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# Urbanization and disaster in Accra, Ghana. Does human life matters?

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This article discusses urbanization and disaster in the capital city of Ghana — Accra. Urbanization refers to the population shift from rural to urban residency, the gradual increase in the proportion of people living in urban areas, and the ways in which each society adapts to this change. It is predominantly the process by which towns and cities are formed and become larger as more people begin living and working in central areas. Urbanization has its own good and evil. In spite of the positive effect of urbanization, in Ghana one can conclude that urbanization has done more harm than good. This article reveals some catastrophic effects of urbanization and suggested solutions.

**Keywords:** urbanization; disaster; District Assembly Common Fund (DACF); population; Environmental Impact Assessment; environmental auditing; Municipal, Metropolitan and the District Assemblies (MMADAs); Community-Based Health Planning Services (CHPS)

Urbanization is relevant to a range of disciplines, including urban planning, geography, sociology, economics and public health. Therefore, the government of every country has a lot to do when it is experiencing a massive shift of people from rural to the urban centers.

Over the years, there has been an overwhelming number of people moving from the rural areas to the capital city Accra, in search for greener pasture.

The most recent estimates show that the population of urbanized Accra is 2.43 million. One of the most interesting things to note about the demographics of Accra is the high population of younger residents. Approximately 56% of the population are under the age of 24 (worldpopulationreview.com/world-cities/accra-population) [4]. This trend is not expected to change in the coming years.

The large concentration of people in Accra has led to numerous environmental disasters ranging from floods, fire outbreaks and other related air and land pollutions. These problems have bedeviled the government by increasing government spending whenever any of the aforementioned occurs. This article would be useful to the government of Ghana and Policy Makers on knowing the impact of urbanization and provide appropriate measures to remedy the situation.

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Let's turn to the catastrophic effect of urbanization in Accra, Ghana. In spite of the potential positive economic impact of urbanization in Accra, the rapid growth of population in the city has done more harm than good in recent years. As discussed earlier, the environmental disaster rate in the capital city for the past five years due to urbanization cannot be overemphasized. Two of such disasters have comprehensively been reviewed; they are: The 2015 Accra Flood and October 2017 atomic Gas Explosion.

The 2015 Accra Flood. Of all natural hazards, floods are by far the most hazardous, frequent and widespread throughout the world [5. P. 2]. This makes flooding an important subject of study, particularly in Third World countries, where consistent and appropriate research on it has been lacking. Accra, the capital city of Ghana, has a metropolitan population of about 2.5 million people [7. P. 58]. Each rainy season (April to October) it experiences rain fed floods that lead to the destruction of property, the loss of life, and a slowdown of transportation and economic activity. The population and area occupied by Accra have been increasing [7. P. 61].

One major disaster which resulted out of urbanization which deserve a critical attention is "The 2015 Accra Flood". The 2015 Accra flood resulted from heavy continuous rainfall in Accra, the largest city in Ghana. The rain started on 1 June 2015. Other causes of this flood is as a result of the improper planning of settlement in Accra, choked gutters which block the drainage system and a few other human factors. The floods have resulted in heavy traffic on the roads in the city and also a halt in commercial activities as markets were flooded and workers trapped. Mayor of Accra Metropolitan Assembly, Alfred Oko Vanderpuije described the flooding as critical. At least 25 people have died from the flooding directly, while a petrol station explosion caused by the flooding killed at least 200 more people [3].

According to the Environmental Protection Agency, National Disaster Management Organization (NADMO) and other environmental experts, the primary cause of the flood was as a result of rapid urbanization in the city and congestion with scattered settlement in other part of the city that prevented the heavy rain to the drainage system.

Accra's drainage, garbage collection and disposal problems have been identified as also contributors to flooding because they are either non-existent or are in poor conditions (World Bank, 1996). According to Ayitey-Attoh [1. P. 99], increased urbanization in Accra and the inability of city authorities to match planning with it resulted in about 1.7 million people living in areas with minimal infrastructure.

Atomic Junction Gas Explosion. Another disaster management case is the Atomic Junction Gas Explosion. It occurred on 7 October 2017, when a liquefied natural gas station located around Atomic Junction in Accra, Ghana. News gathered from the explosion reports that the gas station exploded first before affecting a Total Filling Station nearby which also caught fire. There were a number of fatalities, with at least seven deaths and 192 injured. The total cost of property destroyed was estimated to be GHS 1.503.010 (\$311.497.23980). The root cause of the accident from our point of view is rapid urbanization. The high demand of gas in the capital city has forced gas sellers to mount stations at dangerous locations of the city to cater for the ever increasing population. In Accra, almost every household depends on gas causing demand to exceed supply over the years [6]. Our over ten years' experience living in the capital city has experienced a

lot of surprises where one has to form a long queue at various gas stations to purchase gas. Most business people have seen the fuel/gas filling station as a lucrative to satisfy the increasing population thereby mounting the stations at any area of their choice provided they can pay authorities. Potential threats to human life are not considered. The establishment neither do not go under proper environmental auditing nor environmental impact assessment. Feasibility studies from concerned organizations shows that till urbanization is reduced, gas explosions will continue occur.

There are some solutions to urbanization, from our point of view.

1) Creation of more jobs. With the existence of the local government system in Ghana, the government should channel more resources to the Municipal, Metropolitan and the District Assemblies (MMADAs) to develop the district level and create more jobs to the youth. This can be done by increasing the District Assembly Common Fund (DACF) to the MMDAs whilst checking corruption.

2) Building of schools. The government should not focus on building schools in the urban centers alone but also should pay attention to the rural areas. At moment all the 10 regions in Ghana have public universities but this is not enough. The better one are in the capital City, Accra. To curb urbanization, more tertiary institutions should be built in the various district with vocational education.

3) Population control. Key stakeholders in urban areas must provide campaigns and counseling for effective medical health clinics and family planning to help reduce the high rates of population growth. In Ghana, each MMDA has Health Directorate charged with the responsibility to educating the local people with health promotion and disease control. The author suggests that the Community-Based Health Planning Services (CHPS) compounds which operates under the various Health Directorates in the country would be oriented towards family planning programs. With this family planning options would be made accessible across the entire urban area with the objective of controlling diseases and population growth.

4) Urban Planning. Urban planning deals with physical layout of human settlements. The primary concern is the public welfare, which includes considerations of efficiency, sanitation, protection and use of the environment, as well as effects on social and economic activities. There is the need for the government to restructure/redesign the urban areas to cater for the ever increasing population. This will go a long way to prevent potential disasters which may result out of flood and other human related activities.

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# Убранизация и стихийные бедствия в Аккре, Гана. Что значит человеческая жизнь?

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В статье рассматриваются урбанизация и стихийные бедствия в столице африканской страны Ганы Аккре. Урбанизация проявилась в перемещении населения из сельской местности в города, что привело к постепенному увеличению числа людей, живущих в городских районах, а также к поиску способов адаптации населения к этим изменениям. Это процесс, посредством которого города и поселки формируются и увеличиваются по мере того, как все больше людей начинают жить и работать в центральных районах. У урбанизации есть свои плюсы и минусы. Однако несмотря на положительный эффект урбанизации, в случае Ганы можно сделать вывод, что она принесла больше вреда, чем пользы. Статья раскрывает некоторые катастрофические последствия урбанизации и предлагает способы их разрешения.

Ключевые слова: урбанизация; стихийные бедствия; общественный фонд; население; оценка воздействия на окружающую среду; экологический аудит; муниципальные, столичные и районные органы власти; службы планирования здравоохранения на уровне общин; Гана; Аккра

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