

SANITATION: AN URGENT TRANSFORMATION

- Joining efforts

Limeira unit (SP)



Expansion of the water supply and wastewater collection systems is urgently needed in Brazil. The numbers related to this deficit are alarming and the pace of growth lags behind what is needed to achieve the universalization targets established in the National Basic Sanitation Plan (PLANSAB). The goal is for 100% of Brazilian territory to be supplied with potable water by 2023, and for 92% of all of the wastewater produced in the country to be treated by 2033.

However, with the current pace of investments, this goal will not be met. Projections from the Brazilian National Confederation of Industry (Confederação Nacional da Indústria – CNI) indicate that if the annual volume of investments remains unchanged, this outcome will only be reached in 2060.

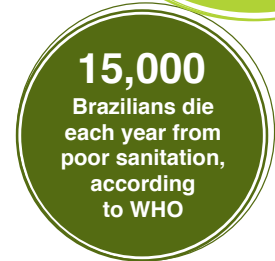


Why is basic sanitation so important to people’s lives?

1 + PUBLIC HEALTH AND LOWER INFANT MORTALITY

The United Nations Children’s Fund (Unicef) estimates that in 2016, over 3,000 children under the age of five died in Brazil because of diarrhea caused by insufficient access to treated water, wastewater collection and appropriate hygiene conditions. According to data from the Brazilian Institute of Geography and Statistics (Instituto Brasileiro de Geografia e Estatística – IBGE), for every 1,000 children born in the country in 2017, 15 are likely to die before reaching the age of five - and nearly half of these deaths could have been prevented with better sanitation conditions and adequate medical care.

Expansion of wastewater collection also contributes to reducing the proliferation of dengue, chikungunya fever and the zika virus, illnesses transmitted by the Aedes Aegypti mosquito, which reproduces in standing water. Approximately BRL 1.45 billion could be saved each year on health expenditures, according to estimates from Instituto Trata Brasil.



2 + PRODUCTIVITY AND EDUCATION

One of the main inputs for production in Brazil is the water used in manufacturing and agriculture. Expanding the collection system and wastewater treatment systems improves the quality of water in water bodies and contributes to confronting the risk of water scarcity that exists in many of Brazil’s drainage basins.

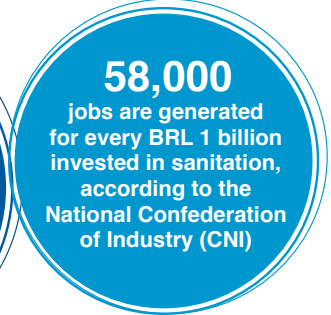
In addition to this aspect, sanitation also lowers the incidence of diarrhea and vomiting, which are major causes of absenteeism among workers and students. In practice, this means more time dedicated to work and more education, which will result in more a qualified workforce in the job market in the long term.



3 + ECONOMIC GROWTH

Investment in basic sanitation drives economic activities and job creation, directly and indirectly. Universalization of services adds an average of 18% to property values, according to estimates from Instituto Trata Brasil, and would result in increased tax collection at the municipal level.

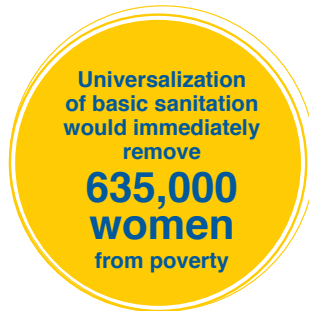
In 20 years, income generated directly from sanitation investments would reach BRL 309.1 billion, with over BRL 489.9 billion being created through the hiring, supplier contracts, purchase of inputs and other aspects. In the tourism sector alone, for example, gains from universalization could reach BRL 42.9 billion, according to the Instituto Trata Brasil study.



Source: Saneamento Básico: Uma Agenda Regulatória e Institucional (Basic Sanitation: A Regulatory and Institutional Agenda). Brazil's National Confederation of Industry (CNI), Brasília 2018.

4 + GENDER EQUALITY

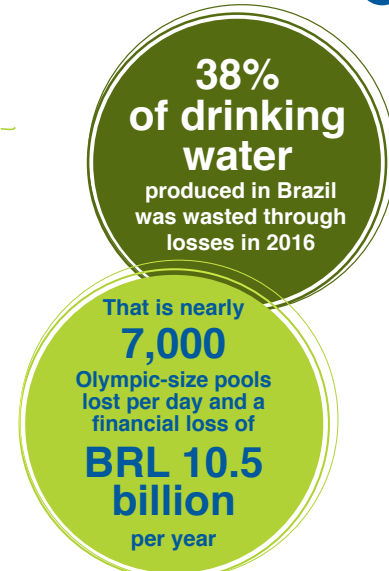
An unprecedented study entitled "Sanitation and the Life of the Brazilian Woman," done by BRK Ambiental in partnership with Instituto Trata Brasil, with support from the Global Compact Network Brazil, shows that one out of every four women in Brazil have inadequate access to treated water and wastewater collection and treatment. This survey indicates that illnesses caused by a lack of sanitation impact the productive time of Brazilian women 10% more than Brazilian men. Girls of school age without access to basic services score around 46 points lower compared to other students, and by the age of 14, girls suffer more from school absences due to diarrhea and other gastrointestinal ailments. These data and analyses were curated by Ex Ante, an economic consulting firm.



Source: O Saneamento e a Vida da Mulher Brasileira (Sanitation and the Life of the Brazilian Woman). BRK Ambiental and Ex Ante Economic Consulting, São Paulo, 2018.

5 + ENVIRONMENTAL CONSERVATION

Water scarcity is an increasingly serious problem that is more and more present in Brazil's cities. In recent years, a drop in the volume of water available in the reservoirs in practically every region of the country has impacted people's lives and slashed productivity across various sectors. In this sense, reducing losses in supply systems is a critical issue for the sector to combat, through investments in mitigating leaks, faulty equipment and theft. With environmental actions, sanitation companies can contribute to the conservation and recovery of degraded areas and increase public awareness in concession areas.



Source: Perdas de Água: Desafios ao Avanço do Saneamento Básico e à Escassez Hídrica (Water Losses: Challenges to Advancements in Basic Sanitation and Water Scarcity). Instituto Trata Brasil, São Paulo, 2018.

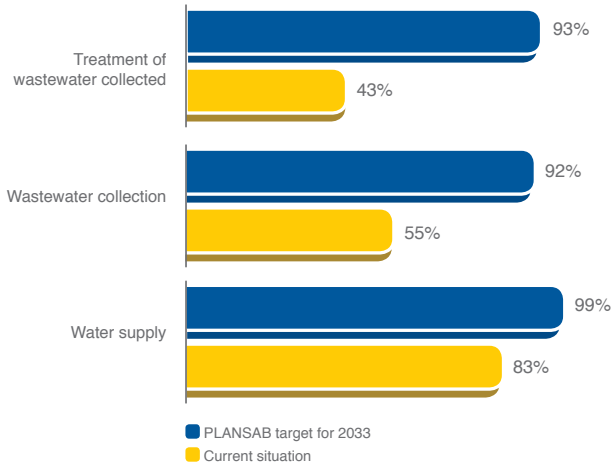


Joining efforts

Universalization of basic sanitation is urgently needed in Brazil and the National Basic Sanitation Plan (PLANSAB), launched in 2013 by the federal government as a strategic guideline for expansion of water and sewer services nationwide, sets forth how this can be achieved. Only half of the country's population is currently fully served by wastewater collection and just 43% of wastewater collected is treated, with the rest being discharged into rivers and seas as raw sewage, causing environmental damage and harming human health.

When the sanitation deficit is regarded at the regional level, this situation takes on even more worrisome dimensions. While 80% of the population in Southeastern Brazil is served by wastewater collection, a mere 10.2% of those living in the North region and 26.9% of people in the Northeast region have access to this service.

THE SANITATION DEFICIT IN BRAZIL



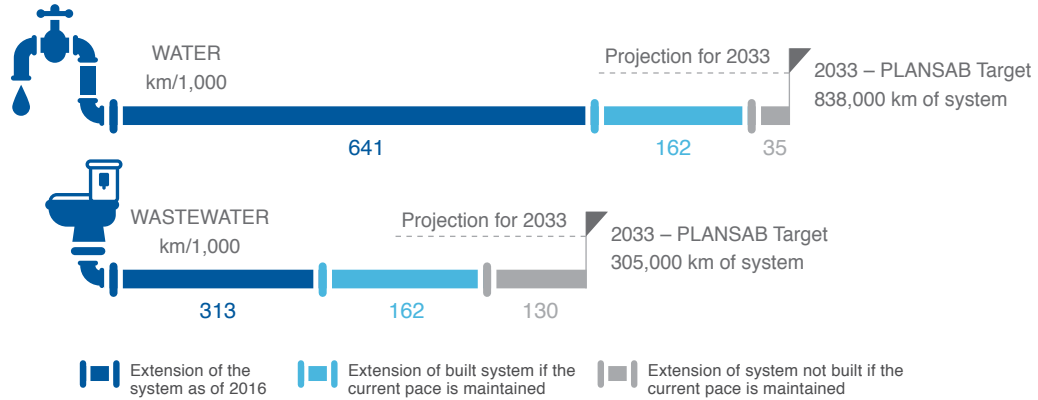
To reach the targets proposed by the PLANSAB, investment in expanding the sanitation system is fundamental. The amount invested annually should be around BRL 23.8 billion, but only half of this amount has been invested, according to a survey by Abcon/Sindcon, organizations representing private water and wastewater services concessionaires. If this pace is maintained, the deficit in 2033 will be 9.4 million Brazilians with no water supply and 44.5 million without wastewater collection.

With scant financial resources, Brazil's federal, state and municipal governments are unable to make an investment of this magnitude on their own. Partnership with the private sector is necessary in order for the country to conclude projects and expand water and wastewater systems in the number and at the speed required over the coming years. Just 6% of cities in Brazil are currently served by private companies, most of which have populations of fewer than 20,000. These companies account for 20% of total investments. According to a survey by the National Confederation of Industry (CNI), from 2014 to 2016, private sanitation companies invested BRL 418 per inhabitant, versus a national average of BRL 188.

Regulation in the industry is still a challenge for the government and private companies to work jointly in this sense.

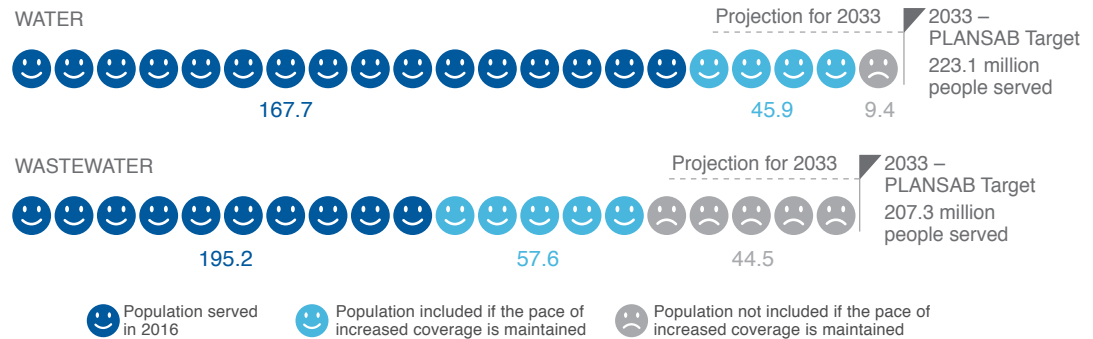
EXTENSION

of the water distribution and wastewater collection system x PLANSAB Target (km/1,000)



POPULATION SERVED

by water and wastewater services x PLANSAB Target (millions of inhabitants)



Source: Panorama da Participação Privada no Saneamento do Brasil 2019 (Panorama of Private Participation in Sanitation in Brazil 2019) | Brazilian Association of Concessionaires (Associação Brasileira das Concessionárias Privadas de Serviços Públicos de Água e Esgoto – ABCON) and National Union of the Private Concessionaires of Public Services of Water and Sewage (Sindicato Nacional das Concessionárias Privadas de Serviços Públicos de Água e Esgoto – SINDCON)

The joint presence of private companies and government-held private companies in the sanitation sector, in addition to benefitting customers with lower rates and more efficient provision of services, is necessary to make it feasible to universalize sanitation. The study "Comparações Internacionais: Uma Agenda de Soluções para os Desafios do Saneamento Brasileiro" (International Comparisons: An Agenda of Solutions for the Challenges of Brazilian Sanitation), conducted by the National Confederation of Industry (CNI), discusses successful experiences in countries where practically 100% of wastewater is collected and treated. In Germany, independent companies already account for 64% of public services, while in Chile, this number is at nearly 94%.

We also contribute to building a new paradigm for sanitation in Brazil, with more sustainability and development, through participation in trade associations and civil society organizations. As one of the companies supporting Instituto Trata Brasil, for example, we help to draft studies and analyses that add to public perception of the benefits of water and wastewater treatment.

On the Brazilian Business Council for Sustainable Development (CEBDS), we are signatories to the Brazilian Business Commitment to Water Security and we take part in the Aquasfera initiative, a platform that joins projects from different companies that are aimed at improving water resource management in production chains.

At trade associations, we contribute to building development proposals for water and wastewater services and to exchanging knowledge in forums and at thematic chambers between members. Notable on this front are participations in the Brazilian Association of Infrastructure and Basic Industries (ABDIB), the



Unit in Goiás state

Brazilian Association of Private Concessionaires of Public Water and Wastewater Services (ABCON) and the Brazilian Association of State Basic Sanitation Companies (Associação das Empresas de Saneamento Básico Estaduais – AESBE).

We are moreover signatories to the Global Compact, a United Nations (UN) initiative that promotes engagement by business organizations with ten principles to bolstering human rights, dignified working conditions, environmental protection and anti-corruption practices. Through these participations, we incorporate the most up-to-date concepts of sustainability into our corporate strategy and direct investments so that the beneficiaries of our activities can have a positive impact on the greatest number of people possible.