The Influence of International Organizations on the Achievement of SDG 6 (Access to Clean Water and Sanitation) in South America

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Abstract

Access to clean water and sanitation is a fundamental human right, and it is essential for achieving Sustainable Development Goal 6 set by the United Nations. This research proposal aims to investigate the influence of international organizations on the achievement of SDG 6 in South America, with a specific focus on Brazil and Ecuador. The study will explore the role of international organizations in addressing clean water and sanitation challenges in the region.

Introduction

Studying the impact of International Organizations in promoting the access to clean water and sanitation is highly important because of different reasons. Despite the progress indicated by the increase of the global population with access to safely managed drinking water services from 70% in 2015 to 74% in 2020, a significant number of people still lack access to clean water (United Nations Statistics Division, 2022).

While SDG 6 is a global goal, the regional dynamics and political structures can play a significant role in achieving these objectives. By concentrating on two countries in South America, Brazil and Ecuador, this project will adopt a regional perspective on the need for clean water and sanitation as a fundamental human right, compare what is the situation in each and the role that International Organizations play in them.

The Sustainable Development Goals (SDGs) were established in the 2030 Agenda for Sustainable Development, adopted by all United Nations Member States in 2015. It contains 17 Sustainable Development Goals (SDGs), that are intended to be guidelines for all member countries to work on in a global partnership and achieve by 2030. Some of the SDGs in this list are: Goal 1: End poverty in all its forms everywhere, Goal 3: Ensure healthy lives and promote well-being for all at all ages, Goal 10: Reduce inequality within and among countries, among others (United Nations, 2023).

Achieving SDG 6 in South America presents unique challenges related to water scarcity, climate change, and regional disparities. For instance, in Argentina, over the past three decades, international bodies like the World Bank and IMF imposed the privatization of water and sanitation, thus particularly affecting lower and middle-class groups. In response to this, there has been a global shift towards a rights-based approach to water promoted by the United Nations.

Goal 6 is ensuring availability and sustainable management of water and sanitation for all. Each goal has specific targets to be achieved by 2030, and there are 169 in all (Madeley, 2015). SDGs are an ambitious strategy to enhance the overall well-being of people. However, governments must acknowledge the need to implement policies, specifically economic and funding related. Nonetheless, not every country is in the same capacity to provide funding for themselves, and 2030, the target date for achieving the SDGs, is approaching rapidly.

The geographic distribution of this issue is also an important factor. The most affected areas are rural areas, especially in Least Developed Countries (LDCs). That is the reason why the international organizations can make a significant impact by implementing specific policies and initiatives to address the challenges faced by these populations.

Additionally, SDG 6 is critical for the achievement of other SDGs as well. Clean water is linked to tackling poverty (SDG 1) and promoting development (SDG 8). It is a fundamental component of food security (SDG 2), crucial for health and well-being (SDG 3), and an essential factor in creating sustainable and habitable urban centers (SDG 11). However, beyond these obvious connections, there are subtler connections to various other SDGs. For example, water plays a significant role in the energy sector (SDG 7), mainly because of hydropower and non-environmentally friendly energy sources. Therefore, my point is that by working on SDG 6, we will simultaneously contribute to other SDGs too.

Seven in ten individuals can now wash their hands with soap and water at home, but 670 million people still cannot (Kuehn, 2021). That is why the critical connection between access to clean water, sanitation, hygiene, and public health is another reason for studying the influence of international organizations in tackling this issue. In the era of COVID-19 and the ongoing fight against infectious diseases, access to proper hand hygiene facilities is critical.

There is a need to not only provide sanitation facilities but also ensure its safe collection, treatment, and proper disposal. The consequences of inadequate wastewater systems are significant and can lead to pollution of surface and groundwater with severe health implications. For instance, the widespread pollution with pathogens from the disposal of untreated wastewater is currently affecting approximately one-third of all rivers in Africa, Asia, and Latin America (Tortajada et al., 2018). In these regions, water bodies, such as rivers, transform into open sewers and become a serious threat to both human health and the environment. Water pollution often requires collaborative efforts and regional solutions, that is why International Organizations can help to drive policies and initiatives on a regional scale to foster healthier communities.

Sustainable development goal 6: Access to clean water and sanitation

According to the United Nations Department of Economic and Social Affairs, the following are targets and indicators outlined under SDG 6 that serve as a detailed plan of action towards achieving this ambitious goal by 2030:

1. *Target 6.1: Achieving Universal Access to Safe Drinking Water:* The indicator 6.1.1 measures the proportion of the population using safely managed drinking water services.
2. *Target 6.2: Ensuring Adequate Sanitation and Hygiene:* It highlights the significance of sanitation and hygiene, emphasizing the need to end open defecation and respond to women, girls, and marginalized groups' needs. The percentage of the population that uses proper sanitary services is measured by indicator 6.2.1.
3. *Target 6.3: Improving Water Quality and Reducing Pollution:* This target seeks to enhance water quality by minimizing pollution, hazardous material release, and untreated

wastewater. Indicators 6.3.1 and 6.3.2 evaluate the proportion of domestic and industrial wastewater safely treated and the quality of bodies of water, respectively.

4. *Target 6.4: Enhancing Water Use Efficiency and Addressing Scarcity:* This focuses on improving water-use efficiency, sustainable withdrawals, and addressing water scarcity. Indicators 6.4.1 and 6.4.2 measure changes in water-use efficiency over time and the level of water stress.
5. *Target 6.5: Integrated Water Resources Management:* Emphasizing the need for coordinated water management, this target calls for integrated water resources management at all levels, including transboundary cooperation.
6. *Target 6.6: Protecting and Restoring Water-Related Ecosystems:* This target emphasizes the importance of protecting water-related ecosystems such as mountains, forests, rivers and lakes. Indicator 6.6.1 monitors changes in the extent of these ecosystems over time, providing valuable information on efforts to preserve biodiversity and ecological balance.
7. *Targets 6.a and 6.b: International Cooperation and Community Participation:* These targets underscore the significance of international cooperation and community engagement. Target 6.a urges the expansion of support to developing countries in water and sanitation-related activities, encompassing technologies like desalination and water efficiency. Target 6.b highlights the importance of strengthening local community participation in water and sanitation management, ensuring inclusivity and sustainable development at the grassroots level.

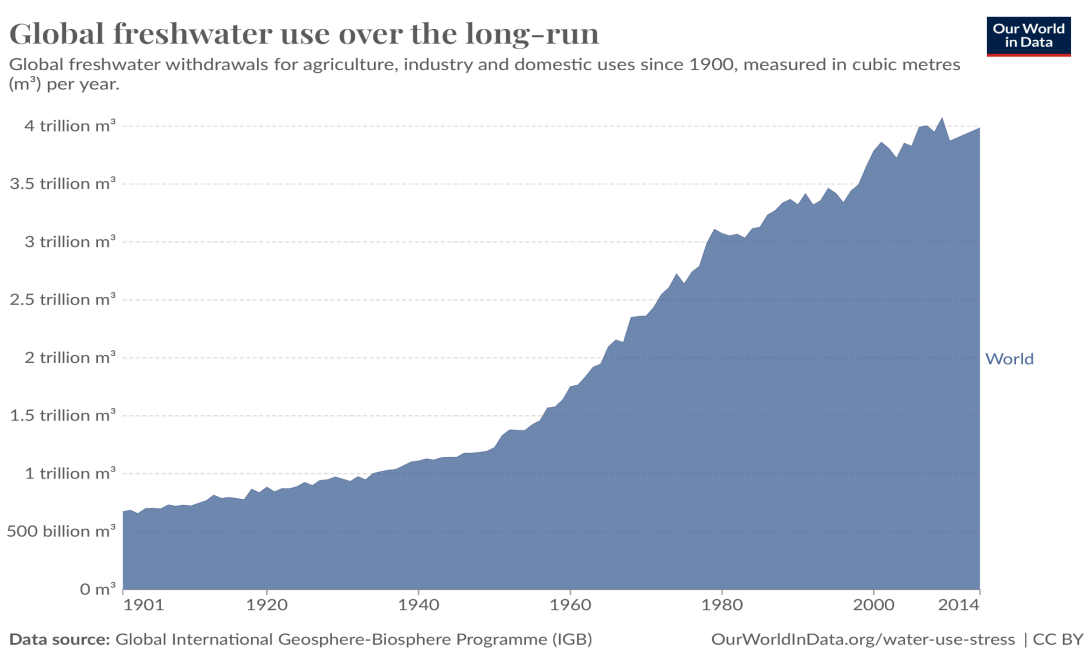
Moving forward, this project will mainly focus on target 6.1, 6.2, 6.a and 6.b. By honing in on these targets, we aim to develop comprehensive strategies to enhance water accessibility,

sanitation, and management, thereby contributing to the realization of Sustainable Development Goal 6 in its entirety.

Freshwater usage, water stress and upcoming scarcity

A number of reasons have contributed to the increase in freshwater usage worldwide, such as the growing population and the trend towards more resource-intensive consumption patterns. Since 1900, the amount of freshwater used worldwide has increased by about six times due to this. Usage of freshwater includes withdrawals for municipal, industrial, and agricultural uses. Graph 1 shows that there was a significant increase in the rates of freshwater usage worldwide beginning in the 1950s. But in more recent times, especially around 2000, the rate has ceased or slowed noticeably.

Graph 1: Global freshwater use over the long-run



Water withdrawals are “freshwater taken from ground or surface water sources (such as rivers or lakes), either permanently or temporarily, and used for agricultural, industrial, or municipal (domestic) uses” (Ritchie & Roser, 2023). The term "water stress" describes the pressure that freshwater resources face due to the ratio of renewable freshwater sources to freshwater withdrawals. It does not necessarily mean that a nation is experiencing severe water scarcity; rather, it means that a country is on the verge of exceeding a water basin's sustainable capacity. Excessive freshwater withdrawals indicate that a nation is either rapidly reducing its aquifers or depends heavily on desalination procedures to produce freshwater by osmosis from seawater.

In the context of water scarcity, according to the Medalion Journal, approximately 50 percent of the Earth's wetlands have been lost since 1900. This is a threat to biodiversity since they are home to a variety of organisms and are crucial breeding habitats for numerous species. When there is a shortage of water, natural habitats usually have serious repercussions. For instance, “the Aral Sea located in central Asia, which used to be the fourth largest freshwater lake globally (...) has shrunk to the extent that it has lost an area equivalent to the size of Lake Michigan" (Padder & Bashir, 2023).

Possible Solutions for Water Scarcity

There are various strategies that can be used to overcome water scarcity. Acquiring effective water filtration systems is essential to ensure the supply of drinkable water. Advanced filtration technologies are used to eliminate contaminants, bacteria, and microorganisms to provide clean drinking water in a variety of environments. Also, switching from flood irrigation

to more effective techniques like drip irrigation or sprinkler systems in agriculture can help to conserve water.

Nonetheless, there are immediate solutions as well. Promoting conservation efforts for water like leak repair, the use of water-saving equipment, and education about responsible water use are some examples. By creating the adequate infrastructure, the supply of freshwater can be less stressed by the safe reuse of treated wastewater in a variety of applications. By turning saltwater into freshwater, improvements in desalination technology offer a practical means of increasing the amount of water available in coastal areas. Moreover building pipelines, reservoirs, and dams, can improve the distribution, storage, and transportation of water.

However, besides these tangible solutions, government action is needed. Water conservation can be encouraged through pricing mechanisms and governance laws. International cooperation includes exchanging best practices, sharing technologies, and working together to manage water resources across international borders.

Background of SDG 6 in South America

1. *Status of access to clean water and sanitation in South America*

The countries in the Latin American and Caribbean (LAC) region, which is marked by notable economic differences, have a variety of social, economic, and health environments. Life expectancy, education, and income are the three basic dimensions of a country's progress that the Human Development Index (HDI) measures.

Due to the increase in migration, "the urban population has been much larger than the rural populations since the latter 1990s" (Soares et al., 2002). Not all individuals who migrate from rural areas to the cities enjoy better living conditions, despite tendencies towards

urbanization. Urban and rural communities have very different access to drinking water systems, with disadvantaged rural areas having more difficulties because of poor sanitation services and insufficient infrastructure.

The availability and quality of sanitary facilities, drinking water services, general health outcomes, and quality of life are all correlated, as water-borne diseases decrease quicker in regions with proper sanitary infrastructure and guaranteed water quality. Consequently, concerns arise over the possible ingestion of contaminated or dangerous drinking water.

"It is estimated that over 219 million people in LAC having a household supply of drinking water is served by hydraulic systems that work sporadically" (Soares et al., 2002). This situation is caused by a wide range of problems such as inadequate treatment facilities, poor water disinfection and inefficient distribution systems. These difficulties are made worse by institutional financial constraints, a lack of technological expertise, and inadequate control and surveillance systems.

The differences in the availability of clean drinking water reflect more general socioeconomic inequalities that exist. Notably, irregularities in water delivery services tend to be linked with natural water scarcity or deficiencies in water distribution systems rather than being exclusively associated with higher-income locations.

2. *Challenges and Barriers*

The freshwater supplies are insufficient in many areas to meet the demands of the environment, economic development, and household consumption. In fact, the insufficiency of drinking water and sanitation demands affects human productivity and health, which in turn is affecting economic development and the preservation of ecosystem health and a clean environment. The world will need to feed and power an extra 2-3.5 billion people by 2050, and

in order to address the nutritional requirements of this growing population, we should take into account the quantity of water used in the manufacturing of various products, especially food and energy (Cosgrove and Loucks, 2015).

The expansion of production and services has undeniably numerous benefits, such as more job opportunities and income growth. However, this progress has come at a cost: the escalating use and pollution of natural resources, like water. More river basins are losing water thus limiting the availability of it for over a billion people. Furthermore, the impact of climate change on the hydrologic cycle adds an extra layer of complexity to the challenge. There is more uncertainty in water availability, a higher frequency of extreme weather events, and a faster return of water to the atmosphere.

As the demand for limited water resources continues to grow, so does the competition for access to clean water. Investigating the related social, political, and environmental implications of these changes will help to address the water crisis and ensure equitable access to clean water and sanitation for all. The achievement of SDG 6 faces unique challenges in South America, with corruption making matters worse. Corruption remains an issue in several South American countries, impacting the efficient allocation of resources for water and sanitation infrastructure development. Misappropriation of funds, bribery, and fraudulent practices can divert financial resources away from essential projects. The lack of transparency and accountability affects the effectiveness of initiatives aimed at achieving SDG 6 targets.

Internal conflicts, political instability, and social unrest disrupt the planning and implementation of projects. In conflict-ridden areas, the focus often shifts from developmental priorities to immediate survival. Moreover, conflicts may lead to the displacement of communities, creating challenges in providing consistent access to water and sanitation services.

To overcome these challenges, a multifaceted strategy is needed. This includes strengthening governance structures, promoting transparency, resolving conflicts through diplomatic means, and implementing sustainable water management practices. Hence, international organizations play a crucial role.

According to the 2021 United Nations World Water Development Report, in Latin America and the Caribbean (LAC), the average proportion of wastewater that is safely treated is just below 40%. This report also states that the proportions of wastewater properly treated in 2018 were 22% in Argentina, 23% in Colombia, 34% in Brazil, 39% in Peru, 43% in Ecuador, 51% in Mexico and 72% in Chile. South America, despite its vast natural resources, faces challenges related to water scarcity in specific regions. Climate change, deforestation, and unsustainable water management practices contribute to losing water resources. This scarcity intensifies competition for available water, particularly in urban areas, where population growth is significant. The scarcity exacerbates existing inequalities in water access and sanitation services, disproportionately affecting marginalized communities. Sustainable water management practices and conservation efforts are crucial for mitigating resource scarcity and achieving SDG 6 targets.

The Role of International Organizations

1. *Key International Organizations working towards SDGs*
    a. World Bank

The World Bank's 2016 report "The Costs of Meeting the 2030 Sustainable Development Goal Targets on Drinking Water, Sanitation, and Hygiene" highlights the financial implications of achieving SDGs related to water supply, sanitation, and hygiene (WASH). The report finds

that capital investments needed to meet targets 6.1 and 6.2 are approximately three times the current investment levels.

To extend safely managed water supply and sanitation services to those currently unserved, the report estimates that capital financing needs would amount to around 0.39 percent of global GDP, which is over three times the historical financing trend. The total annual capital cost for achieving targets 6.1 and 6.2 is projected to be $114 billion, with a range from $74 to $166 billion. If unserved populations immediately receive safely managed services, the annual cost would range from $71 to $158 billion. However, if all unserved populations go through lower-level services first, the cost would be $11 billion higher annually. The global costs under a baseline assumption, midway between these extremes, is approximately $114 billion per year. Additionally, the report explores the costs associated with achieving target 6.3, which aims to "reduce by 50 percent those unserved by treated wastewater, the costs would be $92 billion per year or 0.31 percent of GDP" (World Bank, 2016). In Latin America and the Caribbean, the World Bank Group provides for 27.4% of financing for water and sanitation funds (Rodriguez, J et al).

b. IDB

The mission of the Inter-American Development Bank (IDB) is to improve the quality of life in Latin America and the Caribbean region. By offering financial and technical aid to nations striving to tackle poverty and inequality, the IDB supports efforts to enhance healthcare, education, and infrastructure. In LAC, "the largest provider of financing for water and sanitation is the IDB (40.2%)" (Rodriguez, J et al). As the primary provider of development funding in LAC, the IDB offers loans, grants, and technical expertise, alongside conducting thorough research. Furthermore, the IDB is dedicated to achieving tangible outcomes and upholding the

highest standards of integrity, transparency, and accountability. “IDB Group is the sector leader in Latin America and the Caribbean, with annual disbursements of more than US$ 1 billion” (IDB Invest, 2024). Along with improving the effectiveness of service delivery, the IDB offers a variety of financing options, and offer technical support on gender equality, corporate governance, and climate change.

According to the UN Water Global Analysis and Assessment of Sanitation and Drinking Water (GLAAS), “IDB continued to work to increase green infrastructure investments to promote water security in the region through water funds, to implement 23 AquaRating systems throughout LAC (an innovative rating system that assesses the performance of water and sanitation services providers in a comprehensive way), and to implement throughout LAC a tool for water resources management and planning”. The data provided by the UN GLAAS shows how through initiatives such as increasing investments, the IDB has played a crucial role in addressing water and sanitation challenges in the region. By providing financial resources and implementing innovative rating systems and management tools, the IDB contributes significantly to improving the overall quality of life and promoting sustainable development across LAC.

Another project that the IDB has implemented is the AquaFund which “since its creation has supported more than 124 initiatives, influencing more than US$4.1 billion of IDB’s investments in the water and sanitation area, and helping governments of the region to achieve universal access to high quality water and sanitation services" (IDB, 2023). The AquaFund works across all nations in LAC and focuses on water and sanitation requirements in both urban and rural settings. Collaborative efforts involve various stakeholders, such as governmental bodies, water and sanitation utilities (whether public or private), non-governmental organizations, civil society groups, the corporate sector, and numerous other entities.

Case studies

In this segment, I will conduct a comparative examination of Brazil and Ecuador, focusing on the interventions of two prominent international organizations, the World Bank and the Inter-American Development Bank, in addressing the challenges related to access to water and sanitation.

1. *Brazil*

Brazil is an interesting case study to examine the interactions between environmental policy, regional dynamics, and the role of international organizations due to its abundance of natural resources and different ecosystems. Brazil has gained recognition on a global scale for its pioneering role in climate change discussions and environmental preservation, especially in the Amazon region. Brazil has demonstrated a commitment to environmental legislation and has taken an active role in international forums. However, obstacles still exist in the face of national and state initiatives to advance environmental harmony. These include acts of violence directed towards environmentalists and traditional communities, as well as federal government policy reversals.

The ongoing destruction of the Amazon rainforest is a major source of worry for Brazil since it threatens indigenous communities, biodiversity, and the stability of the climate. By releasing carbon held in its forests, the degradation of the Amazon endangers its rich biodiversity and accelerates climate change. The Agrociencia Journal published a report on “Achieving the Sustainable Development Goals through good enough governance: lessons from Argentine and Brazilian Municipalities.”, and it informed that the Lower Amazon region, which includes cities like Santarém and Monte Alegre, is an excellent example of the complex socio-environmental

problems that Brazil is confronting. The paving of roadways has accelerated agricultural growth, causing deforestation, river pollution, and social unrest. These affect small-scale farmers, fishers, and indigenous groups, who may experience livelihood loss, relocation, and increased susceptibility to climate-related hazards. Therefore, both governmental and non-governmental actors are essential in tackling these issues.

The World Bank's 2023 Water Resources Group (WRG) began operations in São Paulo, Brazil, in 2017 after the State Government's Secretariat for Sanitation and Water Resources (SSWR) and the WRG signed a Memorandum of Understanding (MoU). This agreement started a cooperative partnership that aimed to promote communication, public-private cooperation, and private sector involvement in the state's water resources management and water security. The 2030 WRG São Paulo Steering Committee was founded in December 2020 and functions as a multi-stakeholder platform (MSP) with members drawn from academics, civil society organizations, and the public and business sectors. This committee, chaired by the State Secretary for Infrastructure and Environment, is essential to the discussion, approval, oversight, and direction of the 2030 WRG's priorities and actions in São Paulo.

The IDB is actively promoting water projects in Brazil as well. For instance, the BRK Ambiental Maranhão project, supported by the IDB, involves the design, maintenance, and operation of the water and sewage systems in the municipalities of Paço do Lumiar and São José de Ribamar, located in the state of Maranhão, Brazil. The primary objective of the project is to achieve universal water distribution and ensure that approximately 328,000 people have access to sanitation services. Specifically, the project aims to achieve a sewage collection and treatment rate of 90%. To finance this initiative, IDB Invest has provided a loan of up to R$ 500 million, with R$ 250 million guaranteed by the French Development Agency (Proparco), with a

repayment term of up to 20 years. The total financing amount for the project is USD $49,767,100.

"The program will cost a total $136 million, of which $128 million will be funded by the IDB and $8 million by local partners. The loan will be disbursed over the course of five years, with a 25-year repayment term, a 5.5-year grace period, and a SOFR-based interest rate" (Smart Water Magazine, 2019).

Additionally, the IDB has provided a loan of $100 million to fund projects focused on potable water, sanitation, and wastewater treatment within the metropolitan area of Belém, in the state of Pará, Brazil. Thanks to this, "more than 407,000 households will benefit from new or improved connections to drinking water and sanitation services" (IDB, 2021). This loan is part of the Pará Sanitation Development Project (PRODESAN), which is supplemented by a $25 million contribution from the state of Pará, totaling $125 million in funding. The funds will be directed towards infrastructure projects for potable water provision, extension of sanitary sewage networks, and the establishment of a wastewater treatment facility. Additionally, this project aims to enhance the operational efficiency of water supply services rendered by the Pará Sanitation Company (COSANPA) by modernizing production systems and distribution networks (Adam et. al, 2020).

In order to tackle corruption in their projects in Brazil, the World Bank "developed an Artificial Intelligence System that identifies 225 red-flags of potential fraud in public procurement processes and can help improve expenditures" (World Bank, 2023). By doing this, the system helps to detect high-risk instances, such as companies with a high probability of being shell entities or associated companies competing with one another, and public officials employed by the same government department that awarded the contract, among others. These measures

underscore the commitment of IOs to reducing corruption rates and fostering transparency and accountability in public procurement processes, ultimately leading to more efficient and equitable resource allocation.

2. *Ecuador*

According to the Water and Sanitation Observatory for Latin America and the Caribbean (OLAS), in Ecuador approximately 20% of homes use water sources that are not clearly classified as improved or unimproved. Compared to cities, rural areas are more uncertain since rural households often depend on wells or springs, whereas urban people mainly depend on improved sources, such as the electricity network. Also, this organization informed that 93.7% of urban households have access to flowing water from the public network, whereas 4.2% depend on truck-delivered water.

Given the compelling data presented, there is an urgent need for the assistance of international organizations, as the government has been unable to adequately address this task. One of the IOs that has helped this country is the Inter-American Development Bank, which has provided assistance to "more than 200,000 people and indirect benefits to Quito's 2.6 million metropolitan district dwellers, with help from a US$87.1 million loan from the Inter-American Development Bank" (Smart Water Magazine, 2019).

According to Smart Water Magazine, 93 percent of these funds will go toward improving and expanding Quito's drinking water systems, with the remaining amount going toward the improvement and extension of the sewage and sanitation networks in the municipalities of Quitumbe, Checa, and La Merced. Furthermore, the program seeks to expand from the existing 8 to a total of 18 projects such as building a new drinking water treatment plant and renovating two existing ones, establishing 39 km of raw water transmission lines, installing 16 km of primary

and distribution networks, enhancing 30 hydraulic sectors, and deploying 444 advanced flow meters for large consumers.

Manta, a city in Ecuador, had significant challenges in 2013 when it came to maintaining its road network and offering adequate water supply and sanitation (WSS) services. The World Bank informed that 64% of people received sanitation services, compared to 79% for water supply. The wastewater treatment plants faced operating challenges, and the existing water and sewage pipes were roughly fifty years old and frequently malfunctioned. The institutional challenges faced by Manta's WSS department, EPAM, were outdated records, unclear policies and unreliable metering systems.

Therefore, the World Bank became directly involved in the Manta municipality through an investment project financing loan. First, the gaps in project management and institutional capabilities were identified and it focused on areas where Manta needed major focus. The project combined efforts to strengthen institutions with transportation and WSS infrastructure investments, as well as close supervision. The facilitation of a private-public collaboration to improve operational and commercial efficiency were two strategies employed by EPAM along with the World Bank.

The World Bank reported the following results:

- Nonrevenue water levels dropped from 50 % to 30 %.
- Water continuity increased from 14 hours to 14.7 hours of service per day, with further improvements expected once pending works are complete.
- Access to piped water and new household sewer connections reached 6,707 additional households.
- Rehabilitation of sewerage connections benefited 15,740 households.

- EPAM’s financial situation improved as shown by the decrease in working ratio from 88 % to 79.63 %. (World Bank, 2021)

According to the World Bank, in 2021 the EC Manta Public Services Improvement Project was granted a $100 million loan by the World Bank, via the International Bank for Reconstruction and Development (IBRD). To cover the remaining project expenses, the municipality of Manta provided US$15.6 million. The project's transportation and water supply and sanitation services improvements helped 85,000 residents of the Los Esteros, Tarqui, Manta, and Eloy Alfaro areas.

Ecuador is actively working to enhance integrity practices within its water and sanitation sector, with a particular focus on transparency and anti-corruption measures. The IDB along with the Stockholm International Water Institute (SIWI) have been providing technical assistance to the Water Regulation and Control Agency of Ecuador (ARCA) since early 2022. These efforts have “contributed to the implementation of IDB’s Technical Cooperation program, which strives for transparency, information management, and governance in the water and sanitation sector” (Stockholm International Water Institute, 2023). Through workshops and capacity-building initiatives, key actors in the sector are equipped with the needed skills and knowledge to initiate and sustain change processes for integrity. The implementation of the “Integrity Management Toolbox for Regulators” involves a comprehensive analysis of risks associated with the lack of integrity, followed by the selection of indicators to measure integrity levels objectively. The outcomes of these initiatives include the identification of risks, the development of mitigation strategies, and the formulation of concrete action plans for improvement.. Through these concerted efforts, Ecuador is taking significant steps towards fostering integrity and accountability in its water and sanitation sector.

Analysis

The case studies of Brazil and Ecuador illustrate the key role of IOs in addressing environmental and developmental challenges, reducing corruption, and advancing sustainable development goals. In Brazil, the IDB has played a crucial role in supporting initiatives to improve water and sanitation infrastructure. Through projects like the BRK Ambiental Maranhão project, funded by the IDB, Brazil aims to achieve universal water distribution and sanitation services for its citizens. Additionally, the 2030 Water Resources Group (WRG) has collaborated with local stakeholders in São Paulo to promote water security and management, demonstrating the effectiveness of international partnerships in addressing complex socio-environmental issues. Similarly, in Ecuador, the assistance of IOs like the IDB and the World Bank has been instrumental in enhancing water supply and sanitation services. Projects such as the Manta Public Services Improvement Project have improved infrastructure and strengthened institutional capacities and governance mechanisms.

These initiatives highlight the potential of IOs to foster transparency, accountability, and innovation. As a result, this contributes to the achievement of SDGs and promoting inclusive and sustainable development in LAC. This project is centered on SDGs 6.1 and 6.2. Upon reviewing these case studies, it becomes evident that contemporary states increasingly rely on the collaborative efforts of IOs. In exploring the impact of partnerships between states and IOs, this study identified specific instances where such partnerships have resulted in measurable improvements, such as the Manta project where 6,707 additional households got access to piped water and new household sewer connections. Moreover, the project delved into the critical issue of corruption within the region and how IOs navigate and mitigate these challenges. Corruption can significantly hinder progress in water and sanitation projects, leading to mismanagement of

funds and unequal access to resources. However, IOs use different strategies to promote transparency in water and sanitation projects, such as robust monitoring, evaluation mechanisms and community engagement initiatives.

One of the key arguments supporting the effectiveness of IOs is their ability to provide financial assistance and technical expertise to developing countries that lack the necessary resources to undertake large-scale projects independently. Developing nations often face significant financial constraints, therefore IOs are essential partners that offer funding, knowledge transfer, and institutional support to help countries overcome these challenges.

The initiatives taken by international organizations such as the World Bank and the IDB in Brazil and Ecuador highlight their efforts to combat corruption and promote transparency and accountability. By implementing innovative technologies like Artificial Intelligence systems and implementing comprehensive integrity management programs, these organizations demonstrate a commitment to identifying and mitigating risks associated with fraudulent practices. As countries like Brazil and Ecuador continue to prioritize integrity and anti-corruption measures, they pave the way for sustainable development in the region.

As traditional power structures evolve and new actors appear on the global stage, IOs have become central players in facilitating multilateral cooperation and fostering consensus on critical issues, such as environmental sustainability and public health. Their capacity to bring together different stakeholders such as governments, civil society organizations, and the private sector, underscores their effectiveness in driving collective action. Through technical assistance programs and capacity-building workshops, IOs empower governments and local communities to develop sustainable solutions to water and sanitation challenges.

Conclusion

By analyzing case studies and examining the interventions of IOs such as the World Bank and the Inter-American Development Bank, this study has underscored the effectiveness of collaborative efforts between states and IOs in promoting sustainable development. Furthermore, the analysis has highlighted the importance of transparency, accountability, and good governance in ensuring the success of water and sanitation projects, particularly in combating corruption and promoting equitable access to essential services. This is particularly crucial in regions like Latin America, where according to the OAS, more than 70 river basins are shared by two or more countries, and 60% of the South American territory corresponds to transboundary watersheds. The Amazon basin alone, which incorporates eight of 12 countries of South America, has more than 8,000 km of borders. Thus, effective collaboration between states and IOs becomes imperative to address the complex challenges of managing transboundary water resources and promoting sustainable development across borders.

In conclusion, this project argues that IOs are indeed effective and indispensable actors in the contemporary world, particularly in addressing critical developmental challenges. By providing financial assistance, technical expertise, and institutional support to countries, especially developing nations, IOs play a key role in advancing sustainable development. Additionally, as the dynamics of global governance keep changing, IOs are play an even greater role in shaping international development agendas and driving positive change in the years to come.

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