

Slums in Mumbai and Rio de Janeiro

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“Slums are a manifestation of the two main challenges facing human settlements development at the beginning of the new millennium: rapid urbanization and the urbanization of poverty.”

Anna Kajumulo Tibaijuka, Executive Director, United Nations Human Settlements Program

Water Borne Diseases



Of Mumbai's 12 million residents, 6.7 million of them live in slums. In the Ganesh Murthy Nagar slum in the Colaba district, one resident was quoted, “We had one small, smelly toilet for a population of 10,000.”

According to the United Nations (UN), less than 50% of slum households have sanitary conditions and clean water. The impurities in the water lead to diarrheal diseases, cholera, typhoid, hepatitis, etc. Poor water quality is a leading cause of mortality worldwide and a defining danger of living in slums.¹

Many health conditions are worse in slums than in urban or rural areas. According to PLoS Medicine, “A visit to the *favelas* of Rio de Janeiro, the shantytowns of Nairobi, or the *jhopadpatti* of Mumbai shows that a slum, by any name, is an unhealthy place to live.”²

Despite the lack of clean water for those who live in slums, Mumbai has 24 water parks which use up a total of 50 billion liters of water every day, while millions are suffering in the outer city slums.¹



An extremely polluted beach in Rio de Janeiro. Every week, Mumbai produces a mound of garbage that weighs twice as much as the Empire State building.

Abstract

Developing cities in the current state of the world have comparable problems no matter their geographical distance. An example of this phenomenon can be seen by looking at the cities of Mumbai, India and Rio de Janeiro, Brazil. This study compares how these two cities are similar in how the lack of sanitation affects the quality of life for slum-dwellers. More specifically, this research will examine the need for clean water, waste disposal, and the prevalence of waterborne diseases in Mumbai, India and Rio de Janeiro, Brazil.

Waste Disposal



One of the world's largest open-air landfills, Jardim Gramacho dump.

“As large piles of garbage dot the streets and the city's dumping grounds overflow with a colorful mixture of its residents' discards, waste management continues to be one of Mumbai's most serious problems.”³

More than 200 wells capture the carbon dioxide and methane that emanate from the decomposing rubbish and pipe the gases to a facility run by Brazil's state-controlled energy company, Petrobras.⁵

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Quality of Life



There are more than 300,000 rag pickers in Mumbai, of which 120,000 are kids below the age of 14.

Every hour that people don't work, they are losing money. Some kids start at five in the morning and work until eight or nine in the evening.

People are exposed to medical waste and all kinds of noxious gases, many suffer from respiratory problems, and tuberculosis is very common.⁵

According to the Center for Social Research at the Brazilian economic group Fundacao Getulio Vargas (FGV)(Higher Education Institution), “Rio de Janeiro lacks the sanitation services required to host the 2014 World Cup.”⁶

The city suffers from a lack of adequate infrastructure that can effectively capture all the liquid sewage/waste that come from residences and businesses.⁷



In the city of Rio de Janeiro, over 2 billion liters of raw sewage end up in fresh water sources daily, and only 30% of the urban population has a sanitary infrastructure to properly handle its wastewater.