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Core City Slums and Vulnerability: A Theoretical and Analytical Approach

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Abstract- **Cities,'the magnet of hope' are pulling people into themselves without preparing for them, this influx leads to overconcentration of people in the already blighted cities centers, this creates new problems or aggravates the existing ones which makes the residents vulnerable to various dangers. This work reviews a few urban planning theories, triangulated them and introduces a modified version. It also analysis vulnerability in the slums of core city centers and suggested strategies that can reduce it. The work will be of tremendous use to policy makers, urban planners, academic community and the general public.**

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I. Introduction

The crisis of human settlement has become a topical issue and debate on it has been on for many years now. There are both intellectual and professional viewpoints on the need for controlling human settlements to enhance their growth and sustainability. The study of settlements occupied an important position in the historical development of geography. Geographers and sociologists have over the years tried to explain variations in spatial pattern and their consequences Atser (2006). To find a compatible multiple theories therefore, (a sort of divergence) directed at presenting scientific explanations of the result of the researchers and then look for a convergence of evidences in other to draw overall conclusions in the social sciences Afolabi (2012). Against this background has the researchers engaged in a critical reflection on the rationale behind formulation of some urban planning theories, triangulate, modify and used them as spring board for the formulation of another model, since models form an integral and accepted part of present-day geographical thinking and teaching as opined by Waugh (1995).

a) The Synthesis

Urban Growth Theories; Concentric Growth Zone, Multiple Nuclei Theory, Regional Land use Model, Sector Theories were triangulated with a view to discovering zones of convergence, test their validity and use them as spring board for the formulation of a new theory/model or at least modify the existing ones. Basically, all the theories were formulated upon the fundamental premise of the desire to understand better man-environment interaction, all the four theories embrace in the concept of Central Locations; a place where population and activities concentrate, for instance to Von Thunen in Regional land Use Model, it is 'Markets; the city center, around which all other activities take place with specific reference to agricultural practices, to Earnest Burgess in Concentric Growth Zone, it is 'Central Business District' (CBD), so it is to Homer Hoyt in Sector Theory with additional observations, Chauncy and Edward (1945) in Multiple Nuclei Theory opined that cities grow in wedge shape or sector starting from 'Central Place' called (CBD).In the same vain, they also unanimously agreed that from the central location the expansion starts and grows to all directions e.g. Regional Land Use Theory says activities of agriculture surround the 'market' (Central Place), Concentric Growth Zone says 'the city expands in rings', while Sector Theory expresses the view of 'outward progression of growth' starting from a center, to buttress this stand, Multiple Nuclei Theory talks of 'outskirt growth of city' from a center. Beside these, both concentric growth zone and sector theory described settlement of immigrants along the second ring and along the roads, identifying areas of likely over population and overconcentration of human activities and its attendant problems that include slum development.

IPAT Theory of Ehrlich (1971) comes in at this stage; Impact = Population X Affluence X Technology. According to this formula, the impact of a population on the environment is the product of the size of the population (**P**), its level of affluence (**A**), and the impact of the technologies (**T**) that sustain the level of affluence. The implication of this formula is straightforward – the more people are, the more they consume, and the more technology they use, the greater the damage to the environment. Ehrlich (1971) pioneered the approach which presented environmental degradation as the consequence of too many people. 'Too many cars, too many factories, too much pesticide, too little water, too much carbon dioxide – all can be traced easily to too many people'. It explained the impact of overpopulation on the environment at the core or central place of the city and its impact on the people.

Theory of Slumification – A Modified Version

Sequel to this background therefore, authors proposed the model below CSC = PC= AC = EP = HH;

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Where: CSC = Core City Centers, PC = Population Concentration,
AC = Activity Centers, EP = Environmental Problems, HH = Health Hazards.

The hypothesis stands on the following assumptions with reference to Africa cities.

CSC = Are places of earliest settlers, places around Kings palaces / first administrative centers with daily market places, worship centers or shrines, the places came before the introduction of modern urban planning so they were not planned, those places have highest concentration of human population and their activities in these cities, That the place is characterized by old dilapidated buildings, That these areas has worst environment due to poor sanitation, environmental pollution of various sources e.g. automobile, domestic, noise and others, therefore, it can be concluded that Central Places in Africa cities possesses all the characteristics of slum most especially, about 1km radius to Kings palaces Abumere (1985).

Both physical evidences and literature support this line of though, especially, when scholars have independently identified and unanimously agreed that (CBD) is characterised by old buildings because it is the oldest part of the cities, limited access to space due to high value placed on it, high traffic congestion that resulted from converging transport routs and its associated urban stress, highly populated day and depopulated night, high crime rate, pollution of different forms etc. Mabogunje (1962),(1968),Abumere (1987), Agboola (1987), Laurent (2002), Morife (2010), Obayomi (2012), Owoeye (2013),Oyeniyi *et al*.(2015) etc.

Massive immigration into cities, skyrocketing urban population, rapid growth of informal settlements including slums and squatter, increasing environmental, social and economic problems are clearly the trend of events in African societies, even developed world has its own share. Ola in (2011) opened that since the creation of man and the effects of cohabitation, there have been the consequences of population explosion and concentration underlying nearly all environmental problems is the rapidly increasing human population. Simplify but highly influential formula of Frank (1973) states that population growth contributes to the destruction of the environment, thereby endangering all forms of life.

The word slum is thought to be the Irish phrase *'slome'* meaning 'it is *a bleak or destitute place'*. An (1812) English dictionary define slum to mean *'a room with low going ones in life'* Piece Egan in (1935) define slum as *low, un-frequent part of the town*. It is a heavily populated urban area characterised by substandard housing and squalor Owoeye and Omole (2012). Corecityslumsare the slum communities described by Agboola (1987) as traditional slums, Abumere (1985) as slum within one kilometer radius from the city center and Laurent (2002) as the oldest and largest slum is the core area of the city, which covers the entire pre-colonial towns; a large part of the ancient walled city can be seen as a slumhe concluded.

Core city slums are blighted communities characterised by high population densities per unit area of land, precarious housing condition, poor and unhygienic environmental situation, physical layouts are relatively haphazard, urban services are minimal or not-existing decayed infrastructure, more than three persons share a room, majority of the residents are low-income earners, they are tenants who outnumbered owner residents at a ratio of 9 to1, morbidity and mortality rates caused by diseases stemming from poor environmental conditions are significantly higher than what is obtainable in planned areas of towns, tenure in the informal settlement is largely lacking, poor and costly safe drinking water situation, extremely poor sanitary situation and breeding ground for all forms of anti-social vices, just to mention a few.

II. Vulnerability in Core City Slums

Pelling (2003) defines vulnerability as the exposure to risk and an inability to avoid or absorb potential harm, he defines physical vulnerability as the vulnerability of the physical environment; social vulnerability as experienced by people and their social, economic, and political systems; and human vulnerability as the combination of physical and social vulnerability. Cardona (2003) and (2004a) opined that vulnerability originates as a consequence of three factors: (a)Physical fragility or exposure, linked to the susceptibility of human settlements to be affected by natural or social phenomena due to its location in a hazard-prone area, (b)Socio-economic fragility, linked with the predisposition to suffer harm due to marginalization, social segregation in human settlements, and due to poverty and similar factors; and (c)Lack of resilience, related to the limitations of access and mobilization of resources, and incapacity to respond when it comes to absorbing the impact of a disaster. It can be linked with under-development and the lack of risk-management strategies.

These descriptions fit the condition of core city slums and the residents there of, the people living in slum environment are exposed to risks and they do not have ability and capacity to absorb or resist potential harm, they are vulnerable to physical, social, and most often economic environment. The people are largely poor; their economic lives are unstable and fragile, they eke out there lives on daily paid and energy sapping jobs, the conditions that did not only forced them into residing in slum environment but make them more vulnerable and unable to resist, respond and cope effectively associated dangers that goes with such live style.

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Chambers (2006) stated that the main asset of most poor people is their bodies. These include the plain facts that the poorer people are, the more it matters to be able to work and earn, the more they depend on physical work, and the higher are the personal costs of physical disability. At the same time, the bodies of the poorer are more vulnerable than those of the less poor: they are more exposed to sickness from insanitary, polluted and disease-ridden environments both at work and at home, and to accidents in their work; they are weaker, with malnourishment and previous sickness tending to reduce resistance to disease and to slow recovery; and the poorer have less access to prophylaxis or to timely and effective treatment.

Housing quality, condition or habitability is a serious concern in slum environment because it is usually generally precarious, exposing the residents to extreme danger of insufficient protection against extreme climatic elements, such as rainfall, wind, and temperature. The lives of slum dwellers are also exposed to danger of collapse building especially in core city centers in Africa, where we have the first set and oldest buildings, most of which were built over one hundred years agowith inferior materials and are dilapidated; roofs are rusted and linking, windows and doors are neither in poor condition or not in place the walls are not plastered, the floors not paved rather they are moist. Clark (2009) notes that damp housing affects physical health because it has the potential to increase dust mites and moulds, both of which are allergenic. The rooms are small so are the windows, hence rooms/houses are not well ventilated.

Poor health results in increased hospital admissions and more absences from school and work, with implications on the economy. Basic facilities are generally lacking; no motor able roads within the core city slum communities in case of emergency, most city center slums do experience seasonal flooding due to lack of planning and poor waste management practices which pollutes underground water, bathrooms and toilets are situated outside the houses denying the residents of the expected privacy and exposing them to possible harassment by opposite sex.

Slum dwellers are undoubtedly exposed to dangers of overcrowding and insufficient living space. Since the slum communities seem to be the only affordable to poor migrants, more people are clogged in an unhealthy environment that allows diseases to strive and spread quickly especially when there is an outbreak of diseases. Ant ova *et al* (2008) demonstrated a relationship between crowded living conditions and asthma.

People residing in slum environment are also vulnerable to inadequate sanitation which remains a leading cause of diarrheal disease and mortality among children in developing countries and particularly in urban slums. The Global Burden of Disease Study undertaken by the World Bank (2006) indicates that 15% of all the deaths in children fewer than 5 years in low and middle-income countries are directly attributable to diarrheal disease, 88% percent of the diarrheal disease burden is caused by unsafe sanitation, water, and hygiene. NISER (2011) asserted that water and sanitation disease are responsible for 60 per cent of environmental health. Among water borne diseases, diarrhea dispropo-rtionately affects children under the age of five poor health among children adversely affects the attendance rate at schools.

Children safety is always an issue in slum environment, issues arises from poor child spacing practices, low rate of immunization, poor health seeking practices, poor antenatal care and low rate of life birth Sarah *et al* (2002). Many children in the slums start work at a very early age with no prospect of getting any education. They make money by rag picking trawling through rubbish dumps to retrieve anything that can be sold, all these make them vulnerable to many more disease and injury, researches have sown that people that handle waste or live around dump sites are infected with gastrointestinal parasites, warms and related organisms. Vector insect and rodents can also transmit various pathogenic agents(amoebic and bacillary dysenteries, typhoid fever, salmonellosis, herpes, pneumonia, various parasites, cholera, yellow fever and others). Similarly, children sell newspapers in traffic jams; they peddle drugs or beg on the streets making them and other residents' alike more vulnerable to severe accidents, and cyclic poverty.

Omotoso and Oyeniyi (2015)reported that overwhelming majority ofcore city centers slum inhabitants depend on hand-dug wells for their water needs, most of these wells are too shallow, poorly covered, or not covered at all, these results in polluted surface water from the surrounding area gaining direct entrance into them, raw sewage do find their ways in to wells through seepage, run-off and flood enters directly during heavy rains especially when some wells are just one foot higher than the earth surface. Free ranged animals like goat sheep and fowls pass nights on wells and their dungs equally enter the wells directly, other negative consequences of poor sanitation on water drinking water safety in the core city slums includes citing of wells close to septic tanks, burial sites of dead family members buried within the compounds and dump sites located within the living space, these are repository of filth through which many contaminants pollutes the well waters. Water is drawn manually from the wells and the drawers are left on the wells or beside the wells on a bear floor, these drawers serve as piggy-back for germs and dirt getting into the well waters especially when many wells are not covered, poorly covered or poorly constructed Oyeniyi et al (2015).

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As reported by Agbola (2007) slum residents don't usually have legal right to the property they occupy. The situation that justifies forced eviction especially in blighted core city centers. There is substantial empirical evidence showing that urban development, commercial interests, city beautification projects and public interest are popular reasons advanced by the authorities when forced eviction is done Thomas(2014). Residents of blighted city centers are highly vulnerable to forced eviction as the communities usually face demolition when government reclaims the illegally occupied land for other usages Ramash (2010). As a matter of facts, many of them live with perpetual perturbation of forced eviction, because they know that when it happens, people don't just lose their homes, they lose their hard earned but meager properties especially their means and places of livelihood, family and kinship are separated, pupils change school or drop out of school, forced to seek newjob, new home, and start live afresh into a new and uncertain future in the new environment.

The slum environment is the perfect breeding ground for a wide range of social problems. High unemployment often causes men to stay around the home growing increasingly frustrated with their pathetic situation and the worsening poverty this thereby making them to be vulnerable to committing crimes and engage in anti-social vices. Slum and squatter settlements create a zone of terror and dread for the city people where almost all evils are found, the residents are therefore vulnerable to social stigma from the rest of the society and harassment by security agents; indiscriminate arrests, suspicion and lack of trust.

III. Conclusion

Our immediate environment is as important as the dresses on us. It plays crucial roles on our wellbeing but unfortunately, majority of uson planet earth today congregate and live in blighted or core city centers that fall below the expected standard. We are therefore vulnerable to all forms of dangers that resulted from overconcentration of man on blighted core city centers. This exposes human lives to all forms of dangers that resulted in poor man-environment relationship. No responsible government should allow this precarious situation to continue. Policy Implication

It is time for policy makers and urban planners to seek workable, acceptable and practicable ways of controlling influx of population into cities. To reduce pathetic and life threatening situation in the extremely vulnerable slums of our core city centers government should frantically seek ways of tackling poverty; create jobs, adopt educational policies that is not only theoretical but informal, semiformal and practical. Housing policy that combines affordability, improved technology, the use of local materials and guarantees quality should be introduced. Satellite towns could be of help in reducing overcrowding and its associated vulnerability in our city centers. Public enlightenment on personal safety, security and cleanliness can go a long way in alleviating live threatening conditions and perturbation. Provision of infrastructural facilities within range, slum re-development strategies better waste management methods togetherwith economic empowerment for the dwellers may reduce vulnerability in our core city slums

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