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POLICY BRIEF

Waste or Wealth? The Economic Returns to Sanitation Investment in Ghana



KEY FINDINGS

- Ghana suffers 30 times more from the consequences of poor waste management than it invests in preventing them.
- Annual health and productivity losses from poor waste management exceed 6.2 billion Ghana cedis (GHS) including GHS 5.58 billion in direct medical expenses. This sharply contrasts the GHS 180.2 million spent across all Metropolitan, Municipal, and District Assemblies (MMDAs) on waste management and sanitation.
- Preventable sanitation-related diseases such as malaria, cholera, and typhoid account for 31.9 million lost work/school days and an

estimated 107,222 premature deaths annually.

- Raising investment in waste management in Ghana to the level recommended for lower-middle-income countries, an average of GHS 1,028 per ton of waste, could generate discounted annual benefits of GHS 556 for every GHS 1 invested.
- The increased investment is expected to reduce sanitation-related morbidity by 97.4% and attributable mortality by 81%; leading to annual economic benefits ranging between GHS 58.1 billion and GHS 67.2 billion over the period 2025 to 2032.

INTRODUCTION

Waste management and sanitation have emerged as critical pillars for sustainable development in Ghana, sitting at the nexus of public health, environmental integrity, and inclusive economic growth. Rapid urbanisation, population growth, and changing consumption patterns are generating unprecedented volumes of solid and liquid waste, overwhelming the capacity of many of Ghana’s Metropolitan, Municipal, and District Assemblies (MMDAs). The consequences of inaction are severe, manifesting as widespread pollution, increased public health crises, and significant, often hidden, economic losses. The World Bank estimates that poor sanitation alone costs Ghana’s economy approximately USD 290 million (about 1.6% of GDP) annually through premature deaths, healthcare costs, and lost productivity.

This report reframes the national discourse on waste and sanitation, moving it from a perceived social obligation to a strategic, high-yield development investment. It presents a comprehensive economic analysis that quantifies the immense costs of the current inadequate systems and, conversely, the substantial economic and social returns that strategic investment in this sector can unlock. The study’s objective is to provide a clear, evidence-based case for repositioning waste and sanitation as a high-yield development investment, essential for achieving Ghana’s national goals and its commitments to the Sustainable Development Goals (SDGs).

METHODOLOGY

This study employed a mixed-methods approach, utilising both quantitative and qualitative data to assess the economic costs and benefits of waste and sanitation management in Ghana. Quantitative data, primarily from MMDAs’ 2025 composite budgets, and supplemented by interviews, quantified economic costs associated with waste collection and disposal, informing a long-term investment framework. Qualitative data, gathered through key informant interviews and non-participant observations in various settings, captured stakeholder perspectives on daily challenges, economic impacts on businesses, health effects, and the influence of landfill management.

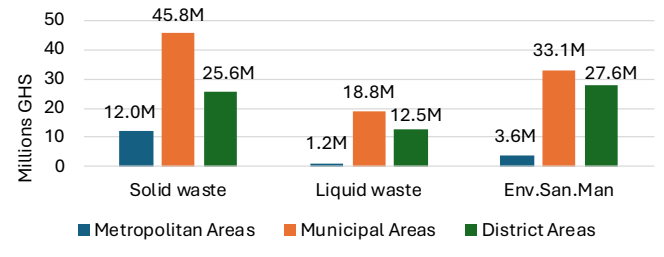
A triangulation approach was used for data analysis, integrating quantitative economic evaluations of health, productivity, and environmental impacts with qualitative insights, and employing scenario-based cost-benefit modelling to evaluate investment implications and inform a prioritisation framework aligned with Ghana’s National Solid Waste Management Strategy.

FINDINGS

Economic Cost of Poor Waste Management

The economic impact of inadequate waste and sanitation in Ghana far exceeds current government investment, with annual health and productivity losses surpassing GHS 6.2 billion. This includes GHS 5.58 billion in direct medical expenses and GHS 650 million in lost productivity due to absenteeism, largely caused by preventable diseases such as malaria, cholera, and typhoid. These illnesses result in 31.9 million lost work and school days and 107,222 premature deaths each year. Alarminglly, this annual cost dwarfs the GHS 180.2 million spent by all Metropolitan, Municipal, and District Assemblies (MMDAs) on waste and sanitation management (see Figure 1). In other words, Ghana spends over 30 times more on managing the consequences of poor sanitation than on preventing them.

Figure 1. Graphical illustration of the estimated current costs associated with waste management disaggregated across MMDA types



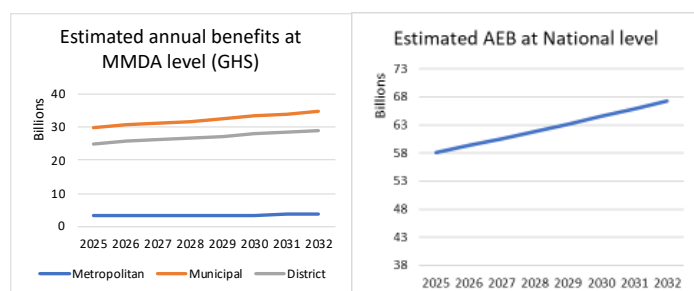
Source: Authors’ construct from 2025 MMDA composite budget

Business-as-usual approach versus “best-case” approach and investment prioritization framework

A comprehensive cost-benefit analysis unequivocally demonstrates that investment in waste and sanitation yields exceptionally high returns, positioning it as a highly effective development intervention. Comparing a “Business-as-Usual” (BAU) approach against a “Best-Case” scenario mirroring average Lower-Middle-Income Country (LMIC) investment levels, the analysis reveals significant economic benefits. Even under the current, inefficient BAU spending of an average of GHS 38.78 per ton of waste, every GHS 1.00 invested generates a discounted annual benefit of approximately GHS 180, underscoring the intrinsic value of existing services. However, by elevating investment to the discounted LMIC average, which is the best case scenario, of GHS 1,028 per ton of waste managed, the returns dramatically increase, with each GHS 1.00 invested projected to yield GHS 556 in discounted annual benefits. This enhanced investment is anticipated to slash sanitation-related morbidity by 97.4% and attributable mortality by 81.0%, propelling total annual economic benefits (AEB) from GHS 58.1 billion in

2025 to GHS 67.2 billion by 2032 (see Figure 2), primarily driven by substantial health cost savings (55.3%) and productivity cost savings (44.7%).

Figure 2. Estimated total annual benefits in best-case scenario if GoG commits to standardised investments based on LMIC average

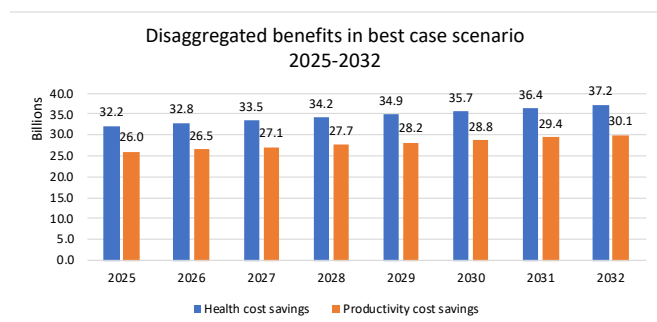


Source: Authors' estimates, 2025

Disaggregated benefits in terms of savings in health and productivity cost

Further analysis of the estimated annual benefits, stratified into health and productivity cost savings, reveals that health cost savings represent approximately 55.3% of the total simulated annual benefits. In contrast, productivity cost savings, calculated as the sum of cost savings from preventable premature deaths, averted absenteeism from work, and reduced working capacity (presenteeism), account for 44.7% of the annual benefits (see Figure 3).

Figure 3. Estimated annual health and productivity cost savings in best-case scenario



Source: Authors' estimates, 2025

CONCLUSION AND RECOMMENDATIONS

This study establishes that insufficient waste and sanitation management in Ghana is not merely a social and environmental concern, but also, a significant economic burden, with the nation incurring billions of Ghana Cedis annually in avoidable health costs and lost productivity -- sums that far exceed the minimal investments currently directed at addressing the underlying issues. This unsustainable situation hinders Ghana's developmental goals. However, the identified investment gap simultaneously presents a

substantial opportunity for growth. Strategic and scaled-up investment in waste and sanitation transcends being just another expenditure. Rather, it represents a high-yield opportunity to boost public health and enhance economic productivity. Such investment directly fosters environmental sustainability and strengthens human capital, creating jobs, stimulating circular economy innovation, and improving the quality of life for all Ghanaians.

Based on this analysis, the following recommendations are proposed for the Government of Ghana and other stakeholders, including development partners and industry actors.



Source: Field photo, December 2025

1. Scale up investment in sanitation and drainage systems: Given that health costs vastly exceed current spending, a significant increase in budget allocations for sanitation, drainage, and environmental health is economically imperative. Prioritise interventions offering the highest health returns, such as safe faecal sludge management and the elimination of open refuse dumps contributing to widespread diseases.

2. Prioritise high-risk urban and peri-urban areas: Direct targeted capital investments toward dense urban slums, flood-prone neighbourhoods, and underserved peri-urban areas where health and environmental risks are most severe. This focused approach will reduce disease incidence, lower mortality, and alleviate the disproportionate burden on vulnerable communities, with specific support for municipal and district assemblies to address these hotspots.

3. Prioritise and increase investment in waste management to align with best practice and expected standards for lower-middle income countries: Considering that current levels of investment fall significantly short of best practices, investment in waste management should be increased to match the levels expected of lower-middle income countries. With expected benefits under the best-case scenario being thrice the benefits enjoyed under the current

investment levels, there is economic and social justification for additional significant investments in waste management.

4. Integrate health and economic benefits into budgeting and planning: Current budgeting frameworks often overlook the substantial “avoided cost” benefits of improved sanitation, which must be fully integrated into all cost-benefit analyses and medium-term expenditure frameworks. This reframing will establish waste and sanitation as a critical economic and public health investment, rather than a discretionary environmental expense.

5. Develop targeted programmes for disease-linked infrastructure: National and donor-funded programs should prioritise infrastructure directly aimed at reducing high-cost, preventable diseases. This includes increasing investments in household and

communal latrines, faecal sludge treatment plants, improved stormwater drainage, and reliable solid waste collection to eliminate vector breeding sites.

6. Strengthen institutional capacity and data-driven governance: To ensure effective and sustainable investments, MMDAs require strengthened institutional capacity for planning, budgeting, monitoring, and regulating waste and sanitation services. This involves routinely integrating environmental and public health data into local planning, enabling better resource targeting, continuous tracking of economic returns, and formalising the informal sector.

7. Regulate informal private waste operators: Municipal Assemblies should encourage Aboboyaa operators to get regular, active health insurance, as well as go for health screening regularly (for example, every six months).

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