Inclusive Water Supply and Sanitation Services Provision for Indigenous Peoples in Latin America and the Caribbean

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Abstract/Summary

In Latin America, extending the human right of access to WSS services to Indigenous peoples represents the final step for many countries to reach universal coverage. In general, the sector has lacked a general participatory framework and a particular set of principles to guide the stakeholder engagement processes and the participation strategies for sustainable outcomes of WSS projects in Indigenous areas. This paper provides practical guidance and operational tools to improve the effective inclusion, engagement and delivery of sustainable WSS investments services *with* Indigenous Peoples. It compiles lessons learned and good practice from throughout the Latin American region, drawing from the visions and experiences of Indigenous groups and organizations, WSS agencies, NGOs, and development partners. The findings of the field work are organized around three concepts essential to ensure effective engagement with Indigenous peoples: Respect, Ownership and Sustainability, and they follow the sub-project cycle for direct application for field practitioners.

Introduction

The World Bank estimates that 43 percent of the approximately 42 million Indigenous peoples in LAC live in poverty and that 24 percent live in extreme poverty. (World Bank 2015) These poverty rates are more than twice the levels found among the non-indigenous population. While the number of Indigenous peoples living in poverty has fallen over recent years, the poverty gap between Indigenous and non-indigenous Latin Americans has stagnated or, in the worst cases, widened.
In LAC, Indigenous peoples are 10 to 25 percent less likely to have access to piped water and 26 percent less likely to have access to improved sanitation than the region's non-indigenous population. (LAC Equity Lab 2015) Lack of access to WSS services perpetuates chronic poverty by contributing to poor health, infectious skin and gastrointestinal diseases, and malnutrition, among other ailments. Extending the human right[1] of access to WSS services to Indigenous peoples represents the final step for many LAC countries to reach universal water coverage.

To effectively and permanently close this coverage gap, LAC countries need to extend WSS services sustainably and inclusively to Indigenous communities. Local service providers in Indigenous communities have historically been more likely to "slip" into failed service provision than in non-indigenous communities.[2] Studies show that adoption[3] and use of WSS systems is lower and slower in

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[1] In 2010 the United Nations (UN) Resolution 64/292 acknowledged that clean drinking water and sanitation are essential to the realization of all human rights.
[2] Data from the *Sistema de Información de Agua y Saneamiento Rural (SIASAR)*, a regional information system owned and managed by member countries to track rural WSS indicators related to access, quality of services and overall sector sustainability. See Annex 5 for more information on SIASAR.
[3] Adoption means the acceptance of and ownership over a given WSS system, including community consultations, understanding of water-related diseases and health consequences of poor WASH, construction and future operation and maintenance.

Indigenous communities largely because of investors' and service providers' lack of knowledge and limited attention to Indigenous peoples' unique social and cultural characteristics. Oftentimes, Indigenous territories are overlooked by WSS project teams given their uncertainty over how to carry out projects in Indigenous territories, the remoteness of these areas, and the high associated per capita cost of a potential operation, among other reasons. In general, the WSS sector has lacked a participatory framework tailored to Indigenous peoples with specific principles to guide stakeholder engagement processes, participatory strategies, and the selection and implementation of investments to promote sustainable outcomes for WSS projects with Indigenous peoples.

The objective of the Toolkit on "Water and Sanitation Services: Achieving Sustainable Outcomes with Indigenous Peoples in Latin America and the Caribbean" is to provide practical guidance and operational tools to promote the inclusive delivery of sustainable Water Supply and Sanitation (WSS) services to Indigenous peoples in Latin America and the Caribbean (LAC). This paper outlines the main findings of this research.

Description of the Case Study – Approach or technology

This paper draws on the findings of interviews, consultations, and field visits carried out in 37 Indigenous communities[4] in seven Latin American countries (Panama, Nicaragua, Paraguay, Argentina, Peru, Colombia and Bolivia) where the World Bank or other development actors have implemented WSS projects. A multi-disciplinary World Bank team, which included WSS engineers, anthropologists, social specialists and economists, among others, carried out the fieldwork. Through interviews with all the stakeholders (governments, WSS institutions including their decentralized units, Indigenous organizations, NGOs, other development agencies and beneficiaries) involved in the roll-out of these projects, this on-the-ground work was able to synthesize lessons learned from a range of perspectives from actual interventions. The lessons from the field presented herein also build on a desk review, interviews with WSS and Indigenous peoples experts, and consultations with Indigenous representatives outside of the countries chosen for the field visits.

As opposed to other low-income groups, Indigenous peoples often: (i) subscribe to organizational and governance structures that are different from the rest of society; (ii) maintain extensive traditional knowledge around their land, natural resource base, and environment; (iii) utilize unique practices and cultural norms around water collection, storage, distribution, sanitation and hygiene; and (iv) hold strong beliefs and practices around the well-being of the collective versus the individual, leading to a higher degree of social cohesion, unique traditions and structures of community organization, and different norms around communal contributions. The recommendations highlight specifically how to take these characteristics into account in the delivery of WSS services to Indigenous peoples.

Main results and lessons learnt

Three key principles of engagement are identified for carrying out successful WSS projects in Indigenous territories: **respect, ownership** and **sustainability**. When Indigenous peoples actively participate in the development of a WSS project and their traditions and organization structure are **respected** throughout the project cycle, they are more likely to develop **ownership** over the services and the results tend to be **sustainable** over time. This paper provides concrete recommendations on how specialists designing a WSS project in indigenous areas can best incorporate these principles throughout the project cycle. This paper targets project managers and field practitioners tasked with the implementation of WSS interventions in Indigenous areas, but it also provides guidance for policy makers and Indigenous leaders aiming to articulate specific demands from the WSS sector in their countries. The full Toolkit document addresses these issues from the perspective of project teams in more depth.

Respect requires the recognition of Indigenous peoples' unique and valuable world views and forms of organization through their active involvement throughout the project cycle.

WSS sector institutions need to build a dialogue with Indigenous organizations to ensure that Indigenous priorities are

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[4] The communities were located in rural, peri-urban and urban settings in order to ensure the widespread applicability of these recommendations.

meaningfully integrated in the sector. Indigenous authorities at national and regional levels have the capacity and interest to define sector priorities, develop policies, and prioritize investments, and should play an active role in the design and implementation of projects that would benefit their populations. These priorities can be articulated in a jointly developed national strategy that outlines a methodology for fair and transparent investment targeting, project implementation, and specific relevant cultural dimensions. Field visits revealed varying levels of such coordination that was seldom recorded through official strategies or articulated sector priorities. For example, in Bolivia, there are limited national policies or programs that ensure the Indigenous cultural adaptation of methodologies for WSS projects, despite existing ties between Indigenous organizations and the national government. However, Bolivia does have a well-developed regulatory framework for the WSS sector that requires the application of community development and training methodologies, incentives and requirements for the establishment and legalization of water committees,[5] and a specific menu of WSS alternatives. This well-developed tool provides a strong platform for the adaptation of Indigenous-specific consultation approaches, as it already mandates thorough engagement with beneficiary communities.

WSS sector institutions need to specifically target investments to Indigenous territories and tailor approaches for engagement, intervention design, and operation and maintenance support to these territories in order to close current regional coverage gaps. The lack of articulated strategic documents setting specific targets and rules for WSS sector interventions in Indigenous areas hampers this allocation. Oftentimes, national and regional Indigenous organizations can also facilitate the communication between individual Indigenous communities, central governments and funding agencies to ensure the community's needs are prioritized. A thorough understanding of the traditional forms of organization at the local level, how communities communicate their demands, and what bodies represent these demands is essential for respectful investment prioritization. If tensions are unveiled between organizations, guiding factors should be based on levels of representation and technical, economic, or other criteria used for investment choices.

In Nicaragua, Municipal Plans were elaborated to assess community WSS needs in each municipality and prioritize the most urgent interventions. Through a questionnaire, the project team calculated a series of indicators that yielded a "priority score." The highest priorities in the municipality were then chosen based on funds availability, and the final list validated by the Territorial Governments and independent Regional Governments. The use of a scoring system enabled the project team to choose communities based on a verifiable set of factors. Developing a thorough information systems with indicators on WSS coverage and management practices can also help project teams identify the neediest communities and elaborate alternative intervention mechanisms, such as institutional strengthening and training on specific WSS aspects that service providers are failing on, for example. Validating the list of prioritized communities with the relevant national and regional Indigenous organizations ensures their support of the intervention, alignment with their vision for territorial development and respect of the traditional structures.

In addition, WSS institutions need to hire social specialists and engineers with the capacity to work with Indigenous peoples and/or provide specialized training to current staff. Institutions can strengthen their implementation teams by: hiring specialized consultants, collaborating with an organization that has this expertise, or implementing a special training program for the existing engineering and social teams. In Paraguay, Asunción-based *Servício Nacional de Saneamiento Ambiental (*SENASA) successfully hired a consultant specifically to manage Indigenous topics in El Chaco (this person identified as Indigenous and had particular knowledge on the area of intervention), and in Argentina, the project team hired the NGO *Fundación Gran Chaco* to support the application and monitoring of social processes. Alternatively, the project team can establish agreements directly with Indigenous organizations to support cultural mediation and engagement with communities. This can help increase ownership at many levels and serve to build longer-term capacity for Indigenous organizations as active partners in WSS projects. Regardless of the approach, the consultants, organization, or newly specialized staff should oversee the consultation process and ensure that the beneficiaries' (and traditional authorities') inputs are the basis of the decision-making process.

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[5] Community-based organizations composed of community members who volunteer to manage their WSS systems.

Ownership builds on the principle of respect for engaging with Indigenous peoples and allows a community to recognize the value of WSS services and take responsibility to design, implement, use and maintain its WSS system accordingly.

At the community level, Indigenous beneficiaries and their local traditional authorities must be involved in all key decision making processes throughout the development and implementation of WSS projects to ensure that the intervention meets community needs and respects their world vision and cultural practices. A successful engagement strategy respects traditional hierarchies and cultural preferences in establishing clear rules for: participation, communication of key information among stakeholders and decision-making processes. Informed consultations are a two-way street: project teams provide information on the potential project and receive inputs and participation commitments from potential stakeholders and beneficiaries. This participation can take the form of conversations about the project with a platform for questions and answers, feedback provision by the future users and approval of key decisions. When well-conducted, consultations also avoid miscommunication around the intentions of the project team and the availability of resources. The consultation process is essential in building trust where there might be fundamental disagreements (between central government and Indigenous organizations for example) and in ensuring that local knowledge is respected and incorporated into projects.

In La Guajira, Colombia, the Regional Government, *Gobernación*, imposed that no requests be made of beneficiaries until they could see the physical system working, under the assumption that Indigenous beneficiaries would not believe a system was coming or want to contribute to its construction until that moment. The project team respected this request and worked with Indigenous authorities and local NGOs to agree on system type and carry out the whole intervention, and only involved beneficiaries once results were visible. These idiosyncrasies require flexibility on the part of project teams to assure community members of the beneficial nature of a project through information sessions at project onset.

A demand-responsive approach is essential for building ownership. However, it should be tailored to Indigenous contexts by providing technological options based on traditional knowledge and culturally appropriate community contribution schemes to foster ownership. In Bolivia, the NGO Water for People carries out a diagnostic of community needs and refines the intervention design in that community accordingly. This strategy effectively involved beneficiary communities and built on the communities' value system of collective wellbeing. The demand-responsive approach (DRA) applied by Water for People led them to 1) meet the demands of the community in full, leaving no beneficiaries behind, and 2) foster collaboration with the beneficiaries from an early stage, respecting their vision for their own development. In contrast, in the fieldwork for this toolkit, other programs were visited where the project prioritization and design had minimal, if any basis, on the diagnostic of community needs. The results were lamentable, with toilets built for empty homes and inhabited homes excluded from benefits. To avoid such pitfalls, social assessments must incorporate practical WSS-related questions beyond cosmovision and natural resources to provide a representative snapshot of the state of WSS and hygiene behaviors and preferences within a community.

Women are strong behavior change agents and keepers of traditional knowledge. Women should be engaged from project onset so that their views and local know-how can be incorporated throughout project life. Gender dynamics differ between Indigenous communities and cultural norms require specific strategies of engagement with women. This desire was voiced repeatedly during field visits. Some Aymara communities in the Bolivian highlands left all decision-making to women and refused to allow men on their WSS committees, whereas in Ecuador sometimes women are not allowed to speak in public but will influence and have the final say in decision-making once outsiders have left the community. Ideally, a thorough consultation process will provide space to discuss women's concerns and needs and ensure they are incorporated in subsequent steps of the project cycle. However, a community's specific cultural norms around gender will influence a project team's ability to carry this out. In the Paraguayan Chaco, Ayoreo women demand to be approached first when projects involve WSS, even before the community's leaders, because they are traditionally in charge of managing those resources. In this case, parallel consultations for men and women were recommended, but project teams should make sure to verify that traditional authorities are informed and supportive before taking such measures.

Sustainability in the provision of WSS services requires user ownership combined with specific,

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institutionalized mechanisms for O&M that reflect Indigenous peoples' customs and norms, including tailored technical assistance and active beneficiary involvement.

To avoid the failure of WSS services over the long-term, adequate time and resources have to be invested in the "soft" side[6] of these interventions to promote a respectful approach and the development of ownership by Indigenous beneficiaries. Consultations and knowledge of local traditional structures should inform the design of sound management structures for the WSS services, for example to create and build capable and credible local water committees with sustainable financing arrangements. Though field work did not evidence a one-size-fits-all solution for management of WSS services in Indigenous communities, successful service provision and management models visited all involved entities with clear communication mechanisms with the WSS services users, taking into account traditional authorities and trainings to build capacity where needed. In rural areas, the most successful management was done through WSS committees with clear statutes and regulations, with support (regular quality technical assistance) from an outside entity (municipal WSS unit or NGO). In more concentrated areas, the most effective WSS management model may be to collaborate with a water utility equipped with a strong social team with Indigenous peoples expertise. The presence of a well-defined management model that is appropriated by the community is a key element to service sustainability as it increases the likelihood that the users will be committed to paying for services to support continuous O&M of their systems.

Though there is a general perception that Indigenous peoples should not and do not want to pay for WSS services, findings reveal that Indigenous beneficiaries recognize the importance of WSS services and are willing to provide some kind of contribution to their sustainability, through either monetary or "alternative" payment models (such as in-kind work or locally-produced materials). In Panama, IDAAN representatives affirmed that in Colón's peri-urban area Indigenous peoples were actually the only users who paid for their water service on time. In Bolivia, all water committees visited charged tariffs (though some of them charged fixed amounts every month). Charging monetary tariffs, however, is not the only way Indigenous peoples can cover service provision costs. There are other culturally acceptable mechanisms, such as organizing a fair (*minga*) to raise funds when the system needs repair, or exchanging natural resources or goods, such as wood or a chicken, for the monthly payment. These contributions have to remain meaningful and contribute to the functioning of the system. The most effective non-monetary contribution remains time and labor for the operation and maintenance of the system. The community can establish a schedule wherein different tasks are assigned to participating community members in exchange for water service. These may be relatively simple but essential tasks, such as distributing water bills or doing house visits to share specific information to users, or more technical tasks that require specific training (chlorinating the water, opening and closing valves, keeping the books of the water committee). If the community decides to use this approach, training needs can be identified through consultations early on to ensure all community members are equipped to carry out relevant tasks. In the community of Boquerón Alto, in Bolivia, all community members attended technical trainings so that water committee members could rotate every year to anyone in the community.

The sustainability of decentralized services requires the establishment by the WSS sector of technical assistance and institutional support mechanisms in particular for the O&M phase, involving periodic site visits, just-in-time professional support, and the mobilization of external parties, as necessary. In Indigenous areas, this regular technical support should work with existing traditional structures, aim to strengthen local capacity, and be defined through consultations. Technical assistance providers who work in Indigenous communities must:

- Understand the region and its context.
- Understand the local social fabric and be able to identify and recognize the appropriate organizational structures.
- Respect the indigenous community's cosmovision and promote its inclusion in technical solutions.
- Speak the local language and/or learn pertinent communication mechanisms.
- Plan according to a timeline that takes into account the local customs and does not jeopardize

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[6] As opposed to the "hard" or infrastructure side of interventions, the "soft" side consists in all the social, technical and capacity-building work carried out in addition to infrastructure delivery.

achieving the technical assistance goals.

- Understand the local way of life and promote its respect in design processes.
- Take cultural uses of the land (sacred spaces, for example) into account in solutions identification.

Although the National Rural Sanitation Program (PNSR) is a government program that provides technical assistance in the implementation of WSS works in rural areas throughout Peru, the PNSR's personnel in the Peruvian Amazon – a region with a high concentration of Indigenous communities – presented the characteristics listed above and truly connected with the beneficiaries they worked with. Staff interviewed during field work showed they had earned the local Indigenous communities' trust by working with them for a long time, spoke the local language, coordinated directly with the traditional authorities (Apu) who worked closely with the water boards, and were regularly informed of local traditional meetings, their development, and their issues of interest.

Conclusions and Recommendations

The team found that these essential components of project sustainability were not always present in the field visit cases. In particular, the lack of articulation of priorities for the sector in Indigenous areas and specific methodologies to address them left a serious need for better coordination among stakeholders. On the other hand, where some of these key steps were being implemented, they often missed other important components for a holistic, successful engagement. The team believes that providing a comprehensive framework for collaboration with dispersed rural Indigenous communities[7] in sustainable WSS service delivery is critical to consolidate existing knowledge in this sector and connect practitioners with tools to overcome constraints and knowledge gaps in order to better serve marginalized Indigenous communities.

Fact-Checking

The fieldwork carried out for this Toolkit challenged several commonly held stereotypes on Indigenous communities' WSS preferences and habits.

Reluctance to use and adopt sanitation solutions by Indigenous peoples. It is common to hear that Indigenous peoples will resist using toilets because of their centuries-old open defecation practices. *In fact, field experience reveled that when social and engineering work is done well, with thorough iterative consultations, tailored sanitation solutions, and community capacity building (in particular involving women), Indigenous peoples demand, adopt and use sanitation solutions.*

Rejection of piped water and water treatment. It is often said that Indigenous peoples reject piped water systems and water treatment because piping or treating the water would change its natural composition. *In fact, if the community receives appropriate training, preferably in their local language, on the health benefits and comfort associated with a piped water supply and water treatment, Indigenous peoples demand, appreciate, and are willing to contribute (either financially or through other means) to an improved water system.*

Unwillingness to pay for water services. Many people believe that Indigenous peoples are not willing to pay for water services. *Contrary to popular belief, Indigenous peoples are ready to contribute to WSS services projects and their operation, either in monetary or in-kind contributions. In fact, in many cases, Indigenous peoples are keen on having water meters to promote rational water use and equitable water sharing among the families.*

And finally,

Working with Indigenous peoples is too complex and difficult to achieve desired outcomes. Initially, engaging with Indigenous peoples may appear overly complex due to the additional layers of coordination required and the need for a customized approach. *When treated as development partners, Indigenous communities actively pave the way for successful project delivery. So long as the Indigenous traditions and*

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[7] Though the field work involved visits to urban, peri-urban and rural settings, the team found that those Indigenous peoples living in the most remote areas maintained their cultural norms and practices the most, while those closer to cities considered themselves less Indigenous. As such, the recommendations of this Toolkit are tailored to rural Indigenous peoples, though they also applied in some peri-urban cases such as Panama and Bolivia.

organizational structure are respected, the projects are defined with Indigenous peoples' active participation, and ownership for the WSS system is established, project development and implementation tends to be smooth and the results tend to be sustainable. Project teams need to allocate time and resources for a demand-responsive approach to project design, implementation, and evaluation that respect the specificities of Indigenous community practices and organization. It is true that WSS services in Indigenous communities require unique and flexible approaches with specialized knowledge of the community, but it is not significantly more complex or time-consuming than a demand-driven approach to providing WSS services to other communities. The elaboration of a country-specific strategy and implementation methodology agreed between WSS sector institutions and Indigenous organizations will also streamline these processes. Furthermore, success is possible, sustainable, and extremely impactful when the project respects Indigenous actors and creates ownership over the intervention.

Structural Barriers

Beyond the practical and on-the-ground recommendations provided in the Toolkit, it is important to recognize that complex social, political, and institutional structural barriers still jeopardize the effective application of the key principles and actions of a sound engagement with Indigenous peoples. On the one hand, these barriers are rooted in centuries of tense relations between Indigenous peoples and Governments; on the other, they also relate to recurrent institutional challenges strongly present in the Social Development and WSS Sectors beyond working with Indigenous peoples.

Historical discrimination against communities outside of the mainstream recurrently leads to their lack of voice, political representation and economic power. This social exclusion has been institutionalized through representation structures and investment prioritization mechanisms in many LAC countries. Though for Indigenous peoples this is slowly changing through the legal recognition of their rights, this has yet to truly transition to practice so that Indigenous peoples may enact their vision for their own development.

Weak institutional structure for Indigenous representation and for the WSS Sector, which usually renders institutions on both fronts unable to respond adequately to Indigenous peoples' demands. In most of the countries in LAC, the institutional structure to support the development of policies and the implementation of key Indigenous engagement principles (such as recognizing land rights, traditional indigenous organizations, and carrying out meaningful consultations, among others) is either weak or non-existent. The lack of definition of key aspects such as tenure laws and resource management often creates severe obstacles for the development of systematic interventions at scale in Indigenous areas.

Similarly, although most countries have a well-defined arrangement for WSS services provision in urban areas, the rural WSS institutional arrangements (particularly relevant considering that most Indigenous peoples live in remote rural areas) are frequently dispersed, under-staffed, under-funded and under-represented in the higher-level Government structures. Additionally, institutions often **lack specific knowledge to work in remote and unique social-cultural environments**, thus demotivating them from engagement or making their engagement less effective. The institutional development barrier is often associated with a **political system that rewards physical interventions**, which tend to be located in populated and accessible urban areas. The majority of funds and overall institutional efforts in the WSS Sector still go to urban areas, which are more easily reached and generate quicker, cheaper results and political visibility.

Changing the mindset of political leaders in order to prioritize investments and institutional efforts towards the most vulnerable, traditionally excluded, and poor communities (namely, Indigenous peoples) is a long-term transformational process that requires strong leadership and targeted knowledge. Higher-level advocacy work, such as international agreements like the Sustainable Development Goals supported by the United Nations or collaboration with international development partners, could help re-direct efforts to the most needful areas and supply open-minded political leaders with the knowledge and tools to break through these barriers and promote inclusive development for their countries.

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{*References should be given in the Harvard style e.g. (Smith, 2001) in the text, together with, in a list at the end: Smith, John (2001) 'Water coverage indicators', DFID report. For more details see http://libweb.lancs.ac.uk/g79harvard.htm}*

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