

Summary

Waste management has become one of the biggest challenges confronting developing countries, including Ghana. Increased population growth and rapid urbanisation have resulted in increased generation of volumes of waste in Accra. Within a period of fifteen years, Accra has grown very rapidly with a population of around 5 million and an annual growth rate of 4% making it one of the fastest growing metropolises in Africa. This phenomenal growth has contributed to the myriad of municipal waste management problems facing the country.

To change the mindset of citizens on polluting the environment with waste, it is key to educate Ghanaians on proper waste management, waste separation, recycling and reuse of waste. Ideally, plastic, glass, metal and paper waste would be sent to recycling facilities which can then be returned as a renewable product. But the reality is entirely different in Ghana.

Context

Currently, 2,800 metric tons of municipal solid waste is generated per day in Accra. Approximately 2,200 tons is collected leaving a backlog of 600 tons in open drains and water bodies resulting in flooding during the rainy season.

There are negative attitudes of the general public towards the environment in general. There is also inadequate waste infrastructure, equipment, and operational funds to support waste management activities. Additionally, there is poor planning for waste management programmes. Unplanned

human settlements also make solid waste management difficult. A lack of political will to enforce by-laws on sanitation and building regulations by the Metropolitan, Municipal and District Assemblies is also a challenge. About 80-100 cesspit emptiers dislodge liquid waste directly into the sea at Lavender Hill in Accra. Uncontrolled human settlements lead to slum formation with a lack of adequate sanitation facilities provision. Furthermore. there is no culture of maintenance for the environment. There is a lack of adequate coverage of the central sewage system as well as an inability to connect to the central sewage system. This is made more complex due to rapid population growth with limited information for national planning. efficiency.

Aims

- → Find out causes of flooding including waste management
- → To access Government initiative on waste management as a solution to major causes of flooding in the city of Accra
- → Evaluate roles of residents in waste management in the city of Accra
- → To make recommendations as to how waste management could be made more effective reducing flood

The Project

As per the objectives of the study, 50 households in Accra was sampled for interview, 10 Civil Engineers, 3 Project Managers and 2 Sanitation Engineers were also interviewed. Threepage quantitative questionnaires were given to them with a minimum of 48 hours to finish answering and adding any additional comments to the last page of the sheet.

It was found that almost 97% of all public owned and managed sewage/faecal treatment plants are non-functional. Out of 35 institutional treatment plants, only 4 are operational, therefore, only 1% of sewage generated is treated. In terms of basic sanitation, it is reported 54% of households use shared, often unhygienic, facilities, 13% have access to unimproved toilets, and 23% practice open defecation. Health threatening pan latrines still exist in our cities and towns. The practice of draining cesspit emptiers directly into the ocean poses both environmental and health impacts some of these includes smell, pollution to the water, deterrent for tourism, a loss of aquatic life and health impacts of populations living close to the water. The 1992 Constitution of Ghana section 41(k) spells out clearly that, it shall be the duty of every citizen to protect and save the environment. Criminal Code, 1960 (Act 29); 'provides that whoever places or permits any refuse, or rubbish, or any offensive or otherwise unwholesome matter, on any street, yard, enclosure, or open space, except at such places as may be set apart by the local authority or health officer for that purpose commits a punishable offence'.

Personal Impact

My understanding and knowledge of environmental management and protection has been growing after my study with UCEM, at any meeting I always educate fellow construction professionals on environmental issues and impact of our activities on our environment. I have plans to seek support to educate Ghanaians on waste management solution and its impact on the environment. After evaluation and analysis of the survey it came out that residents do not know the impact of improper waste management and its impact on the environment.

Results

Plastic waste is a major challenge to flooding in the city of Accra. The local authority does not have resources to manage and collect waste in the city, or to separate the waste generated for recycling. It was also established that all the guidelines and bylaws are just paperwork, no proper implementation has been put in place by Government. The amount charged by the waste management companies is very high and residents feel they can dump refuse anywhere without consequence.