# Better health through mproved sanitation

By Dr Bjorn Lomborg

ROUND 2.5 billion people in the world lack access to dignified sanitation services. In Ghana, coverage is abysmally low.

Every cedi

spent on this

initiative will

worth a little

yield a benefit

Only 22 per cent of the urban population has improved, non-shared facilities, with shared toilets common service option in cities, accounting for over 60 per cent of coverage.

over GHc4. With rapid urbanisation further complicating the issue, sanitation is a serious challenge for the country, Programmes to improve the situation have been implemented, but no systematic scale-up has so far been projected to boost urban sanitation across the country.

# Sanitation/health

Studies have confirmed strong links between sanitation and health. Poor sanitation contributes to several tropical diseases, under-nutrition and diarrhoes, a major public health threat and a leading cause of disease and mortality among children under five years.

It also causes a loss of productivity due to time lost to work or spent taking care of loved ones, and queuing for public or compound toilets. Access to improved sanitation services is a key target in the UN Sustainable Development Goals (SDGs), and low coverage, especially in urban settings, is considered a threat to achieving almost all other goals.

Ghana has made great social and economic advances in recent years, with

impressive GDP growth and reduced poverty, but more remains to be done. With so many areas demanding the government's attention, how can decision makers plan policies that will do the most good for every cedi spent of limited public resources?

### **Ghana Priorities**

Ghana Priorities, a collaboration between the

National Development Planning Commission (NDPC) and the think tank Copenhagen Consensus, aims to answer this question by providing clear data on the most costeffective initiatives for the country, from education

to treating malaria. The 28 teams of economists that contributed to the project calculated not only the economic, but also the social and environmental costs and benefits of public policies, to find the smartest ways to improve the lives of Ghanalans

To find effective solutions to Ghana's urban sanitation problem, Mr Bismark Dwumfour-Asare from the University of Education in Winneha, independent consultant Mr Biorn Larsen and Mr Brad Wong from Copenhagen Consensus studied interventions that provide toilet subsidies for urban households. They focused on both the impact of a subsidy alone and a subsidy with additional support to metropolitan, municipal and district assemblies (MMDAs) for better enforcement of sanitation by-laws.

Both interventions target urban households and compounds practising open defecation, using public toilets or sharing a toilet, with the interim goal of reaching a situation where no more than three households will share

improved sanitation facilities.

The subsidy aimed at lessening the cost burden will be of approximately GHe4,000, equivalent to the cost of a bio-digester toilet. Extra enforcement will add an incentive for households and landlords to meet their obligation.

While enforcement makes the intervention more expensive, it also improve compliance and is more likely to have a larger effect on Ghana's urban sanitation situation.

The cost of the subsidy with improved enforcement over a 20-year period was estimated by the researchers at GHe16 billion, assuming 75 per cent of households targeted actually build a

The government will only pay for about a quarter of this cost - about GHe4 billion whereas the vast majority of cost falls on households and landlords.

This includes toilet cleaning and maintenance costs and lost rental space worth GHes billion and GHe7 billion respectively. However, the value of benefits from the intervention over the 20-year period is much higher, estimated at GHe69 billion. Four hundred and sixteen lives could be saved and two million cases of disease avoided per year. But the largest benefits would come from increased productivity and cost savings from no longer having to use public toilets

Every cedi spent on this initiative will yield a benefit worth a little over GHe4.

## Subsidy

The researchers also studied providing only a subsidy equivalent to 100 per cent of the toilet cost, without emphasis on enforcement of

sanitation by-laws. Existing enforcement regimes would continue without the intervention directly seeking any improvement, which means the uptake rate would be significantly lower.

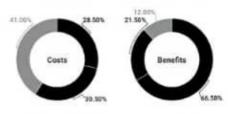
The cost was estimated at approximately GH¢2 billion in total, shared among the government, landlords and households and the benefit at over GHett billion. This intervention would generate social and economic benefits more than five times higher than the original investment, but at an average uptake rate of only 10 per cent, it would do little to help resolve Ghana's critical urban sanitation problem.

High population densities and demand for rental room destined for living instead of toilets contribute to nonshared sanitation rates being so low in Ghanaian cities. However, these interventions could increase rental revenues for landlords, given that tenants would likely be willing to pay more for units with improved sanitation.

Overall, this study provides policy makers with databacked options to improve urban sanitation, moving Ghana closer to achieving its development goals.

The writer is the President of the Copenhagen Consensus & Visiting Professor at Copenhagen Business School.

### Improving urban sanitation



- toilet and enforce
- intenance, cleaning
  - @ real estate
- ided public toilet costs @ health benefits

Toilet subsidy without by-law enforcement





Toilet subsidy with improved by-law enforcement





on Authors paper assuming BS discount rate, quints and benefits aver 35 years

