were not requested to pay for waste collection though their monthly average monthly income (GH¢ 260) earned could support the payment.

The landfill did not meet the requirement of a sanitary landfill as in the case of KMA and therefore could be described as an open dump. Though the landfill had a weighbridge, gas recovery system, leachate collection system they were not functioning. The landfill too had no internal access and sited near a settlement. Additionally, waste was not usually separated into their various components before final disposal. This led to burying of some valuable resources in the landfill which could have been otherwise re-used. More so, burning of waste occurred in the landfill. The waste management institutions were unable to deliver efficient services as they were under resourced. Skips for storing waste generated were woefully inadequate. In the whole Metropolis one hundred and eighty-six (186) skips were supplied particularly in the low-class residential areas.

However, about 230 extra skips were required by WMD and ZoomLion Ghana Ltd. to be supplied to the low-class residential areas. Also, about four thousand (4000) dustbins extra were required to be supplied in the middle- and high-class residential areas in the Metropolis as against about one thousand, five-hundred and ninety-seven (1,597) dustbins distributed. Equipment for waste transportation were also inadequate. These include: "oboafo" tricycle, compaction trucks, roll on/roll off trucks and skip loaders. For instance, two hundred (200) "oboafo" tricycles were needed by the waste management institutions for the door-to-door collection. However, about one hundred (100) tricycles were available. Furthermore, the compaction trucks which were used for the door-to-door collection were only two (2) for the entire Metropolis. Therefore, four (4) were required to ensure regular collection.

Conclusion

The study concludes that the key factors affecting effective waste management in the Tamale Metropolis inadequate skip supply for storing waste; high population to skip ratio; lack of routine collection of waste, poor methods of waste management and inadequate resources for waste management institutions to effectively collect the waste generated. To effectively tackle the problems enumerated, the following measures are recommended; provision of adequate skips and dustbins, regular collection of waste, use of Integrated Solid Waste Management Model, proper Management of Landfill, adequate resourcing of Waste Management Institutions. If the above recommendations given are well taken and implemented, it will bring about effective solid waste management; ensure a clean environment and curb any possible outbreak in TAMA.

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