

WATER AND SANITATION MARKET ASSESSMENT: POTENTIAL REGIONAL VIABILITY OF WATERCREDIT & MICROFINANCE SOLUTIONS IN COLOMBIA

Executive Summary

This report was developed by Water.org to assess the market for water, sanitation and hygiene (WASH) services in Colombia and gauge potential opportunities to expand access to WASH through financial services, including microfinance. It is based on the analysis of technical documents as well as a series of interviews with a broad range of actors representing government entities, microfinance institutions (MFIs), water utilities (WUs), and non-governmental organizations (NGOs). The research and interviews were conducted between January and March 2012.

Water, Sanitation & Poverty in Colombia

In 2010 Colombia had an estimated 46 million inhabitants, with 75% of the population living in urban areas¹. Of the urban population, 21 million people live in the seven largest cities². According to the national definition of poverty, 37% of the population is considered poor, earning less than USD 106 per month³; 12% of the population is considered extremely poor, earning less than USD 47 per month⁴.

There is high WASH coverage in urban areas, but gaps in coverage remain in rural and peri-urban communities. More than 92% of the population in Colombia has access to an improved water source, leaving 3.6 million people⁵ without access to safe water. Ninety-nine percent of urban households have improved water access, but 600,000 of the urban households with access to an improved water source do not have a networked water connection⁶, although they may be connected in the relatively near future as water networks are extended. In rural areas 72% of the population has access to improved water sources⁷.

More than 77% of all Colombians have access to improved sanitation which translates into 10.5 million people relying on unimproved sanitation solutions, including shared sanitation or open defecation⁸. Urban areas have an improved sanitation rate of 82%, and in rural areas 64% of the population has access to improved sanitation⁹.

¹ UNICEF and World Health Organization. Joint Monitoring Program, 2012 Update.

² DANE, Boletín Censo General 2005, "Perfil Colombia", September 2010

³ Colombian national poverty line 2010: 187,079 COP. DANE, 2011.

⁴ Colombian national extreme poverty line 2010: 83,581 COP. DANE, 2011.

⁵ Thereof approx. 3.2 Million in rural areas and 400,000 in urban areas

⁶ JMP 2012.

⁷ JMP 2012

⁸ JMP 2012

⁹ JMP 2012



There is limited data on the condition of WASH in informal urban settlements of Colombia, but it is mandated that WASH networks are not extended to informal settlements that are deemed risky due to conflicting land rights and high risk of landslides or flooding. The population of Colombia's major cities has increased substantially during the last decade (rate of urbanization estimated at 2.13%¹⁰). As of 2007, it was estimated that 3.2 million Colombians were displaced by ongoing armed conflict in rural areas, typically migrating to informal settlements in urban and peri-urban areas¹¹. Most of these areas are not formally recognized as part of any municipality, but are usually annexed by municipalities if they face low risk for natural disasters. Public services are only extended to formally recognized areas, as the mandate for service provision in Colombia does not allow construction of infrastructure in informal areas. This is a major constraint to the increase of WASH coverage in Columbia's highly populated peri-urban areas.

Ownership, structure and service quality of WASH providers varies between urban and rural areas.

WUs are responsible for WASH provision in urban areas and are either privately owned, publicly owned by municipalities, or of mixed ownership. The three largest WUs in the country (in Bogotá, Medellín and Calí) are publically owned. The largest seven WUs serve 41% of the population¹². WUs with over 2,500 connections (i.e. larger cities) typically provide water over 21 hours per day. Small municipalities are predominantly served by smaller WUs. There are approximately 1,700 WUs with less than 2,500 users¹³. WUs with fewer than 2,500 connections provide water only 12 hours per day on average¹⁴. WASH services in rural Colombia are provided by approximately 11,550 community-based organizations (CBOs), only 2,000 of which are registered and supervised by the Superintendent for Public Domestic Services.

WU and Government-focused WASH access solutions

Service providers are required to provide financing and subsidized tariffs to the poor. Colombian residential areas are classified in up to six socioeconomic strata, and a progressive tariff structure subsidizes low income family tariffs by charging higher rates to high income families. Any entity providing WASH services is legally required to finance water and sewerage connections for low income households with a minimum repayment period of 36 months and a maximum loan APR of 6%¹⁵. The legal framework in Colombia does not provide guidelines for the reimbursement of network extensions executed and financed by third parties (e.g. neighborhoods). However, some WUs support neighborhood initiatives in recently legalized settlements, training residents and supervising the

¹⁰ JMP data 2012, author's calculation

¹¹ Lozano-Gracia, Nancy, Gianfranco Piras, et al. "The Journey to Safety: Conflict-Driven Migration Flows in Colombia". *Regional Economics Application Library*. University of Illinois, May, 2009.

¹² DANE, Boletín Censo General 2005, "Perfil Colombia", September 2010

¹³ Superintendencia de Servicios Públicos Domiciliarios 2010

¹⁴ Superintendencia de Servicios Públicos Domiciliarios 2010

¹⁵ Law 142, Art. 97



installation of network extensions. In other cases, property development companies install networks and include the costs in home prices.

| WATER UTILITY | СІТҮ | INTEREST RATE (MAXIMUM 6%) | LOAN TENOR (MINIMUM 36 MONTHS) |
|---------------|--------------|----------------------------|-----------------------------------|
| AAA | Barranquilla | 6% | 48 Months |
| EAAB | Bogotá | 5.99% | 36 Months |
| EPM | Medellín | DTF* w/ Maximum of 6% | 60 Months |

Sample WU Loan Terms for Financing New Household Connections

*DTF: Average market interest rate for deposits Sources: Law 142, Interviews with WU

The Colombian national government is aggressively investing to increase water and sanitation coverage. According to the government's National Development Plan 2010-2014 (NDP 2010-2014)¹⁶, water and sanitation coverage will increase by an additional 700,000 households and 1.125 million households, respectively, by 2014. Earlier WASH infrastructure project impact was limited by a lack of funds for intra-domiciliary connections and bathrooms, and the NDP 2010-2014 considers government subsidization of these components. The *Ciudades Amables* (friendly cities) program will fund 90,000 new intra-domiciliary connections to existing water or sewerage networks or those under construction in urban and peri-urban areas. The program will begin in Cartagena, Barranquilla, Medellin and Bogotá, with possible future expansion to other cities. Another recently approved, but still un-named program, will address rural WASH shortfalls with 40 infrastructure projects and funding for household connections, intra-domiciliary connections and bathrooms¹⁷ ¹⁸.

Colombian Microfinance Sector

Despite a strong microfinance environment, overall microfinance coverage is relatively low and services are highly concentrated geographically. In 2011 the Economist Intelligence Unit's *Global Microscope on the Microfinance Business Environment* ranked Colombia as the 7th best climate for microfinance. The Colombian microcredit portfolio has increased steadily over the past seven years with annual growth rates of between 12.8%- 42.2%¹⁹. Yet there are only 2.2 million active microfinance borrowers. CGAP²⁰ identifies the legally mandated interest rate ceiling as one key contributor to low market penetration. Most MFIs focus primarily on urban and peri-urban areas neglecting Colombia's rural areas. Only recently – as urban microfinance markets have become saturated – have MFIs begun to create strategies to expand into rural areas²¹.

¹⁶ Approved by law 1450 in June 2011.

¹⁷ Interview with José Francisco Manjarrés, Senior Specialist in Water and Sanitation, BID, 02.03.2011.

¹⁸ Interview with Javier Moreno, Director Sustainable Development, VMAS, 16.02.2012.

¹⁹ EMPRENDER 2011

²⁰ Consultative Group to Assist the Poor (CGAP) is a consortium of 28 development agencies that supports microfinance. www.cgap.org.

²¹ Interview with Claudio Higuera Martínez, Gerente General, EMPRENDER, 14.02.2012.



Several large financial institutions serve the majority of the existing microfinance market. Three banks specializing in microfinance (two of which recently transformed from NGOs) and two NGOs hold over 88% of the total outstanding microfinance portfolio²². In addition to these MFIs with national coverage, smaller NGOs and foundations offer small- to medium-sized credit programs with regional focus. Two national-level apex associations support MFIs in the country: EMPRENDER focuses on non-regulated MFIs, while the recently-established Asomicrofinanzas includes both regulated and non-regulated MFIs.

Microfinance, Water and Sanitation Linkages

Some MFIs offer home improvement products that can finance WASH improvements, but these are not priority products and interest rates are not competitive with WU financing rates. Of the MFIs interviewed, none offer technical assistance for home-improvement loans, such as advice on appropriate WASH technology. Of those MFIs that do offer credit for home improvement, demand is limited by strict MFI controls on loan use. MFI interest rates for home improvement loans range between 23.87% - 36%.

A government initiative through *Banca de las Oportunidades* provides technical assistance for the development of home improvement loan products. *Banca de las Oportunidades (BancOp)* is a strategic unit of the public second-tier²³ bank BANCOLDEX (*Banco del Comercio Exterior de Colombia*) aiming to increase access to the finance amongst the poor. BancOp provides assistance to MFIs in various forms, including seed capital, technical assistance for market assessments, product design and piloting, and co-financing of operating expenses during startup. BancOp is planning a program for late 2012 that provides technical assistance to six MFIs for the development of home-improvement products. This program aims to facilitate at least 40,000 home-improvement loans.

The Inter-American Development Bank (IADB) may fund the introduction of microfinance services for WASH improvements. Products considered may include household connections, interior installations (where network exists) and individual solutions (in dispersed and rural areas), eventually co-financed by national or local governments.

Conclusions and Recommendations

There is limited opportunity in Colombia for large scale MFI-led lending for household WASH improvements.

- Thanks to government subsidies, WUs offer financing for household connections and intradomiciliary installations at below market rates

²² EMPRENDER 2011

²³ Intermediary bank, lending to other financial institutions.



- Potential for government subsidies for intra-domiciliary connections and bathrooms might provide a counter-incentive for families to invest in household WASH installations
- There is a lack of MFI presence in rural areas with greater WASH needs
- Peri-urban areas with high WASH demand are often informal and ineligible for new infrastructure and services from WUs
- A lack of WASH NGOs limits potential WASH support for MFIs

The Colombian microfinance sector has the capital available for WASH-focused credit products, and some opportunities may exist for WASH lending on a small scale, particularly in rural areas and recently legalized peri-urban settlements. In peri-urban areas, MFI capital could finance the extension of water or sewerage networks into newly legalized settlements if alliances between WUs, local governments, community boards and MFIs can be established. In rural areas with limited network access, financing could facilitate access to on-site sanitation solutions. In those rural areas where networked service provision is viable, CBOs could develop new networks, network extensions or improvements, financed by MFIs. However, there may be substantive challenges to this approach. Rural populations' financial resources might not be sufficient to finance investments in water networks, necessitating co-financing from the government or NGOs. Additionally, Colombia generally lacks the WASH NGOs to support CBOs in the design, construction, administration, operation and maintenance of networks.