

FS 1.3.b: OLAS Household Survey Data Set: 2023 Update

Key Points

- The OLAS Household Survey Data Set now includes **time-series** information, covering 2003-2022.
- The data set has been expanded to include **new water and sanitation indicators**.
- The data set has **5 additional breakdown dimensions** added, including ethnicity, gender, and disability status.



The OLAS Household Survey Data Set, described in FS 1.3, 1.4 and 1.5, has been expanded. This factsheet is an update to Fact Sheet 1.3 OLAS Household Survey Data Set, describing the 2023 changes. For a description of the project and related materials please refer to FS 2.1: Expansion of the OLAS HHS Data Set.

One of the key objectives of the Water and Sanitation Observatory for Latin America and the Caribbean (OLAS) is to provide reliable data on water and sanitation access throughout the region. To this end, the OLAS created the OLAS Household Survey data set (HHS-OLAS), which provides key indicators on water and sanitation access in Latin America and the Caribbean (LAC). The data set has undergone multiple iterations, the most recent of which has dramatically expanded the data available and its potential uses. This fact sheet outlines the changes to the dataset as an update to the previously published [Fact Sheet 1.3 OLAS Household Survey Data Set](#) [1].

Better Geographic and Temporal Coverage

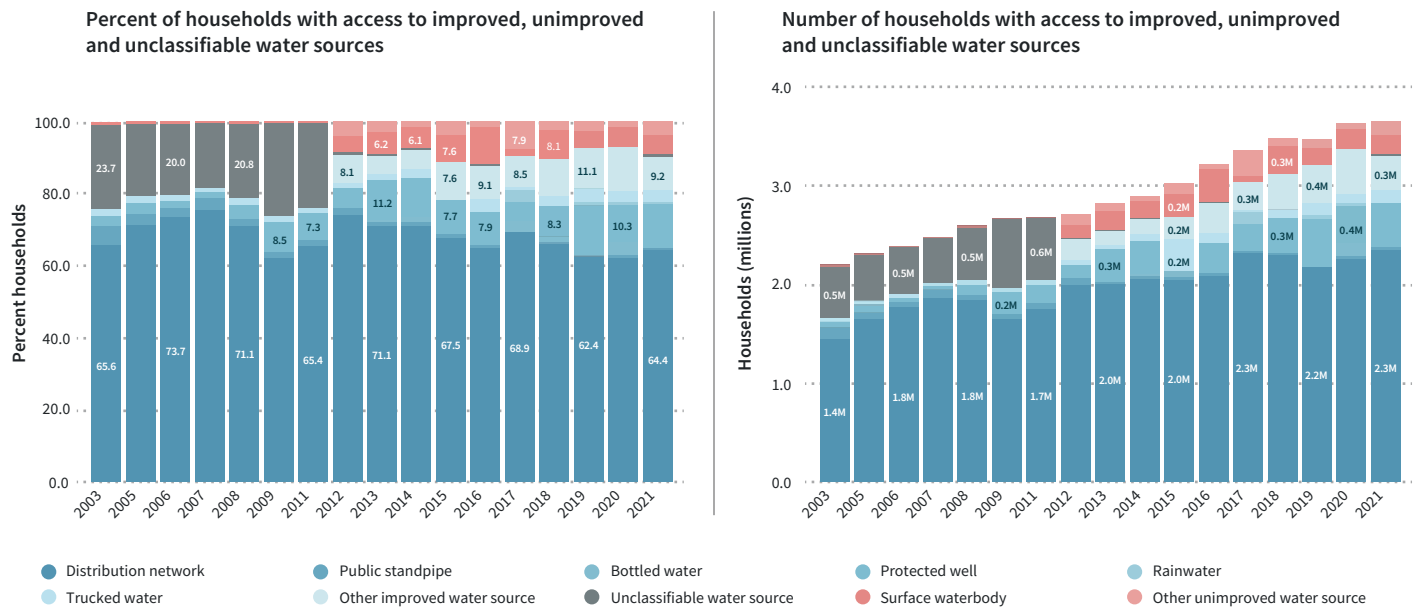
The previous version of the HHS-OLAS was severely limited temporally, which limited its usefulness for tracking progress on key water and sanitation access indicators throughout LAC.

Table 1: Temporal and geographic coverage of the 2023 HHS Data Set Update [2]

ISO3	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Total	
ARG	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20
BHS	1	1	1	1	1	1	1	0	1	1	1	1	0	0	0	0	0	0	0	0	0	11
BLZ	1	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
BOL	1	0	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	0	17	
BRA	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	19	
CHL	1	0	0	1	0	0	1	0	1	0	1	0	1	0	1	0	0	1	0	0	8	
COL	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	19
CRI	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20
DOM	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	19	
ECU	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20
GTM	1	1	0	1	0	0	0	1	1	1	1	1	1	1	1	1	1	0	1	1	15	
HND	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	17	
PAN	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	18	
PER	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	19	
PRY	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	19	
SLV	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20	
TTO	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	13	
URY	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	20	
VEN	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	0	18	
BRB	0	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	13	
MEX	0	1	1	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	0	10	
JAM	0	0	1	1	0	1	0	1	0	1	1	1	0	1	0	0	0	0	0	0	8	
NIC	0	0	1	0	0	0	1	1	1	1	0	1	0	0	0	0	0	0	0	0	6	
SUR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	
Total	19	19	21	21	18	19	19	18	20	21	20	21	18	18	17	16	13	14	13	9		

Today the dataset includes **20 years of information** (2003-2022), covering 23 countries throughout the region. On average, the data set contains 17.7 countries per year, as well as an average of 14.8 years per country. To put this expansion in perspective, the previous iteration of the data set had an average of 5 countries per year and only 1.6 years per country (see Table 1 in [FS 1.3](#)). This expansion allows users to, eliminate noise by calculating lines of best fit, view how surveys in the region evolve over time, and, crucially, analyze how water and sanitation access indicators change over time with changing populations. Data is available as the percent of households (Figure 1, left) and as total number of households (Figure 1, right).

Figure 1: Water source data for Bolivia, showing the evolution of indicators over time. Users can see the implementation of more specific response options in the Bolivian ECH in 2012 via the shrinking of the “Unclassifiable source” category [2]



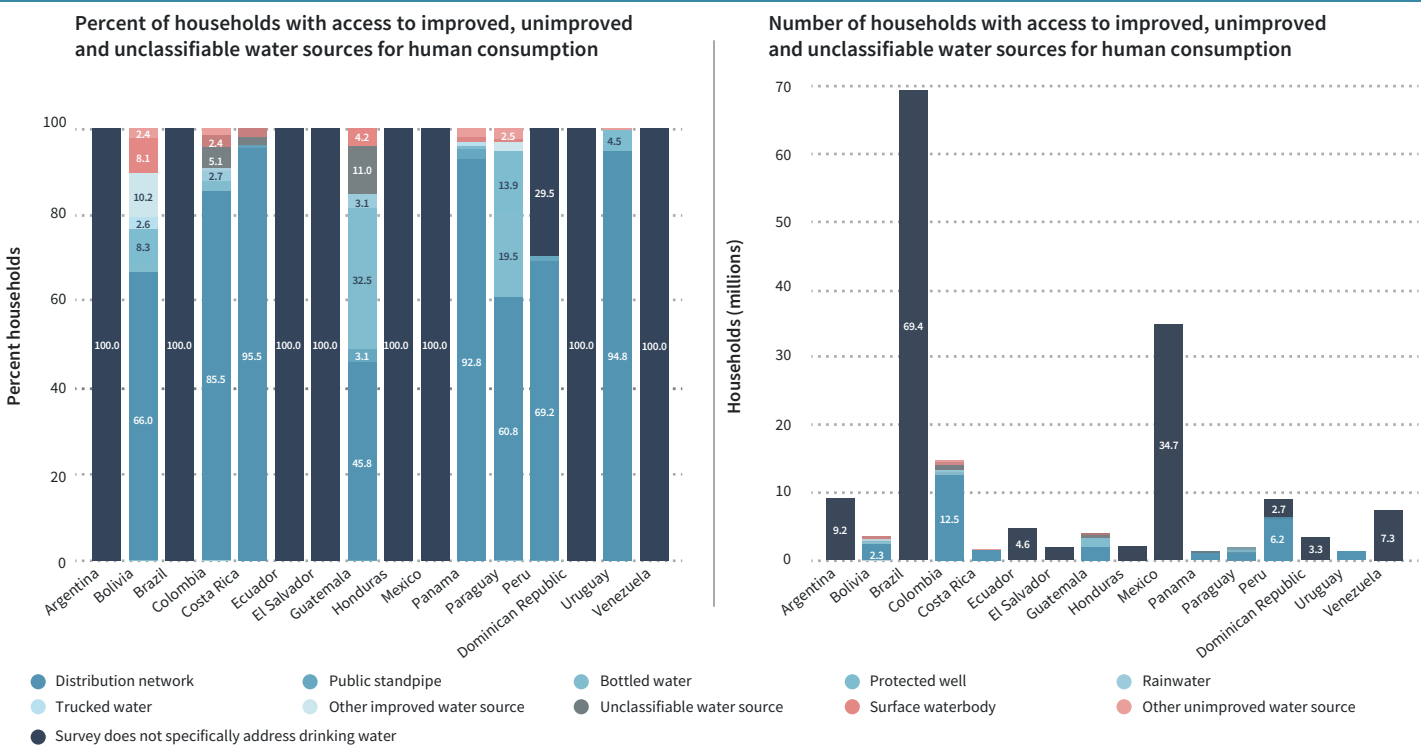
More In-depth Indicators

The expansion project was leveraged to improve the indicators in the data set via including more detailed disaggregation of water sources, sanitation facilities and alternatives adopted by households without access to sanitation facilities. The data set also includes information on water meter use and water treatment at home, although these are only addressed by a few surveys in the region. A complete list of the updated indicators can be found in the updates to FS 1.4 for water access and 1.5 for sanitation access.

The data set also includes several indicators meant to measure uncertainty and lack of information, allowing users to understand information gaps. This makes comparison more valid between

countries if indicators are analyzed in context. For example, in Figure 2, we can see a breakdown of water sources used for human consumption in 2018 by country. We can see that there are many countries that do not address drinking water sources in their surveys, while in Peru the topic is addressed but only for piped network water sources. Additionally, most countries have some response options that cannot be classified as improved or unimproved according to the Joint Monitoring Programme (JMP) definitions (examples: well, spring, other).¹ The inclusion of indicators that measure data gaps or uncertainty in the information give us a more comprehensive understanding of the data and enable informed comparisons that otherwise would not be valid.

Figure 2: Information on drinking water sources for 2018 shows the use of indicators that measure missing information [2]

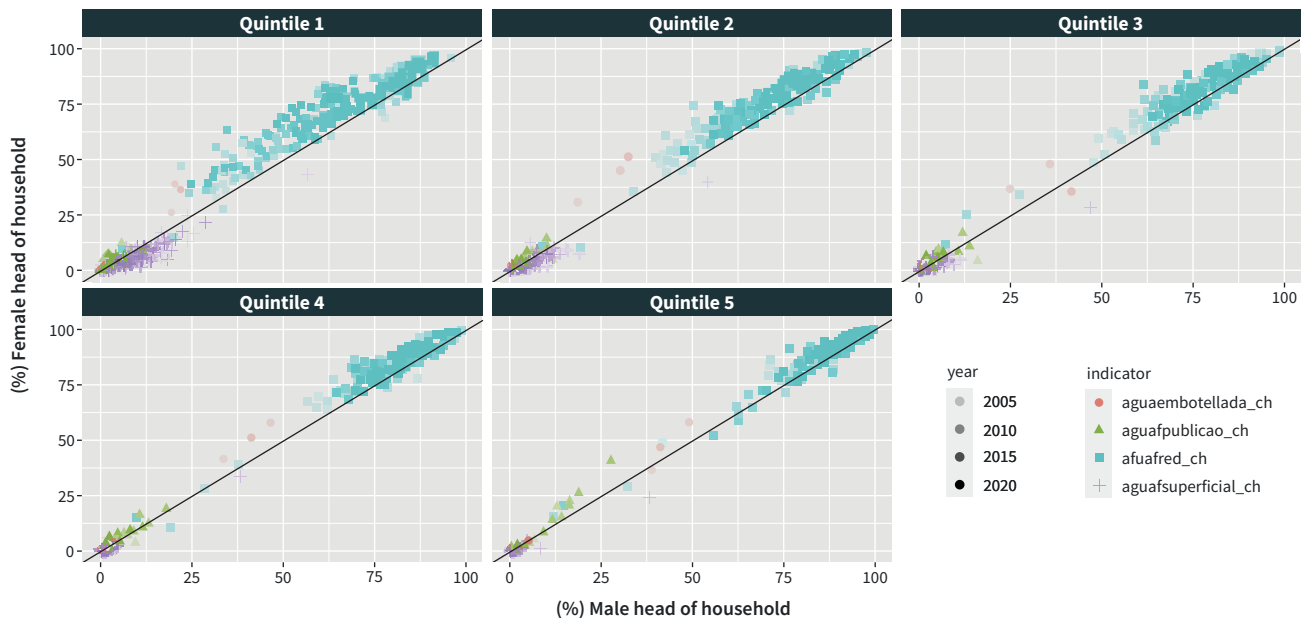


¹‘Improved’ drinking water sources include “piped water, boreholes or tubewells, protected dug wells, protected springs, rainwater, water kiosks, and packaged or delivered water. ‘Unimproved’ drinking water sources include unprotected dug wells, unprotected springs, and surface water (rivers, reservoirs, lakes, ponds, streams, canals, and irrigation channels).” [3]

More Breakdown Dimensions

The expansion of the data set has resulted in the incorporation of various breakdown dimensions that had not previously been available. Specifically, age, gender, ethnicity, disability status, and migratory status have been added in addition to income quintile and zone (rural or urban), as well as combinations of these dimensions where they have enough observations to produce a reliable data point. This allows for analysis of water and sanitation access via several perspectives previously unavailable. Figure 3 shows an example, where access rates of several indicators are shown for male headed households vs female headed households for each income quintile.

Figure 3: Example of use of new dimensions for analysis, showing several indicators related to access by income quintile, gender and year [2]



More Frequent Updates

The expansion of the household survey data set was done by the OLAS in collaboration with the Social Division of the Inter-American Development Bank (IDB), which harmonizes national household surveys from all borrowing members of the IDB. Through this collaboration, the OLAS indicators were integrated into the harmonization process and the Household Survey Indicators Data Set managed by the Social Division, allowing for quick and easy updates when new survey data becomes available.

Conclusion

The expansion of the Household Survey data set allows for detailed analysis of elements related to water and sanitation access over time based on multiple sociodemographic factors. This level of detail enhances the usefulness of the data set for understanding the dynamics of water and sanitation access in the region. The Household Survey data set and all associated methodology, code, and documentation can be accessed on [the OLAS](#), while more information on the project can be found in **Fact Sheet 2.1: Expansion of the OLAS Household Survey Data Set**.

References: [1] OLAS, (2022). "FS 1.3 OLAS Household Survey Data Set". Water and Sanitation Observatory for Latin America and the Caribbean. Accessed at: [FS 1.3 OLAS Household Survey Data Set \(iadb.org\)](#). [2] OLAS, 2023. "OLAS/SCL WASH Household Survey Dataset", Water and Sanitation Observatory for Latin America and the Caribbean. Accessed at: [https://mydata.iadb.org/Water-and-Sanitation/OLAS-SCL-WASH-Household-Survey-Dataset/bjat-gfsm](#). [3] JMP, (2021). "Metadata: SDG Global Indicator 6.1.1." Joint Monitoring Programme. Accessed at: [Metadata: SDG global indicator 6.1.1 | JMP \(washdata.org\)](#)

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