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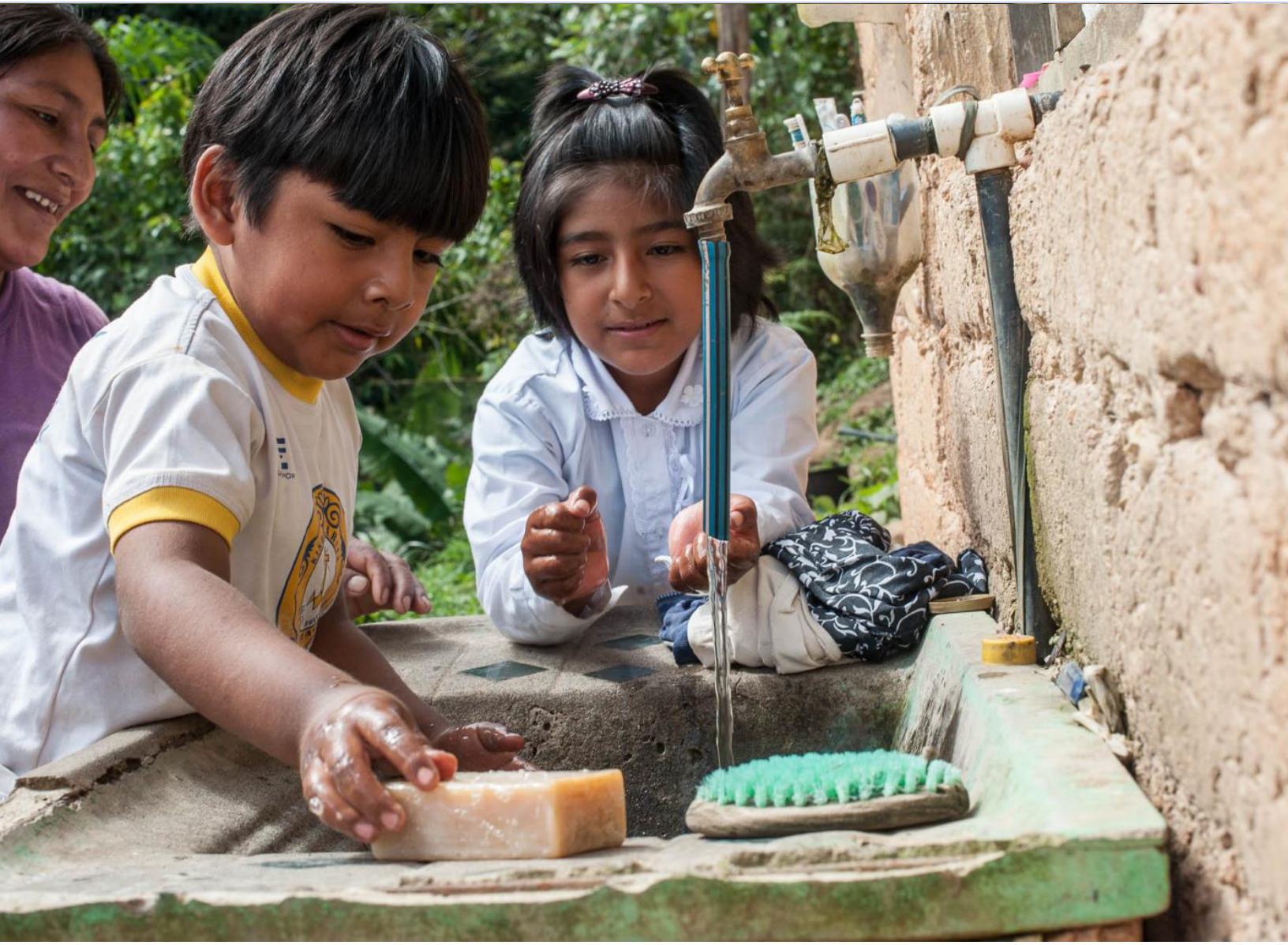

Two children of the Chua wash their hands before eating lunch. Photo: Susan Warner.

Operation and Maintenance Financing for School WASH Facilities in Bolivia

2016

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Operation and Maintenance Financing for School WASH Facilities in Bolivia

Bolivia

The Plurinational State of Bolivia in South America has a surface area of 1,098,580 km2 and a total population of 10.85 million people. It is a lower middle income country (GDP per capita – $3,124.1) (The World Bank Group, 2014). The country is divided into nine departments and 339 municipalities. Municipal governments hold funds for public investments, including WASH (water, sanitation and hygiene) in schools. The country is mostly urban, with agriculture and mining serving as the predominant economic sectors.

Bolivia's public school system was founded in 1956, with profound changes in 1969, 1973, 1994 and the current Education Law from 2010. It establishes compulsory education of two years of preschool, six years of primary and six years of secondary school. The educational philosophy is based on the indigenous vision of the cosmos, and should be liberating, decolonizing, intra- and intercultural, multilingual and productive.

Executive Summary

This is a case study on the financing for the operation and maintenance (O&M) of school WASH facilities in Bolivia, based on a review of documents, key informant interviews and visits to 15 schools in urban Cochabamba and rural Oruro.

In Bolivia, the government invests in WASH in schools through an autonomous agency called the National Productive and Social Fund (FPS) for construction, and its municipalities for O&M. The FPS pools municipal as well as national Ministry of Education (MoE) and international organization funds for implementing projects, concentrated on community WASH and education. The Ministry of Environment and Water (MoEW) and its decentralized institute, the National Service for the Sustainability of Basis Sanitation Services (SENASBA), support municipalities and their water and sanitation companies (EPSA) with capacity building and community participation for sustainable water and waste management in communities, including schools. International organizations and NGOs provide occasional support for construction and rehabilitation of facilities as well as the activation of school boards and student brigades (clubs) to monitor and maintain facilities.

Bolivia has some good practices with respect to policy and institutional reform that are supportive of municipalities and schools to operate and manage their WASH facilities. Bolivia's decentralization and its 2010 *Law of Autonomies and Administrative Decentralization* fosters local human and economic development by shifting decision-making and management of social programs to local governments. It outlines that 20 percent of funds for municipalities will go towards education institutions, and that these funds will be used for purchase of materials and maintenance of school infrastructure. The Law also states that municipalities can use a part of their allocation from the government for rehabilitation of schools, including its sanitary facilities. Besides municipal funds, the MoE supports the payment of school staff, which would include the school porter, who is typically responsible for cleaning WASH facilities. Municipal water and sanitation companies provide water, and waste collection services to schools. The MoEW, SENASBA and the Ministry of Health (MoH) also have plans to scale up a health and hygiene education program through school curricula to over 80 percent of municipalities in Bolivia.

Despite these achievements, municipalities were often unable to meet the WASH O&M needs of schools, with only a third of the 15 case-study schools in rural Oruro and urban Cochabamba citing that their WASH facilities were successfully managed. Nine schools reported the need to purchase cleaning supplies to supplement municipality provisions, and they were often supported by community donations and NGOs to meet such gaps. Without a dedicated cleaner for daily maintenance, schools often rely on their porter or students and parents to clean and maintain latrines. WASH facilities in schools in rural Oruro were better maintained than in urban Cochabamba, possibly due to the lower student to toilet ratios and the support schools had received from Save the Children for many years.

There are areas for improvement at national and departmental level as well. The current MoE standards

for WASH infrastructure in schools are not published and do not include details on maintenance standards. The MoE management information system, although it collects data on school infrastructure, is not used regularly to monitor school WASH facilities. Overall, the water and sanitation sector in schools has dispersed actions, between the MoE, MoEW, FPS, municipalities and other actors and there is a need for coordination.

Recommendations made by key informants to improve the O&M of WASH facilities in Bolivian schools include the following.

- Additional allocations from municipal governments to improve and renovate the existing school infrastructures, such as improvement in water supply and quality, sewage and waste management system.
- Additional financial resources and support for the O&M of WASH facilities, both at municipal and school levels.
- Training of human resources in charge of O&M of school WASH facilities, at all levels.
- Motivating students to properly use facilities and keep them in good condition.

Key Indicators for WASH, Education, Finance and Gender

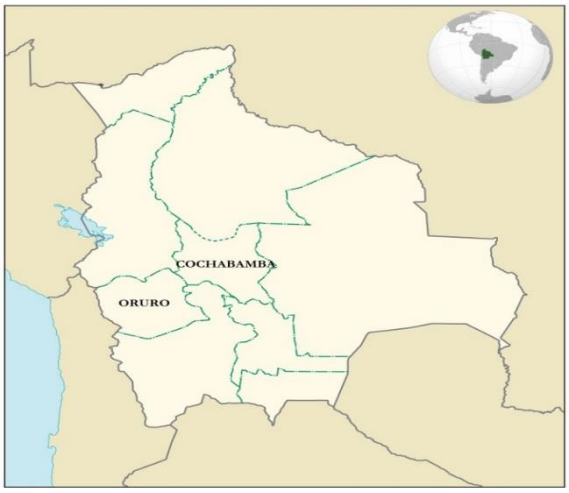
WASH Indicators	**Percentage**
Estimated urban population coverage, improved drinking water sources[1] (2015)	97
Estimated rural population coverage, improved drinking water sources[1] (2015)	76
Estimated urban population coverage, improved sanitation facility[1] (2015)	61
Estimated rural population coverage, improved sanitation facility[1] (2015)	28
Estimated urban and rural water coverage in schools[2] (2013)	84 & 81
Estimated water and sanitation coverage in schools[2] (2013)	87 & 74
Education Indicators	**Percentage**
Primary education attainment rate[3] (2010)	92
Total net enrolment rate, primary, both sexes[4] (2013)	82.28
Total net enrolment rate, lower secondary, both sexes[4] (2013)	90.85
Finance Indicators[4]	**Percentage**
Government expenditure on primary and secondary education as % of GDP (2012)	2.42 & 2.09
Primary and secondary education as % of total government expenditure (all sectors – 2012)	6.70 & 5.79
Primary and secondary education as % of total government expenditure on education (2012)	37.59 & 32.45
Government expenditure per primary and secondary student (2012)	481 & 524 US$
Aid Indicators[3]	**US$ (million)**
Total aid to education and basic education (2012)	52 & 20
Gender Parity Index (GPI) Indicators	**Integer**
Gender parity index of the primary attainment rate – poorest and richest children[3] (2010)	0.90 & 1.00
Total net enrolment rate, primary, gender parity index[4] (2013)	0.99
Total net enrolment rate, lower secondary, gender parity index[4] (2013)	0.99

[1] UNICEF/WHO. Progress on Sanitation and Drinking Water, 2015
[2] UNICEF. Advancing WASH in Schools Monitoring, 2015
[3] UNESCO. EFAGMR, 2015
[4] UNESCO. Education Data Set, 2015

Methods

- **Documentation review**: A desk review of relevant national government documents, websites, Save the Children Bolivia responses during the desk review, and development partner documents and websites (see references for a detailed list).
- **Key Informant interviews with government and development partners:** This included government representatives from the municipality of Caracollo (in the Oruro department), and three municipal districts of the city of Cochabamba and Save the Children Bolivia staff.
- **School Visits, comprising interviews, observation surveys and local shop visits:** Interviews and observation surveys at 15 government primary schools (8 urban, 7 rural). Five schools were located in Oruro department, and 10 in Cochabamba (see map). In Bolivia, a "school" refers to one shift of students (MoE, 2015). Nine of the 15 schools shared infrastructure with another "school", the remaining 6 schools were simple shift schools (morning only). All schools visited were primary schools (grades 1-6), although some of the schools also had secondary school (grades 7-12) and/or preschools. Schools had between 195-927 students, with a median 603 students in Cochabamba schools and a median 283 students in Oruro schools. The number of students corresponds with a specific shift.

  All 5 schools in Oruro were supported by Save the Children between 2007 and 2012 with children mobilized and educated on health and hygiene, portable hand washing devices such as tippy taps and soap; and school boards were activated to support school health and nutrition issues. The same program was applied starting in 2013 in the 10 Cochabamba schools. Data was collected in the fall of 2014. None of the WASH facilities were repaired or constructed by Save the Children. Conversion rate used in the case-study:_1 BOL = 0.14175 US$ (Oanda Currency Converter, Oct 30, 2014).



Map of Bolivia highlighting the departments of Oruro and Chochabamba.

Resource Setting for WASH in Schools

3.1 Agencies Investing in WASH Facilities in Schools

FPS and municipal governments are the main agencies that invest in WASH in schools in Bolivia. The FPS, an autonomous agency under the supervision of the Ministry of Development Planning is responsible for managing resources from the General Treasury and international agencies to co-finance development projects in municipalities, particularly for WASH, agriculture, and education (FPS, 2015).

The MoEW through its decentralized institution, SENASBA is responsible for capacity building of water and sanitation service providers on sustainable management of WASH services in communities, and schools (SENASBA, 2015). There are other public water institutions, such as EMAGUA, for planning and administration of infrastructure projects, and MICSA, for investments in the water sector.

Construction and Rehabilitation

The FPS is the lead agency managing the financing of construction and rehabilitation of schools and their WASH facilities, working jointly with the MoE and municipalities (FPS, 2012).

Children of different ages wash their hands in front of the "CHUA 1ra" school in the village Chua I. Photo: Susan Warner.

Another important source for school construction is the President's fund "Bolivia Cambia, Evo Cumple" (Bolivia changes, Evo complies). An estimated 4,587 million BoL (650 Million US$) has been disbursed between 2006 and 2014 on education, sports, communal, sanitation, productive, health, irrigation and road infrastructure (Diario Digital, 2015).

Municipalities are responsible for education infrastructure in general, including school WASH facilities (MoE, 2010). Through FPS, municipalities co-finance projects with developments partners (FPS, 2012).

Development partners, including bilateral donors, such as from Japan, Netherlands, Sweden and Denmark, as well as UNICEF, and NGO's such as Save the Children and others, occasionally support schools with new school buildings and WASH facilities, or rehabilitating existing facilities.

Water, waste disposal and hygiene services

Urban municipalities through local water and wastewater companies (EPSA) provide water to schools, with municipal taxes contributing to the water, sewerage, and solid waste services for schools. Where schools are outside the reach of piped city water systems, municipal governments sometimes subsidize water purchases for schools. In these cases, the municipal government funds water firms to truck water on a weekly basis to schools.

Generally, solid waste services are provided by the municipal waste management companies funded by municipalities. Where these services aren't available, porters, students, health committee members, and/or teachers are sometimes responsible for solid waste collection and disposal.

The municipal government funds hygiene materials (soap and bleach) for schools. The MoE in collaboration with the MoEW, SENABA, and the MoH is supporting

hygiene promotion in schools, through integration of health and environment education in the school curriculum. This integration started out in 10 communities in 2010 (MoWS, 2009). Development partners and NGOs, such as Save the Children, also invest in hygiene promotion, through IEC materials, training workshops and water treatment projects in primary schools.

Maintenance and Monitoring

Generally, municipal governments are responsible for repairs of school sanitary installations, however long wait times sometimes lead schools to do their own repairs.

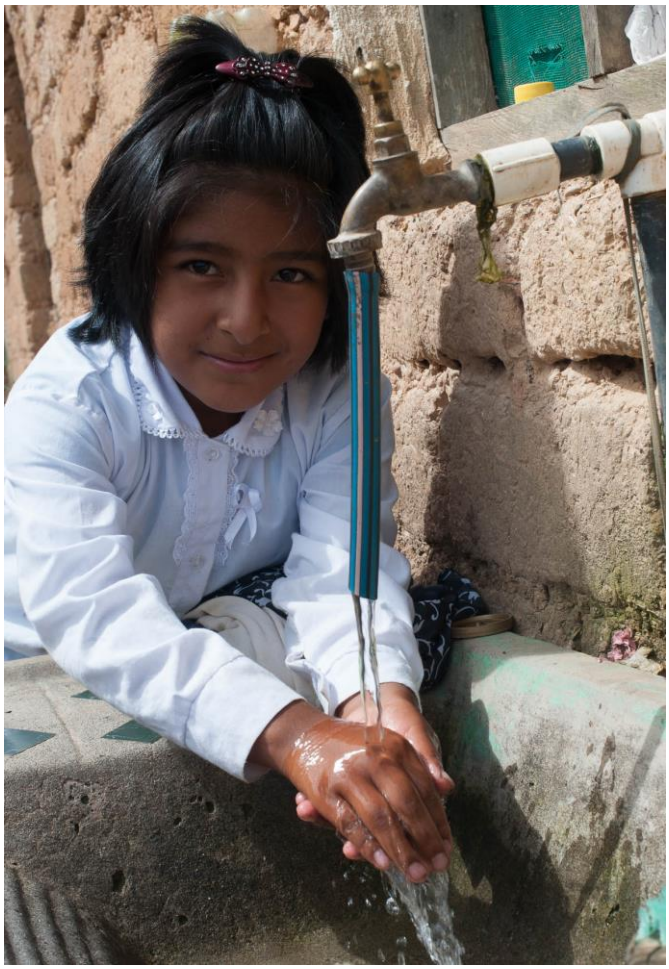
The MoE has an Information Management System, SIE, with sub-systems on schools, school infrastructure and students (RUE, INFRAEDU and RUDE respectively), but does not provide comprehensive data on access to clean and functional WASH facilities, hygiene services, or waste management. Actualization is supposed to be annual though the system does not work efficiently (UNICEF, 2014b). UNICEF in 2013 analyzed school WASH data in the SIE from the previous decade, which showed improvements in access to water, sanitation, solid waste disposal and health facilities in schools (UNICEF, 2013).

3.2 Policies for WASH in Schools

Bolivia does not have national regulations for the installation of WASH facilities in school buildings. However, basic WASH infrastructure standards issued by the MoE exist in an unpublished document titled *Standards of design and architectural equipment for rural school buildings* (UNICEF, 2013).

Bolivia's 339 municipal governments are responsible for establishing and enforcing their own school regulations for maintenance and WASH system management. While these may be found in some bigger, and more urban municipalities, many small and rural municipalities do not have drafted regulations for WASH in schools. Key policies that spell out responsibilities for school maintenance are as follows:

- The *Law of autonomies and administrative decentralization of 2010* outlines that municipalities will receive funds from the treasury for school education, public health, and development projects on infrastructure, which includes maintenance of school infrastructure.
- The *Education Law 070 of 2010* broadly states that the responsibilities for infrastructure and its maintenance rests with municipalities without making reference to WASH in schools (MoE, 2010).
- The 2015 MoE *Resolution on education and school management* mentions that directors of education units (schools) along with municipal authorities, school boards, autonomous governments and school staff decide on infrastructural improvements in schools based on school budgets. It also includes that education unit directors and community education



Nine year old Shirley washes her hands before helping her mother to prepare lunch. Shua I village. Photo: Susan Warner.

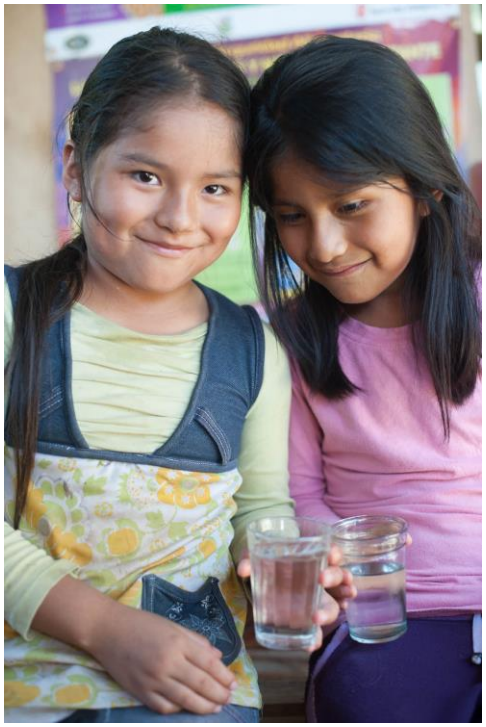
councils, along with school boards are responsible for the maintenance of school infrastructure, however it does not provide guidance on how much needs to be budgeted (MoE, 2015). It also does not specifically mention "water" or "sanitation" facilities.

- *Desarrollo Comunitario y Fortalecimiento Institucional* (Community Development and Capacity Building), a publication prepared by the FPS as part of Water Operating Regulations for Small Communities, states that with municipal government support, EPSAs should perform maintenance activities in schools, and that schools are engaged in EPSA's activities.
- The MoEW in its *National Basic Sanitation Plan 2008-2015* mentions that priority interventions include the national program of health education in the schools, which includes provisions for ensuring cleanliness and maintenance of toilet facilities (MoEW, 2009).

3.3 Financial Allocations for O&M of WASH Facilities in Primary Schools

Municipal governments and the MoE are the main funding sources for education and WASH in schools that influence allocations for O&M of WASH facilities in primary schools. Since the *Law of Popular Participation* in 1994 decision-making and management of social program was shifted to local governments, with 20 percent of national tax revenue transferred to municipalities (National Congress, 1994). The *National Dialogue Law of 2000* outlined that the allocations to municipalities will be split in to three parts with education receiving 20 percent of funds, public health receiving 10 percent of funds, and social development infrastructure projects receiving 70 percent of funds (National Congress, 2001). The funds are released from the Ministry of Finance (MoF) to the municipal governments based on their population for education and public health; and on the basis of their recalculated population estimated based on the proportion of poor. Municipalities then create a plan based upon their budget allocations and their priority needs. Mainly, financial allocations for WASH O&M and rehabilitation come from the education and social development infrastructure portion of municipal funds.

Water, handwashing and toilet facilities in schools in Caracollo. Photo: Caroline Hilari.



Two sisters drink fresh, safe water in the village La Colmena. Photo: Susan Warner.

- The 20 percent for improving the quality of education will fund the following areas, based on the municipal plan. Municipal transfers to schools are in kind, meaning no cash directly goes to schools.
    - School equipment, including computers
    - Materials (including cleaning materials)
    - Maintenance of school infrastructure
    - Incentives for programs for school dropouts

  A key informant noted that in 2015, Caracollo municipality in Oruro (where five case study schools were selected) allocated 50,000 BOL to 49 schools for cleaning materials. Distributions were based on student populations; however assuming that all schools had a median population of 283 students, the allocation per school and student per year would be 1,020 BOL (145US$) or 3.6 BOL (0.51US$), respectively. Repairs are assigned based on requests from school directors and boards.

- Municipalities that are large and have a larger proportion of poor populations receive a greater allocation of social development infrastructure projects than those that are smaller and have a smaller proportion of poor populations. Expansion, renovation and construction of school infrastructure, health infrastructure and sewerage and sanitation systems is one of the 12 areas that municipalities can use these funds based on their plan (National Congress, 2001).

Other than the municipality, the national MoE, which pays for salaries of teachers and support staff (including porters who clean school WASH facilities) and educational materials, is a source of WASH O&M funding. Salaries are transferred directly from the Ministry of Education, and the basis for school allocations from the MoE is essentially the number of students in each school. The allocation for schools in 2013 was 15.05 million BOL (2.13 million US$) (MoE, 2015b). Occasionally, the local community and development partners support schools with their WASH O&M needs.

Situation in Schools

4.1 Condition of WASH Facilities in Schools

Handwashing and toilet facilities in Oruro (rural) were generally in a better condition that those observed in Cochabamba (mostly urban). Toilets in Oruro were mostly functional, in Cochabamba only close to 25 percent of student toilets were functional. School grounds were clean in Oruro, though they were mostly dirty in Cochabamba. There were problems of leakages and drainage in schools in both locations; and of the 15 case study schools, only two schools had soap present at handwashing stations.

- In the five Oruro schools visited, water supply included running water from a piped network in four schools, and through a tanker in one. The most commonly used water source was functional in all five schools on the day of the visit, but with problems of leakage in all schools. There were 10 handwashing stations across five schools; in four schools these were in or close to toilets. Four schools with nine handwashing stations had running water; however all had problem of drainage; and only

one school had soap. No signs of litter were present on school grounds. Four schools had pour/flush toilets with water supply, while one had pit latrines. Total number of toilets across five schools were 73, with similar numbers of toilets for girls and boys (34 and 32), and the median student to toilet ratio per school being 20:1 (range, 12-22). Almost all of the toilet facilities were functional (93 percent), most of which were either clean or somewhat clean.

- In the 10 Cochabamba schools visited, water supply included piped water in five schools, tanker trucks in three, and a dug well and bore-hole in one school each. The most commonly used water supply was functional in eight schools on the day of the visit, but five had problems of leakage. Of the 127 handwashing stations, 60 percent were functional, while only 30 percent had proper drainage, and 20 percent (from one school) had soap. Seven schools had signs of food and other waste on their grounds. Schools either had pit latrines or flush and pour-flush facilities. Of the 134 toilets, there were similar number of toilets for girls and boys (59 and 53), with a student to toilet ratio being 54:1 (range, 9-88). However only 25 percent of toilet facilities were fully functional, while 69 percent were partially functional. Over half (53 percent) of toilet facilities were observed to be unclean.

4.2 School Resources and Systems for O&M of WASH facilities

School buildings in Bolivia have a separate management for each shift, and each shift is counted as a "school". Of the nine school buildings that had double shifts, the findings on resources are for one shift only. Almost all schools reporting having annual plans, ten of which included WASH in their plans. However budgets for maintenance was reported by only four schools. Nearly all schools reported the porter was responsible for cleaning school facilities and waste disposal. Schools relied on municipalities for maintenance and supplies; in addition, the school board or teacher also purchases school supplies. School boards and student brigades (clubs) were present in nearly all schools. While all school boards were involved in some aspect of WASH in schools, only half of the student brigades were involved in WASH.

- Thirteen schools reported having annual planning processes; 10 of which – all five from Oruro and half from Cochabamba – stated that WASH was included in the plans. However, none of schools clarified the activities in the WASH plans.
- Four schools – three from Oruro and one from Cochabamba –reported that they had school budgets which included maintenance. In schools that reported preparing budgets, it was generally the school director, council of teachers, or the school board that submitted their budgets and reports to the municipal government annually.
- All schools were found to have a School Board, which is a parent management committee. School boards' support for WASH mainly involved community coordination, funding repairs in the absence of municipal support, and supervision of facilities.
- Generally schools did not conduct routine O&M activities for their water system or handwashing facility. All but for one school in Oruro did not treat their water regularly. Two schools reported support from NGOs to test their water. Soap was said to be provided by the municipality. All schools reported that repairs were done either by the school or by municipal authorities. Eleven schools reported problems in their water or handwashing system in the recent past. Ten schools cited problems of insufficient water, and long waiting times for repairs.
- In 12 schools (10 from Cochabamba) the porter, who is the school guard is responsible for cleaning toilet facilities. Three Oruro schools reported that students, parents or school bathroom committees clean the facilities. Materials for cleaning toilets are either purchased by the school or provided by the municipality. Schools unless supported by parents or NGOs do not provide menstrual hygiene materials for students. Four schools from Cochabamba and two from Oruro noted that their sanitation system

was working successfully, others noted they needed more support from municipalities.

- Twelve schools, nine from Cochabamba, reported that solid waste was collected by their municipality's free waste collection service.
- All schools reported conducting hygiene education activities in the past year. These were usually conducted by teachers, or in the case of Oruro by health commission members (set up with NGO support, comprising teachers, parents and students). Thirteen schools reported using health education materials (posters, pictures, pamphlets, banners); some schools received materials from NGOs.
- Fourteen schools reported having student brigades; in seven, student brigades are involved in the O&M of WASH facilities. Activities of student organizations involve cleaning facilities, and occasional campaigns on handwashing, waste disposal and proper use of toilets.
- Nine schools, which included all five in Oruro, received WASH supplies (disinfectants, soap, broom) from their municipal government or an NGO. Nine schools also purchased WASH supplies locally to meet additional needs; all but two schools had hardware stores within two kilometers of the school.

4.3 School WASH O&M Costs

Schools generally did not incur costs for WASH, because they relied on their municipal governments. However where municipalities did not provide supplies or services, or it was insufficient, schools fund raised locally from the community. The costs of WASH items quoted by these schools were used to determine median costs per student per year and median costs per school for those that reported costs. These reported figures however cannot be used to estimate school WASH O&M costs. A detailed cost analysis is needed to understand the actual cost for routine O&M and repairs.

Toilet cleaning labor (school porter) was the most common cost reported by eight schools, with an annual median cost of 10.33 BOL (1.46 US$) per student or 4,802 BOL (681US$) for a median school of 465 students. Toilet cleaning materials were purchased by seven schools, with an annual median cost of 1.20 BOL (0.17US$) per student or 359 BOL (51US$) for a median school of 299 students. Student brigades were common is most schools, but many did not have a budget as these were NGO supported. Costs for hygiene education and promotion, and water and handwashing O&M were mainly reported by schools in Oruro.

Conclusion and Recommendations

Bolivia has decentralized funding and maintenance of schools to municipal governments, with schools relying on their municipalities for routine O&M services and repairs of their WASH facilities. Visits to schools found that municipalities are unable to meet the WASH O&M needs of schools, leaving schools to come up with their own solutions. National standards for WASH in schools do not exist, and it all depends on individual municipalities and their schools on whether they prioritize WASH. As found in case study schools, basic water supply and toilets are available in schools, but there are problems with leakage, cleanliness, and availability of soap.

Recommendations made by key informants in schools to improve the O&M of WASH facilities in Bolivian Schools were as follows:

- Additional allocations from municipal governments to improve and renovate the existing school infrastructures, through installations of sinks, sewage system, and water supply system.
- Additional financial resources and support from the municipal government for the O&M of WASH facilities.
- Improvement in water and waste services, through better waste management inside and outside schools, and improvement in water quality.
- Increase in financial resource for schools to manage their O&M, and such as by hiring a plumber.
- Training of human resources in charge of O&M of school WASH facilities.
- Motivating students to properly use facilities and keep them in good condition.

References

Diario Digital http://diarioandaluz.com/2015/09/14/cuestionan-transparencia-del-programa-bolivia-cambia-evo-cumple/ 2015

FPS, *Institutional Strategic Plan 2012-2015* 2012

FPS, http://www.fps.gob.bo/, 2015

Ministry of Education, Plurinational State of Bolivia, *Education Law No. 070: Revolution in Education,* La Paz, 2010

Ministry of Education, Plurinational State of Bolivia, *Ministerial Resolution 001/2015: General Rules for Education and School Management,* La Paz, 2 January, 2015

Ministry of Education, Plurinational State of Bolivia, *Ministerial Resolution No. 010/2011: General Rules for School Subsystem Regular Education,* La Paz, 12 January, 2011

Ministry of Education, Plurinational State of Bolivia, *Specific Regulations Systems – Treasury and Budget,* No. 1028/ 2011, La Paz, 23 February, 2012

Ministry of Education, http://www.minedu.gob.bo/ , 2015b

Ministry of Water and Sanitation, Plurinational State of Bolivia, *National Plan of Basic Sanitation, 2008 – 2015,* La Paz, November, 2009

Ministry of Housing and Basic Services, Republic of Bolivia, *Community Development Guide for Water and Sanitation Projects,* La Paz, March, 2002

Ministry of Services and Works, Republic of Bolivia, *Water Facilities – Design for Drinking* Water Systems, Bolivian standard NB 689, La Paz, December, 2004

Ministry of Development Planning, Plurinational State of Bolivia, *Instrument application: Community Development and Capacity Building (DESCOM – F1),* La Paz, September, 2012

SENASBA http://www.senasba.gob.bo/index.php?option=com_content&view=article&id=51&Itemid=58 2015

SENASBA *National Service for Sustainability of Basic Sanitation Services "SENASBA": Institutional Strategic Plan 2010 – 2014,* September 2010

The Honorable Congress, Republic of Bolivia, *Administrative procedure of 23 April 2002,* La Paz

The Honorable National Congress, Republic of Bolivia, *National Dialogue Law 2000: Law 31 of July 2001,* Law No. 2235, La Paz, 2001

The National Congress, Plurinational State of Bolivia, *General Law on Autonomies and Decentralization "Andrés Ibañez",* Law No. 031, La Paz, 19 July 2010

The Honorable National Congress, Republic of Bolivia, *Law of Popular Participation,* Act 1551, La Paz, 20 April, 1994

UNICEF and Save the Children, *Bolivia: Enabling Policy Environment for WASH in Schools, UNICEF, NY, Save the Children, Bolivia,* 2014

UNICEF and Save the Children, *Water Sanitation and Hygiene in schools, strengthen education of adolescent girls in rural areas of Cochabamba, and Menstrual Hygiene Management Study in schools,* UNICEF BOLIVIA, La Paz

UNICEF and Save the Children, *WinS O&M Study: Desk Review Instructions,* UNICEF, NY, 2014

UNICEF and World Health Organization, *Progress on Sanitation and drinking water – 2015 update and MDG assessment*, UNICEF – NY, WHO – Geneva, 2015

UNICEF, *Advancing WASH in Schools Monitoring*, UNICEF, NY, 2015

UNICEF, *National School WASH Inventory in Bolivia,* UNICEF, Bolivia, September, 2013

UNICEF, *WASH in Schools: Bolivia Country Profile,* UNICEF, NY 2014b

United Nations Educational, Scientific and Cultural Organization, *EFA Global Monitoring Report 2000 -2015: Achievements and Challenges*, UNESCO, Paris, 2015

UNESCO- International Bureau of Education, *World Data on Education: 7th edition, 2010/11, Bolivia,* http://www.ibe.unesco.org/fileadmin/user_upload/Publications/WDE/2010/pdf-versions/Bolivia.pdf, UNESCO – IBE, Geneva, April, 2010

UNESCO, UNESCO Institute for Statistics – data centre, http://data.uis.unesco.org, UNESCO, NY, 2015

World Bank Group, The World Bank, http://data.worldbank.org/country/Bolivia#cp_wdi 2014

Wikipedia, *Water resources management in Bolivia,* https://en.wikipedia.org/wiki/Water_resources_management_in_Bolivia#Legal_and_institutional_framework 2014