

Monitoring SDG 6.2 and 6.3

Case Study 1: Bolivia



Background

The Plurinational State of Bolivia, a landlocked lower middle-income country in the heart of South America with a population of 11,5 million people (2019), faces frequent water scarcity across some of its geographical zones, and large inequality. Data shows divides between rural and urban zones, and across wealth quintiles. The country is strongly urbanized; only 36% of Bolivians live in rural areas. Overall, the income per capita of the highest quintile in Bolivia is 13.5 times that of the lowest quintile. In recent years the country has faced political and social instability, in part related to the high levels of historical disparity between different population groups.

With regards to sanitation, JMP reports that in total, 83% of the population has access to improved sanitation facilities. But as summarized in reporting by the newly established Water and Sanitation Observatory for Latin America and the Caribbean (OLAS), this number does not tell the full story: “As of 2018, 14% of households in Bolivia did not have access to sanitation facilities, whereas 47% have access to sanitation facilities connected to a sewer system. Sanitation access varies significantly by income quintile and urbanization rate. Approximately 40 percent of rural households and 39% of lowest income quintile households have no access to sanitation services.” With high levels of rural poverty and general water stress, sanitation is not generally considered a priority by households.

The Plurinational State of Bolivia, under its then President Evo Morales, was one of the initiators promoting access to drinking water and sanitation as a fundamental human right to life to the United Nations. The Bolivian State Constitution that was adopted in 2009, recognizes water and sanitation as fundamental and human rights, albeit it talking of ‘alcantarillado’, or sewerage, rather than of all forms of sanitation. In urban areas, all on-site sanitation is considered not improved, therewith differing from the JMP definitions.

Bolivia reports through the UN-Water Global Analysis and Assessment of Sanitation and Drinking Water (GLAAS) process, coordinated by WHO. The country is not a member of the Sanitation and Water for All (SWA) partnership, but SWA is a partner of the aforementioned OLAS, which includes key sector data on Bolivia.

WASH sector governance, planning & review

Sector governing bodies

The Ministry of Environment and Water (MMAyA; Ministerio de Medio Ambiente y Agua) is the governing body for water and sanitation in the country, particularly through the Vice Ministry of Drinking Water and Basic Sanitation (VAPSB). The Vice Ministry is largely responsible for the formulation, promotion, implementation, monitoring and financing of policies, plans, standards, programs and projects for the improvement of drinking water and basic sanitation services (sanitary sewerage, excreta disposal, solid waste, and storm drainage). This also includes disseminating and monitoring the application of policies, plans, projects and technical standards, and implementing, sustaining and strengthening the National Sector Information System.

MMAyA also hosts the national regulator for drinking water and basic sanitation (AAPS; Autoridad de Fiscalización y Control Social de Agua Potable y Saneamiento Básico). The AAPS is a key institution in sector monitoring, and its functions can be summarized as follows:

- Regulator
- Granting of licensing, registration and authorizations
- Evaluation and approval of service delivery plans
- Control, supervision and inspection
- Attention and engagement of users

For a large part of the population, water and sewerage services are delivered by so-called Drinking Water and Sanitary Sewerage Service Providers known as EPSA (Entidades Prestadoras de Servicios de Agua Potable y Alcantarillado Sanitario). There are 4 categories of EPSA, differentiated by the population of the areas they serve:

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|------------|--|
| Category A | Over 500,000 inhabitants |
| Category B | Between 50,000 and 500,000 inhabitants |
| Category C | Between 10,000 and 50,000 inhabitants |
| Category D | Between 2000 and 10,000 inhabitants |

Schemes serving less than 2,000 inhabitants or EPSA constituted of ‘indigenous people of peasant origins’, are registered separately as self-supply systems, or are not registered at all. Monitoring and reporting on rural areas and these non-registered systems is the responsibility of MMAyA and the statistics unit, rather than of AAPS.

Planning and target setting

Bolivia's current targets for water and sanitation are very much linked to the inclusion, in the 2009 Constitution, of water and sanitation as fundamental and human rights. The targets are embedded in a larger political agenda to address

inequality and existing gaps in service delivery to, particularly, indigenous and rural populations. And they build on a history of water-related tension, including recurring water scarcity, long-standing gaps in water service provision, and privatization of urban WASH services ultimately leading, in the 1990s, to what became known as 'water wars'.

The national Patriotic Agenda 2025, published in 2014, set ambitious goals to reach universal access to drinking water services by 2020 and sanitation services by 2025. This multi-sectoral development agenda was further worked out into 'Sectoral Plans for Integral Development to Live Well', essentially sectoral five-year plans. For the water and environment sector, this was the Integral Development Sector Plan 2016-2020 (IDSP). It elaborated strategies and detailed targets and actions to contribute towards achievement of the 2025 goals, and is further supported by annual plans and various sub-sector planning and strategy documents, such as the 2020 National Strategy for Domestic Wastewater Treatment. An overarching monitoring framework for the Patriotic Agenda 2025 also exists, the so-called Methodological Guidelines for Monitoring Sectoral Plans for Integral Development to Live Well, published in 2018.

The key sanitation related targets set by the IDSP stated that by the end of 2020, the percentage of population with access to basic sanitation services should be 70% for urban populations, and 60% for rural populations. No specific targets for ending open defecation were set (GLAAS 2019 report).

While the urban target was met – JMP reports that by 2020, 75% of the urban population had access to either safely managed or basic sanitation services – the rural targets were not: JMP reports that by 2020 44% of the rural population had access to basic sanitation services and 4% to limited services, but a further 32% still practiced open defecation.

An evaluation report to the 2016-2020 IDSP was published in March 2021 but, presumably partly because of the political instability of 2019 and 2020 as well as the implications of COVID19, a new 2021-2025 Sector Plan has not yet been published. However, in a presentation to the WASH sector working group in July 2021, MMAyA did indicate that the new 2021 – 2025 would have a stronger focus on promoting universal access to water and sanitation with a social focus aimed at the most vulnerable populations, including those in rural areas. It also announced slightly lower and possibly more realistic sanitation coverage targets, around 67% nationally by 2025, and around 47% for rural areas.

Coordination, participation and sector review

As reported in the GLAAS Bolivia country highlights 2018/2019, Bolivia has an active, formalized, inter-ministerial coordinating mechanism, which represents some of the key ministries and agencies involved in WASH service delivery, and includes donors and development partners. It is said to conduct mutual review and assessment, apply evidence-based decision-making, and base its work on agreed sectoral framework or national plans. It does not, however, include non-governmental stakeholders. The GLAAS highlight also indicates that a joint sector review was conducted in 2018, although the report of this exercise could not be located.

Discussion with sector partners however, indicated that in reality, decision making is very centralized. Targets such as those for the forthcoming five-year plan are set by government, and Development Partners are informed after

the fact. The same is true for development of plans and strategies, which are centrally driven, generally even without inputs from local governments. The latter may be political as well, with many municipalities now being run by the opposition.

Notably, the GLAAS overview highlighted that, while the country has set universal targets and is fully committed to the human right to water and sanitation, it has not made large strides in including vulnerable groups. With regards to sanitation, national plans do not include measures to extend services to particular vulnerable groups such as poor populations, populations living in slums or informal settlements, indigenous populations, women or people living with disabilities. There are no specific coverage targets for vulnerable groups, nor is progress monitored for these groups, with the exception of indigenous populations. Similarly, while participation procedures were defined for service users and women, the extent of participation in practice is defined as 'medium'.

Monitoring SDG target 6.2 and 6.3

Internationally and among sector partners, MMAyA is known as a progressive and dynamic ministry, committed to achieving the ambitious targets set by the country, and tackling some of the historical challenges faced by the sector. Nonetheless, sector actors and development partners acknowledge there are weaknesses, including around monitoring. GIZ, the Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH, is currently partnering with MMAyA, AAPS and the National Institute of Statistics (INE) on the 2019-2021 ProAgenda 2030 program. As stated in its project description: "Bolivia lacks sufficient reliable data to implement (its water sector goals). Furthermore, the quality of available information often falls short of international standards, which limits its capacity for planning and assessing political decisions or investments. Data gaps and contradictory information are especially common in remote, poor and rural areas, which are home to around 30 per cent of the population."

This is confirmed by data readily available online. As stated above, the AAPS is responsible, among others, for sector monitoring and performance management. One of the key ways in which it undertakes this role, is by publishing annual performance updates on those service providers regulated by the AAPS. This constitutes the Category A to D EPSA mentioned above. The most recent 2019 performance update published in March 2021 reported on 70 EPSAs, whose service areas cover just over 7,5 million inhabitants. Out of these 7,5 million, the report stated that 91.11% were supplied with drinking water, while 62.17% were served with sanitary sewers. Beyond the fact that this leaves some 2,8 million people (38% of 7,5 million) not served by sewers and not reported on by EPSAs, a further 4 million people are left completely outside of the AAPS reporting.



Source: Indicadores de desempeño de las EPSA reguladas categorías A, B, C y D en Bolivia 2019

A lot of this links back to the history of WASH service delivery in Bolivia, including the nationalization of natural resources that took place over the first decade of the current millennium, and the change-over from private to public management and establishment of new types of water service providers. With huge population growth, financing complexities, and shifts in both ideology and contracting, the traditional ‘big systems’ were less and less able to expand services to poor, underserved, informal and/or more remote parts of their service areas. In absence of services, people found alternative ways to obtain the services they needed. In addition, there was a strong overall move towards community management of resources, including, in more rural zones, by indigenous communities. Across Bolivia, this has led to a type of distinction between big and small systems, where, according to literature “...‘big’ and ‘small’ systems refers less to their importance in terms of water supply than to distinctive forms of management: while a big system is generally controlled by a single operator on a determined territory (Bakker, 2007), a small system is managed by the inhabitants of an area where the natural resource is transformed into a service for the community” (Botton, Hardy & Poupeau, 2017).

By and large, the EPSA included in the AAPS reporting are those that are registered and mandated as the single operator in a pre-determined territory, whereas the 4 million people not included here are those being serviced by, or servicing themselves through, these small, often community-managed systems. It is believed that there are approximately 20,000 of these small community water committees. Community members contribute work, and limited funds. There is no link to the government, and external support is almost nonexistent.

What is being monitored

The AAPS performance updates, published annually from 2013 to 2019, report progress against indicators from the Performance Evaluation Framework (MED). This is a tool of the Sector Plan of Basic Sanitation Development (PSD-SB) 2016-2020, established to measure progress and assess the impact of the implementation of policies and sector strategies. The methodology for preparing the MED was led by the technical team of the VAPSB, agreed upon and complemented by the technical teams of the AAPS and the National Service for Sustainability of Basic Sanitation Services (SENASBA). Key performance indicators included in the EPSA performance updates focus on issues such as licencing and registration; periodic presentation of regulatory monitoring reports; presence of Temporary Plans or Five-

Year Development Plans; undertaking of studies of prices and rates; conformity of drinking water analyses carried out; potable water service pressure; efficient operation index; and tariff collection efficiency.

It then monitors a set of service quality indicators in the following categories

- Source reliability and efficiency of use
- Stability of supply
- Environmental protection (including measurement of treatment and control of domestic wastewater)
- System sustainability
- System functionality

And lastly, it reports against the SDG6 targets and indicators. This reporting is detailed, per EPSA Category and even per EPSA. However, for sanitation, the focus is on sewered systems only. The 2019 update, for example, covers 70 EPSA in total, but for sanitation leaves out the five EPSA that do not have a sanitary sewer service. For the remaining 65 EPSA, the rate of population connected to sanitary sewer services varies between 13% and 97%, with 26 of them still facing connection levels under the national benchmark of 65%.

With regards to SDG target 6.3, the 2019 report states that “the objective is that the index is greater than 60% in the case of category A and B EPSA, and greater than 50% in categories C and D, these values being the optimal parameters. This ensures that a considerable percentage of billed drinking water is treated as wastewater.”

In reality, figures are very disparate between the different EPSAs, and a substantial number of them (7 Category B EPSA, 21 out of 35 Category C, and all but 4 in Category D) either do not perform domestic wastewater treatment or do not report data. For those that do, their reported results vary from close to zero, to substantially over 100% - a likely result of leaks in the networks, low levels of micro-measurement and similar gaps in oversight, given that this index is calculated in relation to the volumes billed.

In this respect, it is noteworthy that the 2020 National Strategy for Treatment of Wastewater, states that 30,5% of the country’s domestic wastewater is treated whereas the UN Water SDG6 Global Data Portal reports the proportion of safely treated domestic wastewater flows in Bolivia as 58.29%, based on 2020 WHO data. The dichotomy is likely linked to the lack of harmonization in indicators and data analysis.

A final observation on the 2019 AAPS performance update report is the lack of information on either participation of, or service delivery to particular population groups. There is no mention in the report of consultation processes, nor of women, or of indigenous populations. This seems consistent with the earlier described GLAAS 2019 findings.

Monitoring beyond the EPSA reports

Beyond data availability and reliability, an important component of monitoring is also data use. With this in mind, Development Partners such as GIZ have been working with MMAyA and related partners on the development of an App, that will make sector information more readily available and easier to use by local stakeholders, to improve data-driven

decision making. This also includes a focus on photographic data, to better assess quality of service levels reported.

Overall, given that approximately 4 million people are not covered by EPSA services monitored by the regulator, data on service provision to these people is not readily available. However, the country does invest in household surveys, and the most recent 2018 Household Survey conducted by INE, which surveyed 11,195 representative households to collect information on living standards, was a key resource for OLAS. As stated on their website: “Bolivia collects data on water in their household surveys in accordance with the WHO / UNICEF guidelines, making it easier for researchers to understand the status of water and sanitation access within the country without ambiguity. This household survey is the only household survey in the region that includes information on hygiene practices.” The next national census is foreseen for 2022, after the most recent census in 2012.

Furthermore, while rural information is not up to date, numerous new projects are being supported by various Development Partners, who do report data on progress and results.

Sector stakeholders felt that the recent COVID19 crisis and the related push for WASH services did increase collective realization on the need to service, and monitor, the non-connected populations. This, alongside the announced plans to focus more on vulnerable populations in the next five years, may see an overall improvement in monitoring and reporting on SDG 6.2 and 6.3 for the entire population, not just those served by EPSAs.

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SuSanA SDG 6.2 and 6.3 Monitoring Case study

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