Name: Obiadazie Michelle C. College: Medical & Health Sciences

Matric. No.: 19/MHS01/272 Department: Medicine & Surgery

 ASSIGNMENT: You were taught that in writing an academic essay, you should start with the perception of a problem. Perceive a problem in your present environment, formulate a researchable topic for it and create a write-up.

**Introduction**

Urban growth has played a major role in human civilization and has been the center of a wide variety of demographic, socio-economic and cultural responses which cause urban areas to be one of the most dynamic systems and the milieu of environmental, ecological, demographic and socio-economic problems.

Urbanization is not a new phenomenon in Africa. In fact, Africa is reported to have the highest growth rate. In relation to Nigeria, the challenges posed by the rapid population growth have also been accompanied by rapid rates of unplanned urban expansion. This is responsible for millions of people living in sub-standard and in some cases sub-human environment plagued by filth and grossly inadequate social amenities.

Urban sprawl also called sprawl or suburban sprawl, is a global phenomenon which refers to the expansion of poorly planned, low-density, auto-dependent development, which spreads out over large amounts of land putting long distances between homes, stores and work and creating a high segregation between residential and commercial uses with harmful impacts on the people living in the area and the ecosystems and the wildlife that have been displaced.

Simply put, urban sprawl is land conversion from non-urban to urban, or expansion of urban area into neighborhood agricultural, forest, wetland and other non-urban lands.

Sprawls are generally identified as low-density, haphazard development spiraling outward from urban cities. Understanding the causes, consequences, and policy implications related to sprawl can provide important insights on how to construct more sustainable communities over the long term.

**Case Study: Kaduna State**

Looking at the immediate environment, I would use Kaduna-South in Kaduna state as the case study.

Due to the riots and fights which stated breaking out by the year 2000, Kaduna has found itself separated into regions based on religion. Kaduna metropolis is seen to be divided into north and south with the greater majority of Muslims living in the north and the Christians left to reside in the south. Former governors of the state were seen to develop the northern part of it as ethnocentrism found itself to be the order of the day. The development of the northern part of the state led to the proper appropriation of land based on residential, industrial and recreational purposes, rending it more planned and developed.

However, no such thing was done to the south. It also seemed as though the government had no inclination in the development of the south. With no plan put in place, the inhabitants aware of the lack of planning for the area saw it as freedom to build in areas they saw fit.

New leadership which brought about new ideologies on state planning deemed it fit to open Kaduna by putting new roads in place. This was also to reduce the amount of traffic congestion found in particular places in the state, thus the idea of linking the roads.

The new roads however, were put in places which were looked at as settlements which mostly used footpaths as a means of movement seeing as no major highways existed in the areas. With the roads, more people saw it as an invitation to build in the areas and thus, the situation whereby the houses are located so close to the road, leading to the increase in the probability of accidents.

**Characteristics of Sprawl**

Characterization of sprawl is of immense significance considering the profound implications it has for economic efficiency, social equity and environmental sustainability of the urban environment. The phenomenon of sprawl has been described in various ways, ranging from development aesthetics to local street patterns. Common characteristics include:

1. Strip Development: a development in which residencies or commercial properties line roads extending outwards from urban centers. Homes arranged along rural highways present hazards related to traffic safety.
2. Undefined edge between urban and rural areas: sprawling residential development extending outward from urban centers tends to blur the division between urban and rural domains. This development pattern is often associated with the encroachment of open space and agricultural lands.
3. Leapfrogging patterns of development: another well-known characteristic of sprawl is dispersed development, which favors the development of parcels situated further out in the countryside over the vacant lands adjacent to existing development. Leapfrogging creates a haphazard development that consumes large amounts of lands.
4. Automobile dependency even for short trips: because sprawling development patterns create large distances between dwelling units and segregates different land uses, residents are forced to rely on automobiles at the expense of alternative forms of transportation. Also, the cul-de-sac dominated street patterns within these neighborhoods foster a lack of connectivity and serve as an obstacle for walking and biking to nearby destination.

**Consequences**

While this research identifies various social and economic consequences associated with urban sprawl, this article focuses on environmental problems. These negative impacts include, among others, air pollution resulting from automobile dependency, water pollution caused in part by increase in impervious surfaces, the loss or disruption of environmentally sensitive areas, such as critical natural habits, reductions in open space and overall reduction in quality of life. More specifically, the reliance on automobiles has contributed to reductions in air and water quality as well as the accelerated depletion in fossil fuels.

**Sprawl Reduction Policies**

While the causes and consequences may seem daunting, there are policies and techniques that can reduce the proliferation of unsustainable growth patterns.

Some policies which can be implemented to prohibit or direct growth away from some locations include: subdivision regulation, zoning provisions, building permit limits and urban growth boundaries. Some incentive based techniques include: special taxing districts, clustering houses, development density bonuses and transfer of development rights from rural to urban settings, can encourage the containment of growth areas within a central business district.

These policies, among others can help reduce sprawl without compromising needed development. The end result is cleaner air and water protection of natural systems, lower infrastructure costs and increased quality of life. It must however be important to note that in most cases, a single management growth policy is not enough to mitigate outward expanding development, thus it must be part of a multiple strategy plan.

**References**

Ndabula, Christopher, Jidauna, Godwill Geofrey, Averik, Peter Danjuma, Oyatayo, Taofik Kehinde, Abaje, Iliya Bitrus, Ali, Andesikuteb Yakubu. Characterization of sprawling in Kaduna Metropolitan Area. *American Journal of Environmental Protection.* Vol. 3, No. 3, 2014, pp. 131-137. doi: 10.11648/j.ajep.20140303.14

Brueckner, J.K. Urban sprawl: diagnosis and remedies.  *International Regional Science Review* **23**¸160-171 (2000)