

FS 1.2 Sanitation Access in Latin America and the Caribbean: Definitions and Data

- Sanitation access data at the regional level, especially regarding wastewater management and treatment, are generally estimates based on assumptions and outdated data, making it important to review and contrast different sources of information.
- According to the AmericasBarometer 2019 survey, approximately 94 percent of households in LAC have access to sanitation facilities connected to either the sewer network or a septic tank, with country level access rates varying from 69 percent (Nicaragua) to 99 percent (Chile). Approximately 4 percent of the population do not have access to improved sanitation facilities [1].
- Access to exclusive sanitation facilities, which is important for maintaining public health, varies significantly across countries. In most countries, urban households have higher rates of access to exclusive facilities than rural households [1].
- There are large data gaps throughout the region with respect to proper wastewater disposal. The data that does exist is outdated but indicates low rates of treatment for municipal wastewater (35 percent average throughout the region) [1].

Access to safely managed sanitation in LAC

To gain a comprehensive understanding of sanitation access in the region, we analyzed data from the 2018/2019 Latin American Public Opinion Project (LAPOP) Americas Barometer survey, using the framework of safely managed sanitation as defined by the WHO/UNICEF Joint Monitoring Program (JMP). We examine critical aspects of access to safely managed sanitation, including facility type, exclusivity, and wastewater treatment.

The use of the AmericasBarometer data is intended to serve as a complementary data source to the JMP data. It is consistent with the JMP findings regarding the elements of access to safely managed sanitation and their definitions, but because the Americas Barometer is a regional survey, the information can be produced at a more detailed level of disaggregation and does not require the assumptions necessary when harmonizing disparate surveys with different methodologies as required under the JMP methodology (Box 1).

The JMP is the entity in charge of measuring progress towards Sustainable Development Goal 6, which aims to achieve universal access to water and sanitation. To measure progress towards this goal and inequalities in service levels between countries, the JMP has developed the sanitation ladder, whose rungs are designed to allow countries at different stages of development to compare their progress in the time (Figure 1). The main indicator for SDG 6.2 (Indicator 6.2.1a) measures the percentage of the population with access to safely managed sanitation, so the provision of safely managed sanitation is the framework we use to define the elements of access analyzed in this document. "Safely managed" sanitation, as the highest level of service on the ladder, requires that households have improved sanitation facilities that are not shared with other households, and that excreta produced are separated from human contact and treated safely [3]. This fact sheet analyzes each of these components and their current situation in LAC.

Box 1: JMP Assumptions

Because the JMP takes on the difficult task of harmonizing data from many different data sources, its methodology includes a number of necessary assumptions. In many of the countries' national household surveys there are no response options that allow the categorization of water sources or sanitation facilities as "improved." In these cases, JMP classifies 50% of the ambiguous responses as improved and the other 50% as unimproved. The response options presented in the AmericasBarometer survey clearly conform to the JMP definitions, eliminating the need for such adjustments [2].

	SAFELY MANAGED Use of improved facilities that are not shared with other households and where excreta are safely disposed of in situ or removed and treated offsite.
	BASIC Use of improved facilities which are not shared with other households.
	LIMITED Use of improved facilities shared between two or more households.
	UNIMPROVED Use of pit latrines without a slab or platform, hanging latrines or bucket latrines.
	OPEN DEFECACTION Disposal of human faeces in fields, forests, bushes, open bodies of water, beaches, and other open spaces or with solid waste

Figure 1: New JMP Sanitation Ladder [2]

Improved Sanitation Facilities

Sanitation facilities can be classified into two groups: improved and unimproved. This classification depends on the technology used both in terms of the installations within the home and what happens to the wastewater produced. Improved sanitation facilities allow wastewater to be hygienically separated from human contact.

Improved sanitation facilities*	Unimproved sanitation facilities
Flush/pour, flush toilets connected to piped sewer systems, septic tanks or pit latrines, pit latrines with slabs (including ventilated pit latrines), and composting toilets.	Flush/pour flush toilets to open drain or elsewhere, pit latrines without a slab/open pit, hanging toilet/latrine, bucket latrine and no facilities: forests, fields, bushes, open bodies of water, beaches, and other open spaces or with solid waste.

Table 1: JMP definition of improved vs unimproved sanitation facilities [2].

According to the 2019 AmericasBarometer survey, approximately 93.8% of households in LAC have access to sanitation facilities that are connected to the sewer network or a septic tank. These findings reflect data from the JMP, which states that 93% of the LAC population has access to improved sanitation facilities (limited, basic or safely managed sanitation on the sanitation scale) [4]. Sewer connection rates vary significantly between countries and between urban and rural areas, with septic systems and latrines being the most common sanitation solution in rural areas (Figures 2 and 3) [1].

While most households in LAC have access to facilities that either connect to a sewer system or septic tank, there are many countries wherein some households rely on unimproved latrines or open defecation, which can cause public health issues and ecological degradation. Across household surveyed, 4.25% of households use unimproved latrines and <0.1% practice open defecation, while the JMP estimates these utilization rates at 5% and 2%, respectively [1], [4]. It is relevant to note that the JMP classification of open defecation also includes households without access to sanitation facilities, while the AmericaBarometers survey specifies additional options for those without access, such as the use of public facilities or use of neighbors' facilities.

Sanitation facilities

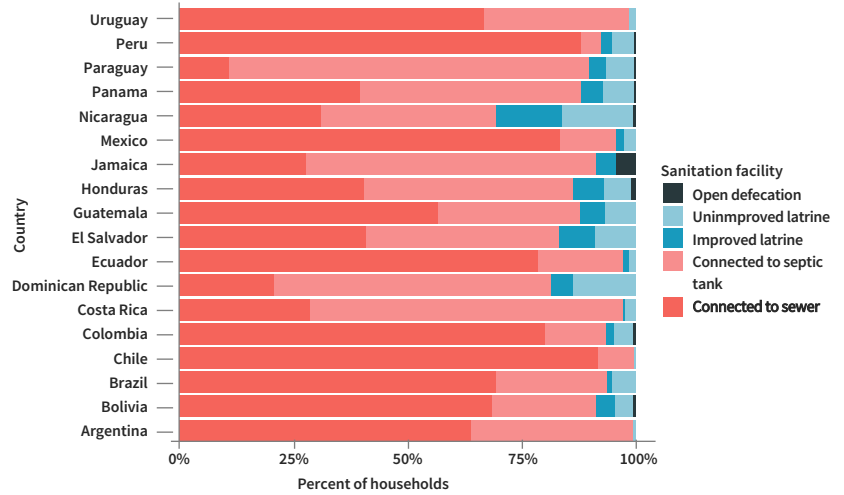


Figure 2: Percent households with access to different sanitation facilities types, broken down by country [1].

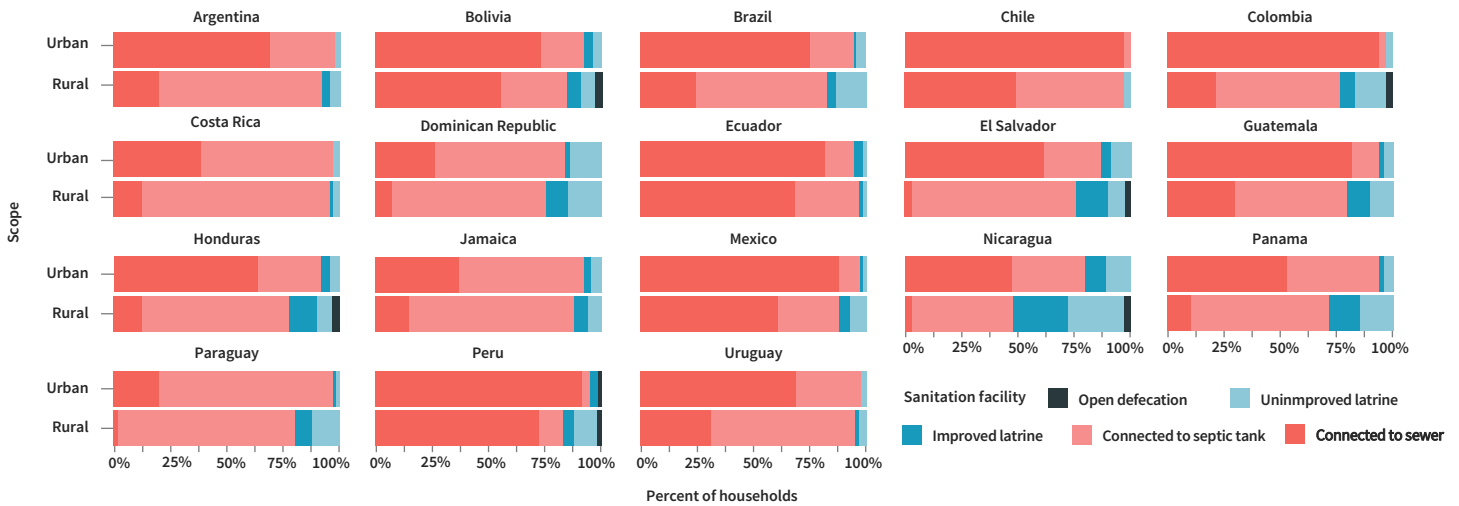


Figure 3: Percent of households with access to different types of sanitation facilities in urban and rural communities [1].

Exclusive Facilities

For facilities to be considered “safely managed”, they must not be shared with other households [3]. According to data from the 2019 Americas Barometer survey, the rate of access to exclusive sanitation services ranges from approximately 78% to more than 97%. In general, households in rural communities are more likely to lack access to a dedicated sanitation facility, however this situation varies between countries [1]. Overall, approximately 5.5% of LAC's population shares sanitation facilities according to the AmericasBarometer survey. While the JMP does only publishes data on access to exclusive facilities for improved sanitation facilities, this complements the JMP data, which states that 4% of the region's population has access to an improved facility that is shared with other households [4].

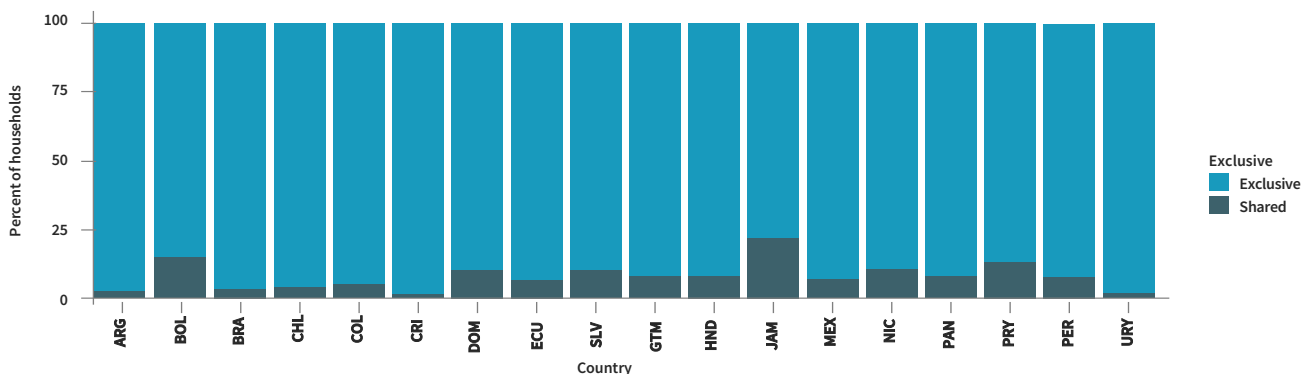


Figure 4: Percent of households with exclusive vs shared access to sanitation facilities [1].

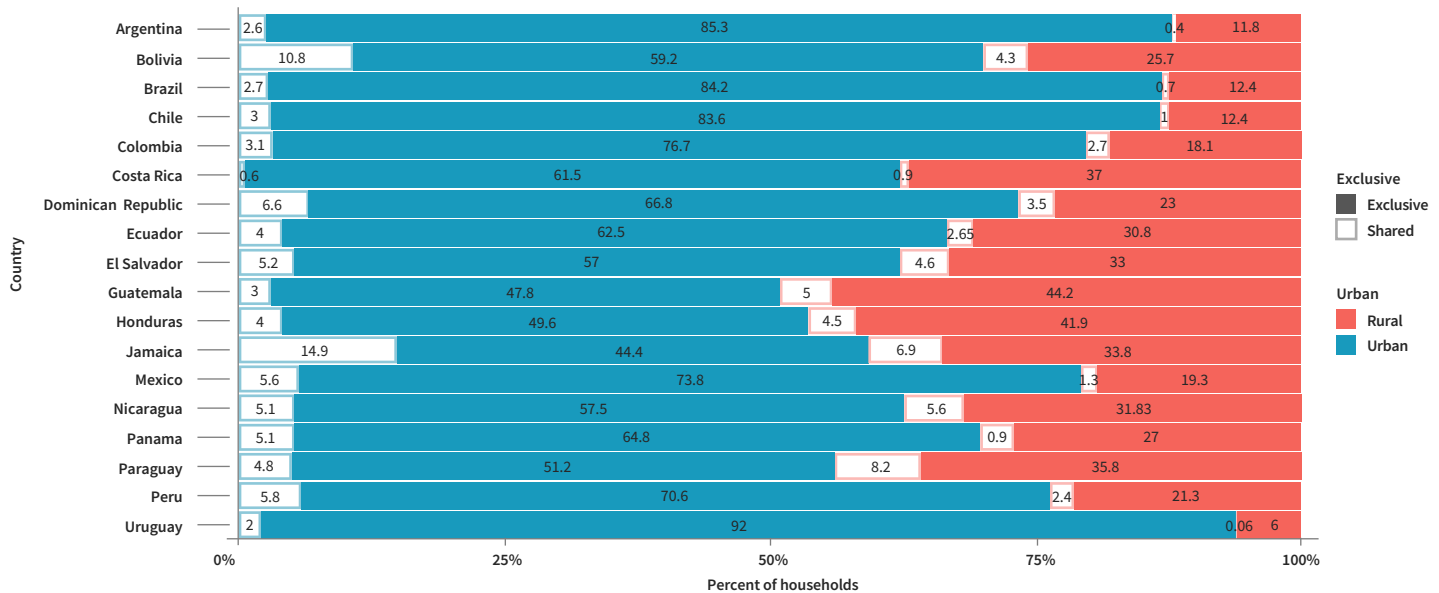


Figure 5: Percent of households urban and rural households with exclusive vs shared access to sanitation facilities [1].

A facility must meet certain criteria for wastewater disposal to be considered “safely managed”. These criteria are outlined below:

- **Treated and disposed of in situ:** When the contents of pit latrines or septic tanks are either emptied and buried in a covered pit or are left in place to decompose. Both strategies eliminate pathogens over time [2].
- **Stored temporarily and then emptied and treated off-site:** When septic tanks or pit latrines are emptied, the waste should be transported to an appropriate facility for treatment and disposal. If waste trucks transport the collected waste to appropriate treatment plants or discharge the sludge into sewers leading to such treatment plants, this waste is “safely managed” [2].
- **Transported through a sewer with wastewater and then treated off-site:** households with sewer connections are considered to have safely managed sanitation services if fecal waste is effectively collected and transported through pipes from sewage to wastewater treatment plants where at least a secondary level of treatment is available [3].

In LAC, wastewater treatment rates are generally lower than desired and reliable data is scarce. Estimates from UN-Habitat, the entity responsible for monitoring wastewater treatment rates for SDG 6.3, show that only 11 of the 33 LAC countries have sufficient data to make estimates (Figure 6). While around 71% of LAC households are connected to a sewer network [1], only around 35% of municipal wastewater is treated on average [4].

Given the evident gap in data availability, for many countries it is not possible to establish compliance with the fecal waste disposal criteria, so it is not possible to determine the exact figure of access to safely managed sanitation in the country.

However, the data gap regarding wastewater treatment can be closed. Many countries in the region maintain detailed inventories of their wastewater treatment facilities, although this information is not always publicly available. OLAS is currently working with LAC countries to create a regional inventory of wastewater treatment plants to help close this gap.

Percent of domestic wastewater treated

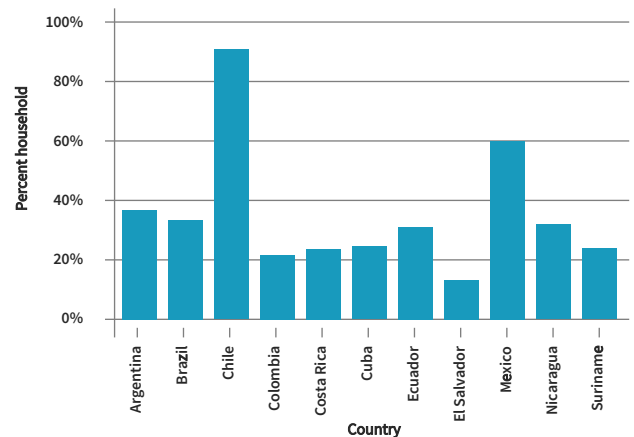


Figure 6: Domestic wastewater treatment rates in LAC [5].

Sources: 1. The AmericasBarometer, 2018/2019. (2019). Latin American Public Opinion Project (LAPOP), www.LapopSurveys.org 2. Joint Monitoring Programme (2018). JMP Methodology 2017 Update & SDG Baselines. World Health Organization, UNICEF. Accessed Nov 10, 2021 at: <https://washdata.org/monitoring/sanitation/> 3. Joint Monitoring Programme (2021). Sanitation. World Health Organization, UNICEF. Accessed Nov 10, 2021 at: <https://washdata.org/monitoring/sanitation/> 4. Joint Monitoring Programme (2021). Progress on household drinking water, sanitation and hygiene: 2000-2020 Five years into the SDGs. WHO/UN-Habitat Joint Monitoring Programme 5. WHO, UN-Habitat. (2020). “Sustainable Development Goal 6 Monitoring: 2020 Country Estimates”. World Health Organization and UNHabitat. Accessed At: <https://www.who.int/teams/environment-climate-change-and-health/water-sanitation-and-health/monitoring-and-evidence/water-supply-sanitation-and-hygiene-monitoring/2021-country-files-for-sdg-6.3.1-proportion-of-water-safely-treated>

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