty and unhealthy living conditions are associated health determinants and urban poverty is linked to powerlessness, which holds back the community's own efforts for improvements. The key to progress is healthy governance, which involves not only government but all levels of society including, vitally, the poor themselves" (WHO, 2007:6). This is the primacy of human experience of the precariously housed everyday.

Utilizing secondary data, observation, and experiential insights this paper presents an overview of the Nigeria's Nationally Determined Contribution policy document. The paper further discusses the liveability context and health of urban dwellers who live unsustainably and are at the frontlines of climate crisis. The paper suggests adopting a One Health approach embedded in ethical and healthy governance, and ethics of care in any planning strategy, policy, or plan or program to ensure the liveability and equitable futures for the precariously housed leaving no one behind.

2.0 NATIONALLY DETERMINED CONTRIBUTION

By 2050, Nigeria aims to be a country of low-carbon, climate-resilient, high-growth circular economy that reduces its current level of emissions by 50% and is moving towards having net-zero emissions across all sectors of its development in a gender-responsive manner (FGN 2021). Nigeria's Nationally Determined Contribution has unconditionally pledged a 20% emissions reduction below Business as Usual by 2030, and a 47% conditional commitment which can be achieved with financial assistance, technology transfer and capacity building from the more advanced and more willing international partners. Specific Policy Commitments include:

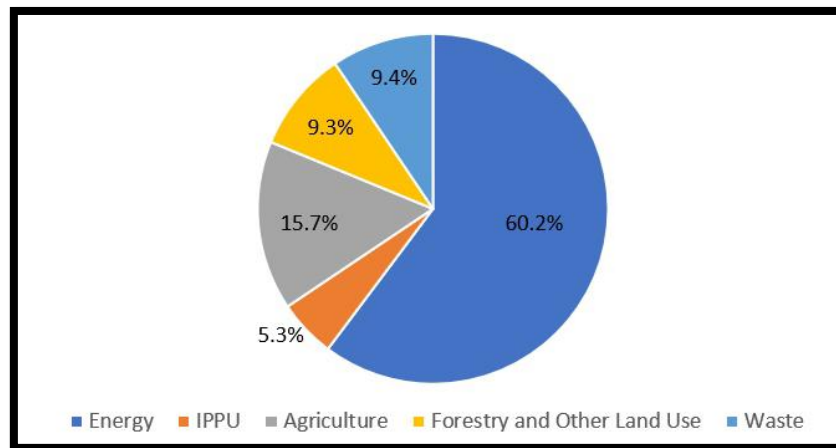
- Elimination of kerosene lighting by 2030,
- Greater uptake of bus rapid transit,
- 50% reduction in the fraction of crop residues burnt by 2030,
- Implementation of forest programmes and initiatives to deliver 20% GHG emission reductions, enhanced removals equivalent to approximately 74.2 MtCO₂e by 2030, and ratification of the Kigali Amendment to the Montreal Protocol to phase out HFCs, and
- Mainstream gender across all sectors.

Of importance is also the regional disparities in the six geopolitical zones. The southwest is least vulnerable, the northeast, on the other hand, is most vulnerable. Understanding these spatial vulnerabilities is crucial to shaping climate-resilient development in Nigeria. However, FGN (2021: iv; Figure 1) notes:

1. Fugitive emissions from **oil and gas** are the largest contributor to overall energy sector emissions (36% of total energy sector emissions in 2018), followed by transport, electricity generation (grid and off-grid), and residential and industrial energy consumption.

2. Agriculture, Forestry and Other Land Use (AFOLU) is the second largest contributor to total emissions, contributing approximately 25% of national GHG emissions in 2018,
3. waste (9%), and
4. Industrial Processes and Other Product Use (IPPU) (5%).

Figure 1: Total GHG emissions in Nigeria between 2010 and 2018 (units: million tonnes CO₂ equivalent emissions).



Source: FGN (2021)

The increase in GHG emissions, SLCP's (Short Lived Climate Pollutants) and air pollutants, such as black carbon and PM_{2.5}, are also projected to increase to 2030 in the baseline scenario, by 33% and 41% respectively. Undoubtedly from the primacy of their lived experiences it can be said that the levels of GHG emissions, SLCP's and air pollutants are high but there is limited knowledge, dearth of literature and no definitive research. The implications for livelihoods, properties, and health, among other negatives, are expected to affect urban communities globally (Allam et al, 2022). The most vulnerable living in precarious housing situations will be most impacted with the negatives.

3.0 CONCEPTUAL FRAMEWORK

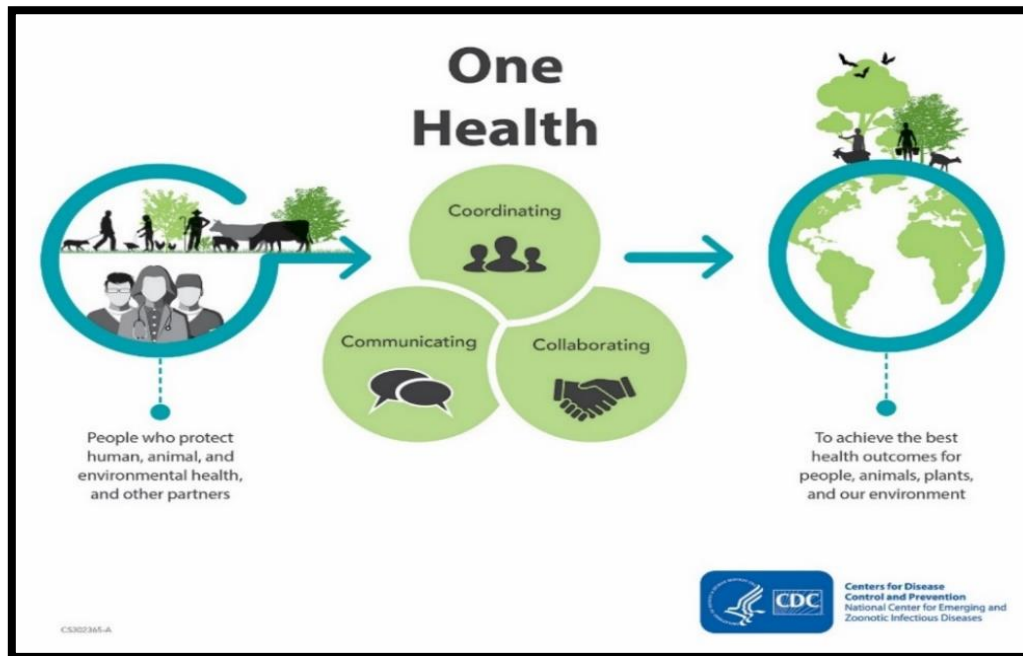
This section discusses the conceptual framework that provides a link between One health, ethical or healthy governance and everyday urbanism and liveability of the precariously housed.

3.1 One Health

One Health is an integrated, unifying approach that aims to sustainably balance and optimize the health of people, animals, and ecosystems (Figure 2). The approach can be applied at the community, subnational, national, regional, and global levels, and relies on shared and effective governance, communication, collaboration, and coordination (WHO, 2022). "One Health approaches are embedded into ecohealth conceptual thinking, which are further expanded to health in social-ecological systems addressing complex issues of human-

environment systems” (Zinsstag, Waltner-Toews, and Tanner, 2015:16). One Health is an approach to designing and implementing programs, policies, legislations, and research in which multiple sectors plan, communicate and work together to achieve better public health outcomes for the human, animal, and environment sectors (FRN, 2019).

Figure 2: The Foundation of One Health



Source: CDC, 2022

Nigeria’s national One Health strategic plan integrates human, animal, and environmental health management for improved health security, recognises the interconnectedness of the health of people to the health of animals and the environment, and offers a collaborative, multi-sectoral and transdisciplinary approach for zoonotic diseases. Diseases at the human-animal ecosystem interface pose threats to humans and animals with increasingly significant morbidity and mortality. The increased burden of zoonotic diseases is attributed to constant encroachment on the ecosystems by humans due to urbanization, population growth, agriculture and food production, extractive practices, deforestation, and the increased need for sustenance.

Of relevance to One Health is the 2030 Agenda for Sustainable Development (para. 26) which affirms the importance of promoting physical and mental health and well-being and ensuring no one is left behind. It also stresses the commitment to the prevention and treatment of non-communicable diseases, including behavioural, developmental, and neurological disorders, which constitute a major challenge for sustainable development. The Healthy Cities approach also reinforces the Agenda 2030 (SDGs 3 & 11) and entails:

- Promoting health and well-being of all people,
- Protecting people in vulnerable contexts,
- Creating a health-supportive environment,
- Achieving a good quality of life,
- Providing basic sanitation and hygiene needs,

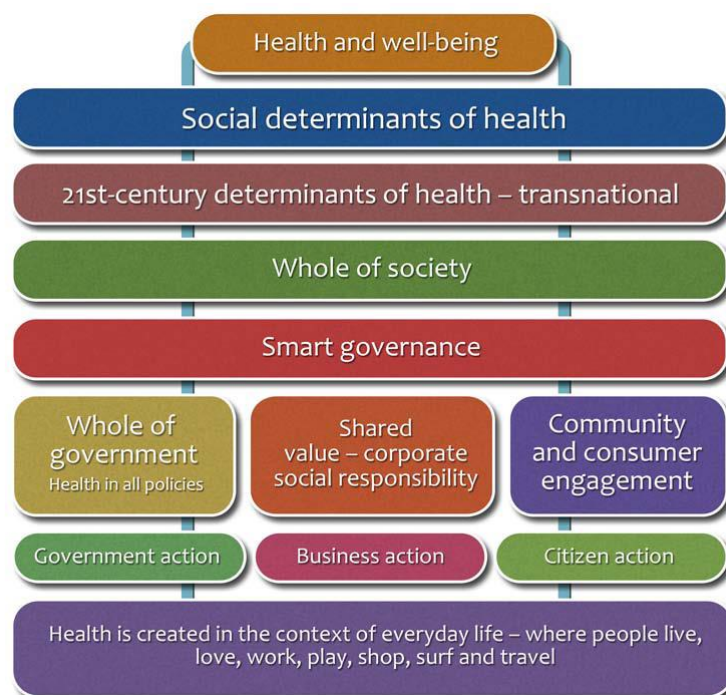
- Supplying access to health care.

After all, “a healthy city is one that is continually creating and improving those physical and social environments and expanding those community resources which enable people to mutually support each other in performing all the functions of life and in developing to their maximum potential.” (Hancock and Duhl, 1988).

3.2 Ethical and Healthy Governance

Ethic of care is an ethic of resistance to injustices (Peake, 2015), ethic based on rights and justice (Gilligan 1982) and moralities of responsibility and care (Collins, 1990; Tronto, 1987). Gilligan’s work (Gilligan et al 1988; Gilligan, 1982) argues for a way of moral knowing that is based on the relationships of caring. Ethical and healthy governance constitutes the pillar of the social determinants of health and liveability. Healthy governance seeks an appropriate combination of health promoting actions (WHO, 2007). The Commission on Global Governance (1995) indicate governance is the sum of the many ways individuals and institutions, public and private, manage their common affairs in a continuing process that accommodates diverse interests and embraces cooperative action. Governance for health is “the attempts of governments or other actors to steer communities, countries, or groups of countries in the pursuit of health as integral to well-being through both whole-of-government and whole-of-society approaches. It positions health and well-being as key features of what constitutes a successful society and a vibrant economy and grounds policies and approaches in such values as human rights and equity” (Kickbusch and Gleicher, 2012: vii,4) (Figure 3). Good or ethical governance is imperative for liveability of the precariously housed. Caring about the health and liveability of the precariously housed is paramount for the sustainability of a healthy city.

Figure 3: Governance for health in the 21st century



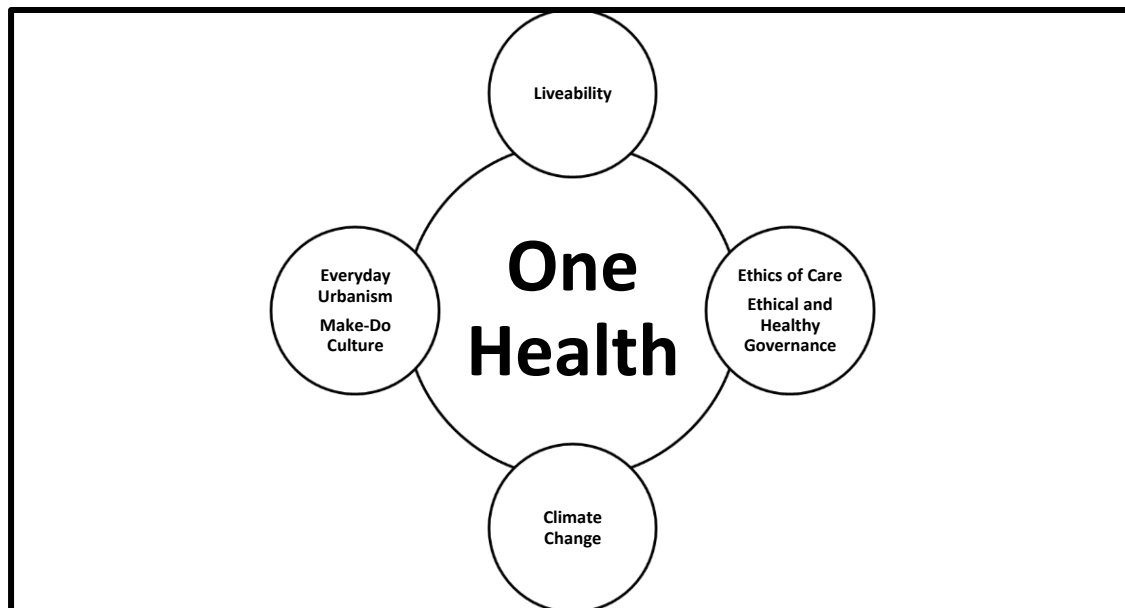
Source: Kickbusch (2011).

3.3 Everyday urbanism

Everyday urbanism “builds on the concept of adaptive urbanism and looks at urban planning as a process of perpetual engagement and reiteration. It views cities as a conversation between and among its residents. This leads to a dynamic urban form that evolves not from outside pressures or plans dropped from above, but from activities that occur within a neighborhood” (Artibise, 2010:1). Crawford (2008:6) argues that everyday urbanism “...emphasises the primacy of human experience as the fundamental aspect of any definition of urbanism”.

Rem Koohaas, a global architect, interprets the urbanism of Lagos for example as a “culture of make-do as the inventiveness of Lagosians as they survive the travails of the megacity” (Enwezor, 2003:16). “The ability to make-do with whatever is at hand is a building block of resilience and Levi-Strauss called this skill of bricolage. When situations unravel, Bricoleurs muddle through, imagining possibilities where others are confounded” (Coutu, 2017: 23). While Godlewski (2010) refers to this as ‘ingenious critical alternative systems’, Koutonin (2015:3) notes “people’s creativity...is visible at every corner of the city”. The make-do culture reverberates intensely from the anonymous spaces of newspaper stands located at street intersections and roadside services, through night life districts to living rooms, and the common interests of religious, cultural, political, security, economy, and leisure (‘fàájì’) pursuits dominate the primacy of experiential lifeworld of Nigerians. Everyday urbanism on the streets of Lagos, Kano, Onitsha, or Benin City is shaped and influenced by the make-do culture. The propinquity (physical or psychological proximity) of the precariously housed is driven by the make-do culture and the yearning for survival. Everyday urbanism of the precariously housed is influenced by their ability to improvise, make-do, adapt, reimagine, re-create using their sweat equity and ingenuity and their flexibility to innovate as need arises even with the absence of any formal governance structure. The health of the precariously housed is inextricably linked to the hazardous spatiality and their everyday urbanism, hence their health exposure. One Health can be achieved by sustainable ethical and healthy governance which on the other hand impacts on climate change, liveability, and everyday urbanism of the precariously housed (Figure 4).

Figure 4: One Health Approach to Liveability



Source: Author, 2022

4.0 PRECARIOUSLY HOUSED

4.1 Hazardous Spatiality

Precariously housed people are those who cannot afford to live in decent, affordable, safe shelters and housing. Precariously housed liveability conditions are appalling, unsafe, unhygienic, and unhealthy. They reside in constantly polluted (water, air, soil) and hazardous spatiality and must contend with issues of safety, access to basic needs (water, sanitation, energy, food, services), insecurity, infrastructure deficit, gender-based violence and insecure tenure. Most precariously housed people work and thrive in the informal or underground economy. They live, work, learn and play in precarious spaces and face serious ecological threats like flooding, sandstorms, windstorms, heatwaves, drought, and fire outbreaks. Precariously housed are in under-resourced areas, rural areas, marginal lands, urban peripheries, remote and hard to reach areas, informal settlements, lagoon communities, under the bridges, in culverts, on railway tracks, garbage dumpsites, slums and on the streets. Majority of precariously housed are women and girls who daily face harassment, violence and live in conflict situations.

4.2 Liveability and Health Exposure

Liveability, the suitability, and attractiveness of a place for **decent** (moral, ethical) living, is in question for the precariously housed in Nigeria and globally. Liveability continues to be at risk for the precariously housed because of the increasing cost of living, food insecurity, poverty, climate crisis, high inflation rate, pandemic, insecurity, insurgency, conflicts, war, and incursion. The Global Liveability Index by EIU ranked Lagos 171 out of 173 countries in the list of most liveable cities in the world (EIU, 2022). From the indicators used for the ranking index namely stability, healthcare, culture and environment, education and infrastructure, Lagos scored 20.0, 20.8, 44.9, 25.0 and 46.4 respectively with a score of 32.2 from a total of 100. The liveability index for Lagos reflects what obtains in the whole country. About 170 million

Nigerians living in dirty environment (Tribune, 2020) and there are approximately 24.4 million homeless people in Nigeria (Roberts, 2020) with a housing deficit of about 16 million units (Okparaocha, 2014).

Unhealthy living and unhealthy living environments expose the precariously housed to communicable and non-communicable diseases. Diseases like respiratory, diarrheal, tuberculosis, and malaria have the heaviest impact on the poor in low-income settlements around the world and taken together, infectious, and parasitic slum diseases would rank at the top of all categories of death (Campbell and Campbell, 2007). Housing conditions (Box 1) affect people's health and can contribute to communicable and non-communicable diseases. Crowding, homelessness, slum, and precarious housing are factors that trigger these diseases. Precarious housing presents with hazards ranging from biological (allergens), chemical (lead) to physical (thermal stress). Poor design or construction of houses is the cause of most home accidents. Use of sub-standard building materials contribute to indoor pollutants causing asthma, allergies or respiratory or other communicable and non-communicable diseases. Poorly ventilated houses or shacks, houses constructed with scavenged materials or precarious materials like cardboard, corrugated iron sheets can be washed away during floods, or blown away during a windstorm or sandstorm. Unplanned, sprawling development without basic infrastructure with sewage discharging into streets, and streams can result in ill-health.

Box 1: Liveability contexts of the Precariously Housed in Nigeria

Source: Author, 2022

In Nigeria approximately 69% of households use solid fuels as their primary source of domestic energy for cooking and these fuels produce high levels of indoor air pollution (Ezeh et al., 2014). Indoor Air Pollution emanating from burning solid fuels (wood, charcoal, animal dung, coal, and crop waste) for cooking and home heating remains a major environmental and public health challenge among the precariously housed. Indoor air pollution due to poor ventilation and cookstoves also accelerates non-communicable diseases (Box 2). Contaminated drinking water and poor sanitary conditions result in increased vulnerability to water-borne diseases which leads to deaths. Diarrheal, worm infections and other infectious diseases spread through contaminated water and water scarcity creates difficulties for families to carry out basic hygiene because of poor access to adequate water, sanitation, and

hygiene (WASH). Only 26.5 per cent of the population use improved drinking water sources and sanitation facilities and 23.5 per cent of the population defecate in the open (UNICEF, 2018). Lack of proper sewage facilities and toilets susceptible to being washed away by floods poses a huge health risk for inhabitants. Nigeria remains the number one country in the world

Box 3: Waste Disposal and Insanitary Toileting contexts of the Precariously Housed in Nigeria



Source: Author, 2022

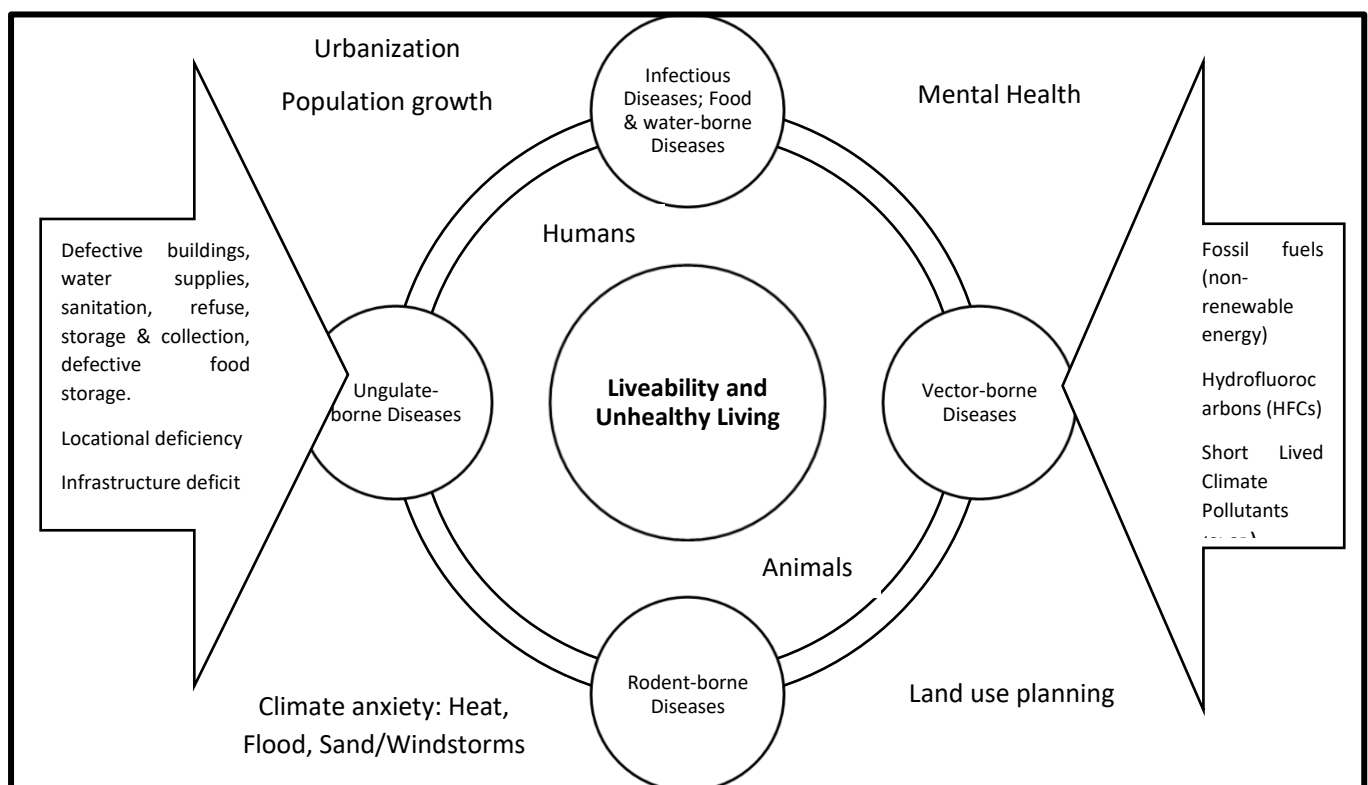
in the practice of open defecation or under-toileted country. With 46 million people still practicing open defecation, using open fields, forests, bushes, and bodies of water as

convenience, the country has been ranked third in the world among countries. Open defecation and unhygienic sanitary practices are prevalent among the precariously housed (Box 3). While cognisant of the fact that there are some chronic illnesses (communicable or non-communicable) that arise from an interplay of genetic, environmental, and behavioral factors with severe adverse influences on social and physical activities and quality of life, the way settlements are planned and designed could also be a trigger (Olufemi, 2020).

5.0 LESSONS LEARNED

Precarious living environment expose citizens to vector borne diseases, water and food borne diseases or illness and these reduce the productivity hours and quality of life. The hazardous spatiality and poorly ventilated housing expose them to personal, occupational, and environmental ill-health. Water and air pollution from poor liquid and solid waste management (black water) are made worse by climate crisis. Greenhouse gas emissions from burning or incinerating waste or waste dumping in the rivers, increasing exposure to fossil fuels, Particulate matters, Hydrofluorocarbons, Short-lived climate pollutants leads to climate anxiety, mental health, stress, ill-health, sickness, disease, and death (Figure 5). Lessons learned include:

Figure 5: Liveability and Health exposure of the Precariously Housed



Source: Author, 2022

5.1 Effective Land use planning: Allam et al (2022) argued for the adoption of a whole-systems approach, focusing on a range of different aspects such as urban planning, climate action, air quality, liveability, and health, among others. Land use planning associated with differential health outcomes include accessibility to food sources, parks and open spaces, transportation options, housing, good quality air, location of services, infrastructure provision, water, employment, educational and social connections. Effective land use planning creates supportive settings that promote healthy human habitats and healthy social interaction, access to recreation, schools, jobs, health care, strong social networks, good air and water quality, and opportunities for physical activity. Integration of these approaches in the planning of our cities would ameliorate the negative health impact and reduce the exposure and incidence of communicable and non-communicable diseases among the precariously housed.

5.2 Ethics of care: The 2030 Agenda on eliminating inequalities features the realisation of human rights to safe water and sanitation, with special consideration for the poorest and marginalised/precarious communities. This realisation is contingent on embedding the ethics of care in ethical and healthy governance in an empowering way. Cities in Nigeria and other developing countries can move from wealthy to healthy cities or cities of Hygeia by incorporating ethics of care and ethical/healthy governance in their various institutions, policies, and development processes to lift the precariously housed out of unhealthy hazardous spaces and mitigate climate crisis. Ethics of care behoves on everyone to safeguard and care about our common good, that is, the environment in a moral and just way.

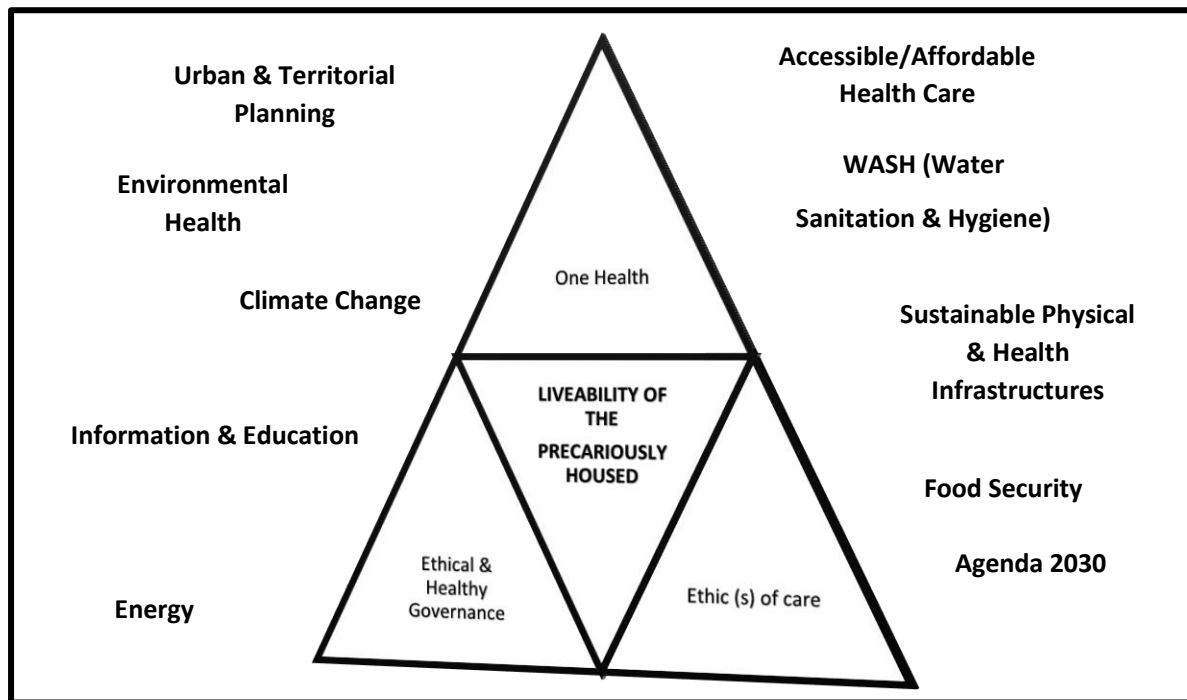
5.3 One Health and Healthy Governance: One Health approach to liveability should be contingent on ethics of care that is embedded in ethical and healthy governance or governance for health which entails working with and listening to citizens needs in a practical and proactive manner, leaving no one behind. Ethical and healthy governance must be participatory, equitable, inclusive, and accessible. Healthy governance must recognize the primacy of human/people, their safety, well-being, right to life, right to housing and basic needs and quality of life. Healthy governance is contingent upon healthy living environments, sustainable infrastructures, civic engagement and inclusion, sustainable ethic of care embedded in ethical/healthy governance structures.

5.4 Research: Research is pertinent in the precarious communities to ascertain the depth and intensity of their liveability and exposure to diseases. Emphasis should be placed on real-time data collection in these communities.

5.5 New Social Contract: As reiterated in the World Cities report (2022) the vision for the future of cities must embody the “new social contract” in the form of universal basic income, universal health coverage and universal housing and basic services and cities should focus on developing inclusive urban governance processes that promote transformative resilience to multiple risks by using local knowledge in the face of uncertainty. For the precariously housed, the new social contract must recognise and incorporate the multiple intersectionality and layers of exposure where people live, work, play and learn, multiple vulnerabilities, and multiple co-benefits of healthy living, healthy environments, and healthy governance (Figure 6). This can be achieved by mainstreaming the One Health to attain multiple benefits and

unlock synergies between health and sustainable development pathways. This would concurrently improve health (SDG 3), tackle poverty (SDG 1), foster gender equality (SDG 5), enhance access to clean energy and climate-resilient infrastructure (SDGs 7 and 9) and promote inclusive, safe, resilient, and sustainable living environments (SDG 11).

Figure 6: Multiple Intersectionality of Liveability and Ethics of Care among the Precariously Housed



Source: Author, 2022

6.0 CONCLUSION

Everyday urbanism, liveability, and health exposure of the precariously housed is dependent on having authentic open dialogue and embracing change in the planning and transformation of sustainable cities of tomorrow. Everyday urbanism of the precariously housed is contingent on ethics of care, ethical and healthy governance. Everyday urbanism of the precariously housed depends on sustainable investment in research, investment in people and the environment in which they live, work, play and learn. To withstand shocks from pandemic or any climate crisis and ensure socio-spatial justice and equitable futures in our cities, the success and implementation of the development plans, growth management strategies and policies are contingent upon ethics of care and ethical and healthy governance, political will, sound planning, appropriate technical and professional leadership, and civil society engagement. Ethic of care is based on rights and justice, moralities of responsibility of care for the environment while embracing equity and equality. There is also a need for cohesive solutions that can reduce emissions at the same time as increasing liveability and revamping the inequalities and inequities arising from planning principles. Planners should be proactive in ensuring liveable environments and fostering life-enhancing plans by enforcing planning regulations and compliance by citizens to zoning by-laws. Improving living environments, ensuring healthy housing and neighbourhoods, preventing non communicable and communicable

diseases through ethics of care and ethical and healthy governance will ensure inclusiveness, equity and support liveable environments. Planners should continue to be frontliners in the regeneration and transformation of the precarious communities and future cities of Hygeia.

REFERENCES

- Allam, Z., Nieuwenhuijsen, M., Chabaud, D., Moreno, C. (2022) The 15-minute city offers a new framework for sustainability, liveability, and health, March 2022, The Lancet Planetary Health, [https://doi.org/10.1016/S2542-5196\(22\)00014-6](https://doi.org/10.1016/S2542-5196(22)00014-6)
- Artibise, Y. (2010) "Everyday Urbanism: Celebrating Ordinary Life in the City", September 23, 2010, Available at <http://yuriartibise.com/everyday-urbanism-celebrating-ordinary-life-in-the-city/>, (accessed 7 August 2015).
- CDC. (2022). One Health, February 7, 2022, [Centers for Disease Control and Prevention, National Center for Emerging and Zoonotic Infectious Diseases \(NCEZID\)](https://www.cdc.gov/onehealth/basics/index.html), Available at <https://www.cdc.gov/onehealth/basics/index.html> (accessed 18 August 2022).
- Campbell, T. and Campbell, A. (2007) "Emerging Disease Burdens and the Poor in Cities of the Developing World", Journal of Urban Health: Bulletin of the New York Academy of Medicine. 84. i54-64. 10.1007/s11524-007-9181-7.
- Collins, P.H. (1990) *Black Feminist Thought: Knowledge, Consciousness, and the Politics of Empowerment*, Boston: Unwin Hyman.
- Coutu, D. (2017) "How Resilience Works", in Harvard Business Review (HBR) Emotional Intelligence Series: Resilience, Harvard Business Review Press, Boston, Massachusetts, pp.1-30.
- Crawford, M. (2008) "Introduction", in Chase, JL; Crawford, M. and Kaliski, J. (2008) *Everyday Urbanism*, Second Edition, The Monacelli Press: New York, pp.6-11.
- Economic Intelligence Unit (EIU) (2022) The Global Liveability Index 2022: Recovery and Hardship, Available at <http://www.eiu.com/> (accessed 16 August 2022).
- Enwezor, O. (2003) Terminal Modernism: Rem Koolhaas, Discourse on Entropy, in Patteeuw, V. (ed.) What is OMA: Considering Rem Koolhaas and the Office for Metropolitan Architecture, NA: Publishers, Rotterdam.
- FGN (2021) Nigeria's First Nationally Determined Contribution-2021 Update, FGN, Article

4.2 of the Paris Agreement under the United Nations Framework Convention on Climate Change (UNFCCC), Prepared by the Federal Ministry of Environment, Abuja, 2nd July 2021.

FRN (2019) One Health Strategic Plan 2019-2023, Available at

https://ncdc.gov.ng/themes/common/docs/protocols/93_1566785462.pdf,
(accessed 26 March 2021).

Gilligan, C. et al. (1988) *Mapping the Moral Domain: A Contribution of Women's Thinking to Psychological Theory and Education*, Cambridge, MA, Harvard University Press.

Gilligan, C. (1982) *In a Different Voice*, Cambridge, MA, Harvard University, Graduate School of Education.

Godlewski, J. (2010) "Alien and distant: Rem Koolhaas on Film in Lagos, Nigeria", *Traditional Dwellings and Settlements Review*, 21:2, pp.7-20.

Hancock, T. and Duhl, L. (1988) *Promoting Health in the Urban Context*. WHO Healthy Cities Papers No.1, 1988.

Kickbusch, I. and Gleicher, D. (2012) Governance for Health in the 21st Century, WHO, Available

at https://www.euro.who.int/data/assets/pdf_file/0019/171334/RC62BD01-Governance-for-Health-Web.pdf (accessed 16 August 2019).

Kickbusch I. (2011) "Global Health Diplomacy: How Foreign Policy can influence Health", *British Medical Journal*, 342: d3154.

Koutonin, M.R. (2015) Lagos-2025: Governor Ambode and State Development Plan, Available at

<https://www.naija.ng/484675-lagos-2025-governor-ambode-state-development-plan.html>, (accessed 3 August 2018).

Okparaocha, C. (2014) In Lagos, under bridges still home to many, The Nigerian Tribune December 8, 2014, Available at <http://www.tribune.com.ng/quicklinkss/inside-lagos/item/23489-in-lagos-under-bridges-still-home-to-many> (accessed 10 December 2014).

Olufemi, O. (2020) Non communicable diseases and Urban Planning, interview with Engage Africa, July 2020.

Peake, L.J. (2015) "The Suzanne Mackenzie Memorial Lecture: Rethinking the Politics of Feminist

Knowledge in Anglo-American Geography", *The Canadian Geographer*, vol. 59, no. 3, fall, pp. 257-266.

Roberts, J. (2020) 10 FACTS ABOUT HOMELESSNESS IN NIGERIA, Blog May 1, 2020, Available at

<https://borgenproject.org/homelessness-in-nigeria/> (accessed 16 August 2022).

Tribune (2020) 170 million Nigerians Living in Dirty Environment — Report, By Tribune Online On

23 December 2020, Available at <https://tribuneonline.ng.com/170-million-nigerians-living-in-dirty-environment-%e2%80%95-report/>

Tronto, J.C. (1987) "Beyond Gender Difference to a Theory of Care", *Signs*, 12, 644-662.

UN-Habitat (2005) *The State of the World's Cities 2004/2005: Globalization and Urban Culture*,

UN-Habitat, Nairobi, Kenya.

UNICEF (2018) Water, Sanitation and Hygiene, Available at

<https://www.unicef.org/nigeria/water-sanitation-and-hygiene> (accessed 16 August 2022).

WHO (2022) One Health, Available at https://www.who.int/health-topics/one-health#tab=tab_1

(accessed 18 August 2022).

WHO (2007) Our cities, our health, our future: Acting on social determinants for health equity in

urban Settings, Report of the Knowledge Network on Urban Settings, WHO Commission on Social Determinants of Health, Prepared by the WHO Centre for Health Development, Kobe, Japan.

World Cities Report (WCR) (2022) Envisaging the Future of Cities, United Nations Human Settlements Programme (UN-Habitat), Nairobi, Kenya, 30030, Nairobi, Kenya, www.unhabitat.org

Zinsstag, J., Waltner-Toews, D., and Tanner, M. (2015) Theoretical Issues of One Health. In

Zinsstag, J., Schelling, E., Waltner-Toews, D., Whittaker, M., Tanner, M., eds. *One Health: The Theory and Practice of Integrated Health Approaches*. Wallingford: Centre for Agriculture and Bioscience International (CABI), 2015: 16–25, Swiss Tropical and Public Health Institute, Basel, Switzerland. DOI [10.1079/9781780643410.0016](https://doi.org/10.1079/9781780643410.0016)