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DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

# BOLIVIA

# REFORM PROGRAM FOR THE WATER, SANITATION, AND WATER RESOURCES SECTORS IN BOLIVIA SECOND OPERATION

(BO-L1100)

## LOAN PROPOSAL

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#### **ABBREVIATIONS**

AAPS	Autoridad de Fiscalización y Control Social de Agua Potable y Saneamiento Básico [Potable Water and Basic Sanitation Social
	Oversight and Control Authority]
ADG	Autonomous Department Government
AMG	Autonomous Municipal Government
EMAGUA	Entidad Ejecutora del Medio Ambiente y Agua [Environment and Water
	Executing Agency]
EPSA	Entidad Prestadora de Servicios de Agua Potable y Saneamiento
	[Water and Sanitation Services Provider]
GIRH-MIC	Programa Plurianual de Gestión Integrada de RHyR y Manejo Integrado de Cuencas [Multiyear Program of Integrated WR&I Management and
	Integrated Watershed Management]
MICSA	Mecanismo de Inversión para Coberturas en el Sector de Agua y
	Saneamiento [Investment Mechanism for Water and Sanitation Sector Coverage]
MMAyA	Ministry of the Environment and Water
OEL	Optional electronic link
PBP	Programmatic policy-based loan
PEF	Performance Evaluation Framework
PMASs	Planes Maestros de Agua y Saneamiento [Water and Sanitation Master Plans]
PSDSB	Plan Sectorial de Desarrollo de Saneamiento Básico [Basic Sanitation
	Sector Development Plan]
PW&S	Potable Water and Sanitation
REL	Required electronic link
SCF	Single Currency Facility
SEDERIs	Servicios Departamentales de Riego [Departmental Irrigation Services]
SENARI	Servicio Nacional de Riego [National Irrigation Service]
SENASBA	Servicio Nacional para la Sostenibilidad de Servicios en Saneamiento
	Básico [National Service for the Sustainability of Basic Sanitation
	Services]
SIIRAyS	Sistema Integrado para Información Regulatoria de Agua y
	Saneamiento Básico [Integrated Regulatory Information System for
	Water and Sanitation]
SNIR	Sistema Nacional de Información de Riego [National Irrigation
	Information System]
UNASBVIs	Unidades de Agua, Saneamiento Básico y Vivienda [Water, Basic Sanitation and Housing Units]
VAPSB	Office of the Deputy Minister for Potable Water and Basic Sanitation
VMA	Office of the Deputy Minister of the Environment
VRHR	Office of the Deputy Minister for Water Resources and Irrigation
W&S	Water and Sanitation
WR&I	Water Resources and Irrigation

#### **PROJECT SUMMARY**

#### BOLIVIA REFORM PROGRAM FOR THE WATER, SANITATION, AND WATER RESOURCES SECTORS IN BOLIVIA SECOND OPERATION (BO-L1100)

Financial Terms and Conditions							
<b>B</b> ermeuwern Diuminetienel C	toto of Dolivio			00	FSO		
Borrower: Plurinational State of Bolivia			Amortization period:	30 years	40 years		
Executing agency: Ministry of the Environment and Water			Grace period:	6 years	40 years		
(MMAyA)		Disbursement period:	12 months	12 months			
Source	Amount (US\$ millions)	%	Interest rate:	SCF-Fixed <sup>(a)</sup>	0.25%		
IDB (OC)	76.5	85	Inspection and supervision fee:	(b)	0%		
IDB (FSO)	13.5	15	Credit fee:	(b)	0%		
Total	90.0	100	Approval currency:	U.S. d	ollars		
		Pro	ject at a Glance				

**Project objective/description:** The objective of this second and final operation in a series of two consecutive operations to support policy reforms under the programmatic policy-based loan modality, is to help increase coverage and improve the management of potable water and sanitation services and the management of water resources in Bolivia, through the development of an institutional and policy framework that includes actions intended to: (i) strengthen sector planning; (ii) strengthen the organizational and institutional development of sector entities; (iii) support effective implementation of the financial policy; and (iv) develop monitoring and evaluation instruments.

Special contractual conditions precedent to the first disbursement of the loan: The sole disbursement of funds for the second operation of this programmatic policy-based loan is subject to fulfillment of policy reform measures or institutional changes, as specified in this document, as well as achievement of the agreed upon targets specified in the policy matrix (paragraph 3.2).

#### Exceptions to Bank policies: None

Strategic Alignment							
Challenges: <sup>(c)</sup>	SI		PI		EI	$\checkmark$	
Cross-cutting Issues: <sup>(d)</sup>	GD	$\checkmark$	CC		IC	$\checkmark$	

(a) The borrower will pay interest on outstanding balances on this portion of the Ordinary Capital loan at a LIBOR-based rate. Whenever the outstanding balance reaches 25% of the approved net amount or US\$3 million, whichever is greater, the rate on this balance with be set.

(b) The credit fee and the inspection and supervision fee will be established periodically by the Board of Executive Directors as part of its review of the Bank's lending charges, in accordance with relevant policies.

<sup>(c)</sup> SI (Social Inclusion and Equality); PI (Productivity and Innovation); and EI (Economic Integration).

<sup>(d)</sup> GD (Gender Equality and Diversity); CC (Climate Change and Environmental Sustainability); and IC (Institutional Capacity and the Rule of Law).

# I. PROJECT DESCRIPTION AND RESULTS MONITORING

# A. Background, problems, and rationale

- 1.1 This loan operation is the second and final operation in a series of two consecutive operations to support policy reforms under the programmatic policy-based loan modality, the objectives of which were established in the Water and Sanitation and Water Resources and Irrigation Sectors Reform Program, as follows: (i) development of investment planning instruments and programmatic guidelines for project preparation and execution; (ii) strengthening of oversight and regulation mechanisms: (iii) development of a cost recovery framework for the delivery of water and sanitation (W&S) services; (iv) strengthening of the organizational development of sector entities and mechanisms for community development; (v) improvement of sector capacities for project identification, execution, and supervision; (vi) development of monitoring and evaluation instruments; and (vii) strengthening of information systems. The programmatic series was designed from the outset to comprise two phases, with an interval of at least two years having been provided for between the two phases so that the reform outputs proposed for the second phase could be achieved and anticipating the workload and funds that these outputs required. In this regard, during this interval, the need to support these processes with financial and nonfinancial instruments was identified. Accordingly, three technical-cooperation operations were processed,<sup>1</sup> approved, and executed to support preparation of the second operation (paragraph 1.31). Starting with approval of the first operation, BO-L1074 (2771/BL-BO),<sup>2</sup> the program advanced in accordance with the objectives set. As programmed, in 2014 preparation began on the second operation, which-based on the actions of the Government of Bolivia and Bank support-made it possible to fulfill the commitments and their means of verification. This locked in the actions initiated and supported their deepening, in addition to promoting and facilitating the implementation of the policies and strategies leveraged under the first operation.
- 1.2 **Recent macroeconomic performance and financing needs.** Bolivia has shown good economic performance, allowing it to reduce poverty levels. It grew by an annual average of 5% between 2009 and 2014. The main source of growth has been the accumulation of capital, primarily through public investments, which increased from US\$629.2 million to US\$4.519 billion between 2005 and 2014. Growth also generated increased household consumption. Favorable terms of trade during this period generated public revenues that, in addition to the indicated increase in public investment, allowed the nonfinancial public sector to achieve a fiscal surplus between 2006 and 2013. In 2014 and 2015, the fiscal deficit was 3.3% and 6.6% of gross domestic product (GDP). Total public debt fell from 40.4% of GDP in 2007 to 33.8% of GDP in 2015. Favorable terms of trade also led the external sector to show a surplus and generate a significant increase in international reserves, which grew from US\$2.205 billion to US\$15.123 billion between 2005 and 2014. The exchange rate has remained unchanged since November 2011 and inflationary pressures were contained by the Central Bank of

<sup>&</sup>lt;sup>1</sup> ATN/OC-14784-BO Support for the Program of Reforms in the Water and Sanitation and Water Resources Sector – Second Operation; ATN/OC-14316-BO Support for the W&S Sector for Development of Planning Instruments; ATN/OC-14205-BO Support for the W&S Sector for Development of Planning Instruments.

<sup>&</sup>lt;sup>2</sup> 4 September 2012.

Bolivia; in 2015 inflation closed the year at 2.9%. As a result of good macroeconomic performance and the public policies applied, moderate and extreme poverty fell from 60.6% to 39.3% and from 38.2% to 17.3%, respectively, between 2005 and 2014. A less favorable external context is anticipated in upcoming years, due to the decline in oil prices. This context will generate a reduction in income from hydrocarbons and in the economy's rate of growth. The transition to this new international scenario creates fiscal and external challenges that will have to be properly handled. However, Bolivia will continue to be one of the most fast-growing countries in the region; the projected growth rate for 2016

1.3 Characteristics of the potable water and sanitation (PW&S) sector.<sup>3</sup> The Political Constitution of the State<sup>4</sup> establishes universal and equitable access to basic PW&S services as a human right. It establishes that it is the State's responsibility, at all levels of government, to provide services through public, mixed, cooperative, or community institutions, based on criteria of universality, responsibility, accessibility, continuity, quality, efficiency, efficacy, and equitable rates, with social control and participation and not subject to concession or privatization. The Framework Law on Autonomous Entities and Decentralization<sup>5</sup> establishes that the central level of government is responsible for formulating and approving regulations and policies, plans, and programs for the country's basic services. The Autonomous Municipal Governments (AMGs) are assigned responsibility for providing PW&S services and approving the rates for them, when they provide the services directly. The PW&S Services Law<sup>6</sup> identifies different and separate organizations to fulfill the functions of planning, regulating, and delivering services. The lead role in the sector was assigned to the Ministry of the Environment and Water (MMAyA), through the Office of the Deputy Minister for Potable Water and Basic Sanitation (VAPSB), which establishes policy for the sector, plans investments, and manages international financing. Regulation was assigned to the Potable Water and Basic Sanitation Social Oversight and Control Authority (AAPS),<sup>7</sup> which is responsible for protecting the consumer and approving service operators' rates. In addition, the Environment and Water Executing Agency (EMAGUA) was created for the purpose of ensuring progress in terms of coverage and supporting the sustainability of investments, within the framework of the policies defined by the Investment Mechanism for Water and Sanitation Sector Coverage (MICSA).<sup>8</sup> In addition, the government created the National Service for the Sustainability of Basic Sanitation Services (SENASBA) with the mission of supporting the development of the capacities of the Water and Sanitation Services Providers (EPSAs) through technical assistance and institutional strengthening of the sector at the national level. The delivery of services and the development of expansion plans and programs is the responsibility of the AMGs, whether directly

ranges between 3.5% and 5% (OEL#9).

<sup>&</sup>lt;sup>3</sup> See loan proposal BO-L1074, Background, problems addressed, and rationale.

<sup>&</sup>lt;sup>4</sup> February 2009.

<sup>&</sup>lt;sup>5</sup> Law 031 of 19 July 2010.

<sup>&</sup>lt;sup>6</sup> Law 2066 of April 2000.

<sup>&</sup>lt;sup>7</sup> The AAPS is a decentralized entity under the supervision of the MMAyA.

<sup>&</sup>lt;sup>8</sup> The MICSA is the sector financing policy; its objective is to prioritize the allocation of investments in water and sanitation services benefiting the most vulnerable populations and to achieve the quality and coverage targets set in current sector plans.

or through the EPSAs, in coordination with the Autonomous Departmental Governments (ADGs). The EPSAs take different forms, including state entities, municipal entities, public social enterprises, cooperatives, associations, and water boards or committees.

- 1.4 **Coverage and quality of services.** According to the 2011-2015 Basic Sanitation Sector Development Plan (PSDSB), potable water coverage was 75% and sanitation coverage was 48% in 2007,<sup>9</sup> with significant rural/urban inequality: water values of 87% in urban area and 51% in rural areas, and sanitation values of 54% in urban areas and 37% in rural areas. Waste water treatment coverage was 30%. The efficiency levels of the companies supervised by the AAPS were uneven, as in the case of collection rates and unaccounted-for water, which was aggravated by the lack of updated rates.
- **Sector planning.** Based on the institutional framework described (paragraph 1.3) 1.5 and in order to improve sector planning, the Government of Bolivia: (i) developed a diagnostic assessment identifying as the principal challenges: (a) increasing coverage with comprehensive and sustainable services, (b) improving the sustainability of services, (c) developing an efficient sector financing instrument, (d) strengthening the institutional framework and decentralization, and (e) incorporating the study of climate change adaptation and mitigation actions in services management; (ii) divided the W&S sector into three segments based on population: (a) rural, (fewer than 2,000 inhabitants), (b) small towns, (between 2,000 and 10,000 inhabitants), and (c) periurban (more than 10,000 inhabitants); (iii) developed the 2008-2015 National Sanitation Plan; (iv) developed "programmatic approaches" to meet the needs of periurban and rural population segments; and (v) began preparing the Water and Sanitation Master Plans (PMAS) for the major urban centers.
- 1.6 **Organizational development.** The diagnostic assessment of sector institutions performed when preparation of the programmatic series started indicated that, despite the clear assignment and separation of functions, there were factors that limited their organizational development: (i) outdated organizational structures; (ii) insufficient staff; (iii) inadequate budget allocation; and (iv) obsolescent information systems and equipment. In this regard, the diagnostic assessment identified the need for those institutions and service providers: (i) to be strengthened in the areas described above; (ii) to be equipped with management tools to fulfill the mandates stipulated by law; and (iii) to develop institutional strengthening plans and build their technical skills and community development programs.
- 1.7 **Sector financing.** The 2001-2007 investments were highly concentrated in urban areas (65%) and in the potable water sector (75%), with the more disadvantaged rural and periurban areas and sanitation lagging behind. Up to 2015, investments of more than US\$700 million were required in urban areas to achieve the Millennium Development Goals. Due to the failure to implement a suitable rate policy, the EPSAs' operating income only allowed them, at best, to recover operating and administrative costs, leaving little room for maintenance and investment. To ensure reduction of the existing inequities, the government

<sup>&</sup>lt;sup>9</sup> Data from before the first operation.

instituted the MICSA as part of its financial policy, establishing resource allocation criteria, incentives, mechanisms, and financing lines. In order to ensure transparency and equity of the financial conditions for access to resources, an index—the Basic Sanitation Investment Area Identifier—was developed, based on access deficit and poverty criteria. Application of the MICSA helped to initiate allocation to the neediest sectors, but revealed the lack of cofinancing on the part of subnational entities, and the need to include the size of the population to be served as an allocation criterion. In addition, in order to ensure the sustainability of investments and the operation and maintenance of services over the long term, the government began to develop a rate policy and a subsidy mechanism.

- 1.8 Monitoring and evaluation. A significant institutional weakness identified was the lack of instruments for monitoring sector performance and a system that can be used to obtain relevant and consistent information on a reliable and timely basis. The government thus suggested developing a tool for monitoring progress made on the PSDSB, making it possible to: (i) evaluate policy implementation and the medium- and long-term outcomes; (ii) synchronously plan the actions of agencies around targets so as to eliminate duplication of efforts and generate synergies; (iii) align international donors and cooperation agencies around the sector objectives and policies and serve as a valid instrument for evaluating them; and (iv) function as an operational instrument to achieve the PSDSB objectives. To improve monitoring of the EPSAs, the development of a regulatory information system suited to the new sector structure is being looked at.
- 1.9 **Challenges in the PW&S sector.** The national strategy embodied in the PSDSB, which supports preparation of the programmatic series, identified the following challenges: (i) to strengthen planning by producing support tools at the local level and for service providers, establishing intervention mechanisms, considering the characteristics of the different population segments; (ii) to strengthen organizational and institutional development, putting decentralization into effect and applying the national community development policy; (iii) to support the effective application of financial policy, developing instruments to contribute to the cofinancing of projects, establishing prioritization and allocation criteria, and promoting the sustainability of services over the long term; and (iv) to develop monitoring and evaluation instruments and strengthen information systems.
- Determinants of sector planning, organizational development, financial 1.10 policies, monitoring and evaluation, and progress made since the first operation. Through the sector planning component, the first operation enabled the development of planning, oversight, and control instruments, establishing policy actions to ensure their sustainability, through approval of the PSDSB and the guidelines for preparing departmental plans and urban PMASs. The organizational development component supported the strengthening plans, community development instruments, and capacity-building, particularly at the subnational level. In addition, the financial policy component supported improvement of the system for allocating public investment resources to the sector and the financial sustainability of the EPSAs. The monitoring and evaluation component helped the lead agency to properly monitor their performance and enabled corrective measures to be taken on a timely basis. Based on the foregoing, the plan in the second operation was to deepen policy actions based on the sector challenges identified, to include: (i) the development and improvement of investment planning

instruments and project preparation and execution instruments; (ii) strengthening of the structure and management capacity of the sector entities responsible for policy-making, project execution, oversight, and regulation; (iii) improvement of the management of the EPSAs; (iv) definition of community development programs in the various stages of the project cycle, with a view to maximizing the benefits of the infrastructure to be constructed; (v) improvement in the systems for allocating public investment resources; (vi) financial sustainability of the EPSAs so they can cover their operation and maintenance cost, thereby ensuring the sustainability of services; (vii) establishment of a performance evaluation framework to monitor the attainment of targets and development of sector information systems to obtain timely and reliable information. The following paragraphs describe the specific advances made in each component of the first operation, the status and progress made when it came time to prepare the second operation, and how this second operation addresses the challenges, objectives, and guidelines of the programmatic series.

- 1.11 **Sector planning.** The instruments developed in the first operation were: (i) the 2011-2015 PSDSB; (ii) guidelines for the preparation of departmental plans and urban PMASs; (iii) broad sector approach for expansion and improvement of W&S in rural and periurban areas; and (iv) guidelines for the scope of oversight and regulation approved by the AAPS.
- In accordance with data from the 2012 CNVP,<sup>10</sup> at the time the second operation 1.12 was being prepared, potable water and sanitation coverage of 80.8% and 52.7%, respectively, had been achieved. According to the 2016-2020 PSDSB diagnostic, it was estimated that by 2015, in line with investments made in recent years, these percentages had increased to 82.6% and 56.0%, respectively. The situation in urban and rural areas shows potable water coverage of 90% in communities with more than 2,000 inhabitants, compared to 65.7% in communities with fewer inhabitants. In sanitation, the coverage are 62.2% and 42.4% in communities with more than and less than 2,000 inhabitants, respectively. Wastewater treatment coverage is 27%. Based on these figures, the country exceeds the Millennium Development Goals for water by nearly nine points, but shows a 16-point deficit in sanitation; inequality persists between urban and rural areas and wastewater treatment coverage continues to be low. The projects submitted by the ADGs and AMGs to the MMAvA are of poor quality and very limited size and impact. It is therefore necessary to continue with the development of departmental sector plans in line with the 2016-2020 PSDSB, identifying key projects that quantify the actions necessary to fulfill the constitutional mandate of access to PW&S and the targets proposed by the government: 95% urban water coverage and 80% rural water coverage, and 70% urban sanitation coverage and 60% rural sanitation coverage, which would make it possible to provide approximately two million inhabitants with potable water coverage and three million inhabitants with sanitation coverage. According to the 2013 AAPS survey on service quality, which included 47 EPSAs serving 6.8 million inhabitants, these providers had operating income exceeding

<sup>&</sup>lt;sup>10</sup> 2012 National Housing and Population Census. These data were not available during the preparation of the first operation and were published when the second operation was beginning to be prepared.

<sup>&</sup>lt;sup>11</sup> Update of the 2011-2015 PSDSB (approved according to Ministerial Resolution 11,825 of April 2011), in the process of being approved by the MMAyA.

their operating costs by 36% and in only eight of them was income lower than costs. The three type A providers have the capacity to cover their short-term liabilities and have funds available to cover contingencies. However, the Cochabamba Municipal Potable Water and Sewer Service (SEMAPA) has unit operating costs higher than the average rate and a collections level below 65%, compared to 90% for the Santa Cruz Potable Water and Sewer Service (SAGUAPAC) and 83% for the Empresa Pública Social de Agua y Saneamiento [water and sanitation public social enterprise] (La Paz and El Alto). Among the type B EPSAs, only two<sup>12</sup> of the 14 entities that make up this group achieve financial sustainability, although the other 12 achieve operational sustainability; 64% of them have limitations for covering short-term obligations and eight of them have unit operating costs higher than the average rate; the group's collections level averages 81%. Of the 30 type C EPSAs, 53% have limitations for covering shortterm obligations; although 67% of them cover their operating costs with their operating income, in 28% of them the average rate is lower than the average cost of operation, and the group's collections level averages 73%. Based on these figures, a marked inequality continues to exist in efficiency levels among the EPSAs, demonstrating the need to move ahead with actions to reverse this situation.

- 1.13 For its part, the government established the 2025 Patriotic Agenda, with 13 pillars of a Dignified and Sovereign Bolivia, two of which are part of the sector policy and are related to basic services. The Ministry of Development Planning developed the Comprehensive Five-Year Development Plan 2015-2020 Government Plan called *Juntos vamos bien para vivir bien* [Together we're on the right path for living well], which has 12 proposals, two of which are part of the sector policy and are related to basic services.
- 1.14 Under the second operation, progress was made on the proposed objectives based on the previous instruments and the diagnostic assessment of the PSDSB was updated; and departmental and master plans, broad sector approaches, and oversight and monitoring plans for population segments were developed. With these concrete advances, national and departmental investments will be planned, budgeted, and executed based on the aforementioned plans and oversight of services will be performed effectively.
- 1.15 **Organizational development**. The following were prepared in the first operation: proposed organizational development and institutional strengthening plan proposals for the VAPSB, MMAyA agreements with EMAGUA, with the AAPS, and with SENASBA to implement the institutional strengthening of these entities; a proposal for strengthening the project evaluation functions of the Water, Basic Sanitation, and Housing Units (UNASBVIs) and guidelines and guides for the implementation of community development programs in the different stages of the project cycle to maximize the benefits of the infrastructure to be constructed, and the training strategy.
- 1.16 For the second operation, a diagnostic was done within the framework of the MMAyA's organizational development and institutional strengthening plan,

<sup>&</sup>lt;sup>12</sup> Oruro's local water supply and sewerage service (Servicio Local de Acueductos y Alcantarillado) and Potosí's sanitary works autonomous administration (Administración Autónoma para Obras Sanitarias).

identifying the following opportunities for improvement: (i) institutional processes not aligned with the organization's strategic objectives and indicators; (ii) organizational structure that does not respond to current needs; (iii) limited installed technical capacity that is not responsive to existing demands; (iv) inadequate physical and technological infrastructure; (v) weak intra- and interagency coordination; (vi) limited progress on the decentralized management model; (vii) programs and projects that are not executed within the deadlines, with anticipated costs and scope; (viii) strategic planning, activities programming, and performance monitoring not aligned within each other; (ix) deficiencies in the MMAyA's attention to the administrative and logistical needs of the deputy ministers' offices; and (x) delays in budget execution and in the transfer of resources to executing agencies and very weak management of (internal and external) communication. The organizational development and institutional strengthening plan was developed through a participatory process with the key actors in the sector, with a process-based management approach, over an implementation horizon of five years (2015-2019), structured in the following components: 1. organizational development to include: (i) management instruments; (ii) instruments for decentralized management; (iii) development of capacities; and (iv) technological and information management development; and 2. institutional strengthening: (i) institutional strengthening of the MMAyA; (ii) decentralized/deconcentrated management; and (iii) research, innovation, and development.

- 1.17 On this basis, efforts continue on the development of specific institutional strengthening strategies and plans for the institutions mentioned, with guides for the preparation of institutional strengthening programs for the EPSAs, and guides for the institutionalization of community development, as well as community development regulations differentiated according to population segments. These advances allow the entities to have the organizational structure and resources they need in line with sector development demands; progress can be made on project evaluation at the departmental level; the EPSAs can be strengthened to achieve higher levels of sustainability; and communities' needs are considered in infrastructure investments.
- 1.18 **Financial policy.** Under the first operation, proposals were developed to update the mechanisms for prioritizing and allocating resources and the co-participation structure of subnational governments within the MICSA framework, as well as guidelines for updating the rates model and a proposal for their implementation.
- 1.19 The advances recorded in the levels of coverage of W&S services (paragraph 1.12), are primarily due to the support the sector has received from the Government of Bolivia, the ADGs and the AMGs, through increased investments, as reflected in the following table:

2010	2011	2012	2013	2014	2015(*)	
\$79,618,827	\$122,307,996	\$155,146,738	\$199,836,915	\$252,449,567	\$260,086,455	

Table 1. Public Investment Executed in the W&S Sector<sup>13</sup>

(\*) Programmed value

<sup>&</sup>lt;sup>13</sup> Source: Office of the Deputy Minister for Public Investment and External Financing (VIFPE) - 2016-2020 PSDSB.

- 1.20 According to the 2010-2020 PSDSB, the investments needed to achieve the proposed targets amount to approximately US\$2.15 billion. In addition, the operating income of the EPSAs continues to be low in terms of covering maintenance and investment. Thanks to implementation of the MICSA and the Basic Sanitation Investment Area Identifier index, resources are beginning to be allocated to the neediest sectors. In addition, the Government of Bolivia has begun to produce inter-governmental agreements so that subnational governments will have active participation in the financing of the planned investments. Furthermore, and in order to ensure the sustainability of investments over the long term, the government is developing a rate policy and a subsidies mechanism (paragraph 1.39) that will allow companies to be financially sustainable.
- 1.21 Advances made in the second operation made it possible to have updated mechanisms for prioritizing and allocating resources, the implemented coparticipation structure, and the rate policy with an approved social focus. Such progress will foster the efficient allocation of resources, which will be cofinanced with local governments, and enable the EPSAs to have resources for ensuring their financial sustainability with a social focus.
- 1.22 **Monitoring and evaluation.** The first operation developed the proposed Performance Evaluation Framework (PEF) proposal and the guidelines for the implementation of an Integrated Regulatory Information System for Water and Sanitation (SIIRAyS).
- 1.23 Continuing with this progress, in the second operation the PEF has been developed and approved, the SIIRAyS is being implemented, and the water and environment information system has been created and is being harmonized with the information systems in the sector's entities.
- 1.24 Characteristics of the water resources and irrigation sector (WR&I). The Political Constitution of the State establishes that water is a right for life as well as a strategic resource and that the State has exclusive jurisdiction over the general WR&I regime and its services. Moreover, Framework Law on Autonomies and Decentralization 031 of 2010 gives the State the authority to establish by law the water resources and services regime, which consists of: (i) regulating the integrated management of basins, investment, water resources, and their use; (ii) determining sector policies and the institutional framework; (iii) setting conditions and restrictions for use and services at all levels; (iv) granting and regulating rights; (v) regulating water use and treatment; (vi) regulating service administration, technical assistance and strengthening, and financial and administrative matters relating to water resources; and (vii) establishing an institutional framework recognizing participation by the relevant social organizations. The Office of the Deputy Minister for Water Resources and Irrigation (VRHR) is the MMAyA department in charge of sector policy. The ADGs and AMGs are responsible for preparing, financing, and executing water resources and irrigation projects, in addition to developing plans and programs. The central government and the ADGs have the obligation to help the municipal autonomous governments fulfill their duties. The role of providing technical assistance and recording and granting rights for the use of water for irrigation is performed by the National Irrigation Service (SENARI). Under the latter, the Departmental Irrigation

Services (SEDERIs) are the decentralized agencies that perform these functions. In most cases, such functions are being financed with resources from the ADGs, which thus cooperate in the promotion of irrigation management capacities at the local level.

- 1.25 **Status of the WR&I sector.** Although the country has abundant water resources, their distribution over space and time is not homogenous. The MMAyA estimates that 41% of the country's area has a water shortage,<sup>14</sup> which limits the agricultural activity in which one third of the country's employed population is engaged. Occasional excess water generates associated risks, the management of which represents significant challenges. In the irrigation subsector, Bolivia is promoting expansion of the irrigated area, which amounts to about 350,000 hectares and is equal to less than 10% of the area under cultivation each year (the lowest percentage in Latin America). In 2012, the irrigated area totaled 303,201 hectares, up from 226,564 hectares in 2000.
- 1.26 Challenges in the WR&I sector. The recent expansion of the irrigated area has involved a gradual increase of investments in the subsector. According to the 2007 National Irrigation Plan known as "Para Vivir Bien," public investment during the decade ending in 2007 averaged only US\$6 million a year, while in 2012 it came to more than \$80 million. The Government of Bolivia has decided to significantly expand the irrigated area and to improve the quality of systems as a central pillar in its strategy to promote agricultural production, combat poverty, and guarantee food security. The country has set itself the very ambitious targets of expanding the irrigated area by 84,000 hectares over the 2015-2019 period <sup>15</sup> and doubling the current area by 2025 (excluding the additional area of large multipurpose projects). This constitutes a challenge not only in terms of investment in infrastructure but also in terms of technical education and training of human resources, contributing to better utilization of water for irrigation; of system users for effective operational and administrative management so that the systems will be technically and financially sustainable; and in the appropriate management of water resources at the watershed level. In addition to improvements targeting the productive sector, the WR&I sector must address the serious harm being done to the Bolivian economy and society by climate change: according to the Economic Commission for Latin America and the Caribbean (ECLAC), damage during the 2007-2008 period affected 618.000 inhabitants and represented 1% of GDP. Over the 2010-2100 period, estimated losses due to climate change would be in the range of 2.9% to 4.8% or 1.3% to 2.2% of GDP, under different scenarios.<sup>16</sup> In this respect, risk management and climate change adaptation policy needs to be developed for the sector. In this context, the challenge for the National Watersheds Plan is to promote and implement a comprehensive vision of water resource management and foster watershed resource planning as an act of public and social administration.

<sup>&</sup>lt;sup>14</sup> Particularly the Altiplano, Valles, and Chaco areas.

<sup>&</sup>lt;sup>15</sup> The target for the 2015-2019 period would make it possible to directly benefit 80,000 families, assuming that the ratio of surface under irrigation per family that has been observed in the irrigation projects financed by the Government of Bolivia since 2009 is maintained.

<sup>&</sup>lt;sup>16</sup> IDB-ECLAC. 2014. The Study of the Economics of Climate Change in Bolivia.

- 1.27 Determinants of sector planning, organizational development, financial policies, monitoring and evaluation, and advances since the first operation. When the first operation (BO-L1074) was proposed, the Government of Bolivia had made progress in the process of adapting the WR&I sector to the new legal framework defined by the 2009 Constitution, as well as in decentralization. Similarly, the sector had initiated a process to strengthen and improve its capacity for managing and monitoring water resources, in line with the priority assigned by the Government of Bolivia and its objective of expanding the area under irrigation. Within the sector planning component, in the design of BO-L1074 the need to prioritize the objective of incorporating risk management planning in the sector's investments was identified, as this was considered a central component of its sustainability that still required attention. To support the objective of incorporating risk management planning in the water resources sector, the first operation identified the need to have a risk management intervention strategy and a proposal for the creation of the Risk Management Unit in the VRHR. In this respect, the VRHR prepared the Risk Management Intervention Strategy and the proposal for the Risk Management Unit was developed. For the second operation, the program suggested taking the advances made from the strategic level to the operational level. The Government of Bolivia approved the 2013-2017 Multiyear Program of Integrated WR&I Management and Integrated Watershed Management (GIRH-MIC), which incorporates risk management and puts the strategy's quidelines into practice, continues the process of implementing the GIRH-MIC outlined by the 2007 National Watersheds Plan, and incorporates adaptation to climate change. At the operational level, as part of the second operation, the VRHR has approved guides for the submission of irrigation projects that incorporate the subject of risks and climate change among their analytical components, leaving as medium-term activities the training needed for the appropriate application of these analyses. In addition, in 2013 the Government of Bolivia approved the 2025 Irrigation Agenda, with the following central elements: (i) more water for irrigation; (ii) social and institutional empowerment; and (iii) more agricultural production under irrigation. Currently, the VRHR is preparing the 2015-2019 Multiyear Irrigation Program, which proposes specific targets for the period, broken down by that program's different lines of action (revitalization of irrigation systems, dams, mechanized irrigation, and other areas).
- 1.28 Organizational development. In the WR&I sector, the identified organizational development needs for both operations focused on improving the sector's capacity for managing water resources through the decentralization of functions related to irrigation projects; the monitoring of dams; and the technical training of stakeholders. During the first operation, with respect to irrigation, the SEDERIS were successfully created in all departments suited to irrigation. With respect to dams, progress was made with the proposal to create the Dams Unit, while in the area of technical training the National Irrigation School was created. Moreover, in line with the priority attached to the subject of WR&I management in the coming years, as well as the governmental objective of decentralization, the WR&I sector is continuously being strengthened. In addition to putting the SEDERIs into operation (achieved with the first operation) and ensuring that they have an operating budget (second operation), the ADGs are playing a growing part in financing and supporting irrigation projects, the latter through departmental irrigation divisions in the governors' offices. For the sector this also means

strengthening its capacities and strategic partnerships so as to be able to analyze, execute, and supervise an increasing number of works, but also to analyze and deal with the effects of climate change through the GIRH-MIC, and consolidation of the VRHR's Risk Management Unit, as part of the second operation. The VRHR has made significant progress with incorporating risk management and climate change in its planning and its functions, although the magnitude of the challenge this entails requires working on continuous medium-term improvement so as to continue strengthening practical application. For example, the advances have made it possible to implement, with the support of the autonomous governments, the three phases of the Río Grande watershed flood control program starting in 2009, for more than US\$62 million.

- 1.29 Monitoring and evaluation. Considering the increase noted and anticipated in the pace of executing irrigation projects, the program identified the need to have an effective system to allow the registration and monitoring of the country's existing irrigation systems, as well as registration and authorization for the utilization of water resources for irrigation purposes. To this end, the program provided for the development of a National Irrigation Information System (SNIR). During the first operation, guidelines were prepared for the design of the SNIR. Based on the guidelines from the first operation, the second operation worked on implementation of the system, which registers the existing irrigation systems and is fed information on the different programs being executed. The SNIR includes a specific model for dams and will therefore be a tool for monitoring them. The SNIR is up and running and operating manuals have been prepared. With regard to the evaluation dimensions carried out by the Government of Bolivia and that were not specifically included in the program, the VRHR had analyses prepared on the irrigation projects of the last decade that have generated important lessons learned. In addition, with the support of international cooperation agencies, the VRHR is developing a methodology that will be adopted for the ex post evaluation of irrigation projects. Lastly, it is working, with Bank support, on its first experience with evaluating the impact of irrigation projects within the framework of the Watershed-based Irrigation Programs (PRONAREC).
- 1.30 **Strategic alignment.** The program is aligned with the 2016-2020 Country Strategy with Bolivia (document GN-2843), given that it will contribute to achievement of the strategic objective of expanding the coverage of potable water and sanitation services, especially in rural areas. In addition, the program is in line with the 2010-2020 Update to the Institutional Strategy (document GN-2788-5) and aligned with the development challenges of (i) social inclusion and equality and (ii) productivity and innovation, given that policy reforms will be made that will increase the coverage of W&S, close the gap between rural, urban and periurban areas, and improve service delivery, resource prioritization, and information systems. In addition, sector institutions will be strengthened in order to improve governance and become more efficient. The program is also aligned with the cross-cutting issue of climate change and environmental sustainability given that it involves institutional strengthening aimed at effective management and preservation of water as a natural resource. The program is aligned with the Sustainable Infrastructure for Competitiveness and Inclusive Growth Strategy (document GN-2710-5), in that it contributes to: (i) promoting access to infrastructure services; (ii) promoting continuous improvements in infrastructure governance; and

(iii) supporting the construction and maintenance of socially and environmentally sustainable infrastructures. It is also in line with the dimensions of success and lines of action of the Water and Sanitation Sector Framework Document (document GN-2781-3) of universal access and improved service quality, strengthened governance of the sector and prioritization of investments, efficient and sustainable management, and social and environmental sustainability.

- 1.31 **Bank support in the sectors involved.** Through three technical-cooperation operations,<sup>17</sup> support has been provided for the process of reforms, both in the preparation of the new operations and in the development of the instruments identified, that support fulfillment of the policy actions to which Bolivian government agencies committed. In addition, the Bank is satisfactorily executing seven projects<sup>18</sup> in the water resources and PW&S sectors, for a total of US\$380 million. In addition, it is preparing the third phase of the Watershed-based Irrigation Program (BO-L1106) and the Lake Titicaca Sanitation Program (BO-L1118), which focus on areas established as priorities by the Government of Bolivia (periurban, small communities and rural towns, areas deficient in irrigation, and watershed cleanup).
- 1.32 Lessons learned. The first operation and the technical cooperation operations enabled the Government of Bolivia to assume the commitments that facilitated preparation of the Water and Sanitation and Water Resources and Irrigation Sectors Reform Program through a process of analysis of the sector's problems, dialogue, consultation, and consensus among stakeholders, led by the MMAyA with the participation of the other sector entities. The process included workshops, meetings, and interviews with many of the sector's agents. In addition, the support provided through technical cooperation allowed MMAyA teams to resolve technical and operational issues that could have placed the current program of reforms at risk, allocate funds to implement them, and define supporting sector instruments. The advances have been achieved through effective dialogue in the search for areas of consensus among the various actors, as in the case of formulating a rate policy with a social focus. In addition, important lessons have been drawn from execution of the aforementioned programs, such as the identification of bottlenecks in the execution of programs due to the need to strengthen executing units' capacities for project analysis and management, implementation of community development, strengthening of the EPSAs to ensure the sustainability of investments, results monitoring, and the need to improve the criteria and capacity for selecting and evaluating projects so that their technical, economic, social and environmental viability are in line with the political priorities of universal access to water and sanitation services. These lessons have been incorporated into the preparation of this program (OEL#6).
- 1.33 **Consistency with the Bank's Public Utilities Policy.** The reforms proposed by the program and the national sector objectives are aligned with the principles of the Bank's Public Utilities Policy (document GN-2716-6), in that they promote

<sup>&</sup>lt;sup>17</sup> ATN/OC-14784-BO Support for the Program of Reforms in the Water and Sanitation and Water Resources Sector – Second Operation; ATN/OC-14316-BO Support for the W&S Sector for Development of Planning Instruments; ATN/OC-14205-BO Support for the W&S Sector for Development of Planning Instruments.

<sup>&</sup>lt;sup>18</sup> 2199/BL-BO and GRT/WS-11830-BO; 2597/BL-BO and GRT/WS-12956-BO; 2440/BL-BO; 2880/BL-BO; 3091/BL-BO; 2057/BL-BO; and 3060/BL-BO.

transparency and accountability through improvement of the sector's monitoring and evaluation mechanisms (paragraph 1.40), support the development of a more effective regulatory regime in the activities carried out for the AAPS (paragraphs 1.38 and 1.40), strengthen sector capacities (VAPSB, VRHR, the Office of the Deputy Minister of the Environment (VMA), EMAGUA, AAPS, SENASBA, and UNASBVIs) to improve service delivery efficiency (paragraph 1.38) and promote the financial sustainability of the EPSAs, considering a social focus in the rate policy (paragraph 1.39), as well as other actions. The program also helps to meet the conditions for the financial sustainability and economic evaluation of that policy, because it promotes the financial sustainability of the EPSAs (paragraph 1.39) and the anticipated program outcomes are socioeconomically viable (paragraph 1.45) and paragraph 1.46) (<u>OEL#5</u>).

## B. Program objectives and components

- 1.34 The objective of this second and final operation in a series of two consecutive operations supporting policy reforms, under the programmatic policy-based loan modality, is to help increase coverage and improve management of PW&S services and management of water resources in Bolivia, through the development of an institutional and policy framework that includes actions intended to: (i) strengthen sector planning; (ii) strengthen the organizational and institutional development of sector entities; (iii) support effective implementation of the financial policy; and (iv) develop monitoring and evaluation instruments.
- 1.35 This operation maintains the original objectives and components agreed upon at the start of the programmatic series and incorporates adjustments in the definition of the matrix commitments that reinforce the precision of their scope, without altering the structure designed originally. The Policy Matrix (<u>Annex II</u>), the Means of Verification Matrix (<u>REL#2</u>), and the Comparative Matrix (<u>OEL#8</u>) present the proposed policy actions and the methods that can be used to verify their complete fulfillment, in order to proceed to execute the disbursement of funds. The five components of the program's structure are described below.
- 1.36 **Component I. Macroeconomic stability**. The objective of this component is to ensure a macroeconomic context in line with the program's objectives as established in the Policy Matrix (<u>Annex II</u>).
- 1.37 **Component II. Sector planning.** The objective of this component is to help develop sector planning, oversight, and control instruments, for which the following are included: (i) a new commitment, which is the development of the 2016-2020 PSDSB, based on the 2011-2015 PSDSB, which the MMAyA considers an essential sector planning tool that will make it possible to plan, budget, and execute national investments based on the guidelines set out in the PSDSB; (ii) two departmental PSDSBs,<sup>19</sup> to which end, in order to clarify the scope of the commitment, the number of plans—two—has been specified (unlike the original commitment that did not indicate the number). It has also been specified that the plans are approved by the departmental authorities (and not the MMAyA). It will thus be possible for departmental investments to be planned, budgeted, and executed based on the guidelines defined therein; (iii) the PMAS, a commitment that has been modified so master plans will be directly approved by the MMAyA,

<sup>&</sup>lt;sup>19</sup> For the Departments of Tarija and Potosí

and no longer by the respective EPSAs, given that those plans cover various companies and various municipios;<sup>20</sup> (iv) a broad sector approach for potable water and sanitation in rural areas with fewer than 2,000 inhabitants, and in towns with between 2,000 and 10,000 inhabitants, a modification compared to the original, as the scope is specified based on current circumstances, which will allow investment programs aimed at increasing coverage and improving service delivery to be structured and executed as provided for in those approaches; (v) operational plan for oversight and regulations by population segment approved by the AAPS, which has been maintained as in the original; (vi) incorporation of the risk management and climate change adaptation strategy in the plans, programs, and technical standards of the VRHR; and (vii) the VRHR's Risk Management Functional Area up and running and with a budget for its operations.

1.38 Component III. Organizational development. The objective of this component is to contribute to the development of sector capacities and institutional strengthening plans, as well as community development instruments, which will give sector entities an organizational structure in line with sector development demands and sufficient numbers of qualified staff and information and organization systems and methods to carry out their functions effectively. The scope of this component includes: (i) VAPSB, VRHR and VMA organizational development and institutional strengthening plans approved by the MMAyA and modified by expanding the scope to include the organizational development of the three offices in a single commitment, including the VMA which was not originally included; (ii) EMAGUA institutional strengthening strategy approved and with a budget for its implementation;(iii) AAPS institutional strengthening plan with a budget for its implementation; (iv) SENASBA institutional strengthening plan with a budget for its implementation; (v) plan to strengthen the UNASBVIs to receive and evaluate water and sanitation projects, with a budget for its implementation, in two departments; (vi) SEDERIs with a budget to operate in seven departments in the country where there are irrigators' organizations, specifying the number given that only seven of Bolivia's nine departments have irrigators' organizations; (vii) creation and implementation of a National Registry of Dams; (viii) guides for the preparation of institutional strengthening programs for the EPSAs, approved by SENASBA; (ix) guides for the institutionalization of community development in the EPSAs, approved by SENASBA; (x) social regulation for community development differentiating population segments, for pre-investment, investment, updated and approved by the MMAyA, in which the "Guides for Community Development" commitment has been changed to "Social Regulation for Community Development" commitment as has the approving agency, prioritizing the purpose thereof in that the latter is compulsory while the guide is only meant to provide direction and thus the regulation must be approved by the MMAyA; and (xi) the Plurinational Water Institute and National Irrigation Institute. The commitment involving the "Environmental Health Education Plan" approved by the Ministry of Education has been eliminated as it was not feasible for the government agency to consider this subject as part of the educational curriculum at the primary and

<sup>&</sup>lt;sup>20</sup> According to regulation DS 29,894 the lead agency for the approval of plans including EPSAs and municipios is the MMAyA.

secondary level, despite the efforts made and work done by SENASBA to achieve that purpose.<sup>21</sup>

- 1.39 **Component IV. Financial policy.** The objective of this component is to help improve the system for allocating public investment funds, cofinancing to increase sector investments, the financial sustainability of the EPSAs so they can cover their operation and maintenance costs, ensuring the sustainability of services. The scope included: (i) the development of mechanisms for prioritizing and allocating resources updated and approved; (ii) MMAyA implementation of the structure for coparticipation of local governments in sector financing; (iii) a rate policy with a social focus and ensuring the financial sustainability of the EPSAs over the long term,<sup>22</sup> approved by the AAPS and the MMAyA, for implementation.
- 1.40 **Component V. Monitoring and evaluation.** The objective of this component is to help establish a PEF to monitor the achievement of targets and the development of sector information systems to obtain timely and reliable information. This will enable sector performance to be evaluated based on the PEF, with the VRHR monitoring the sector's performance based on the SNIR, the AAPS monitoring performance of the EPSAs based on the information they submit, providing the sector with reliable and timely information. The scope includes: (i) PEF for water and sanitation, approved; (ii) PEF of the National Watersheds Plan updated for the 2013-2017 period; (iii) SNIR implemented and in operation; (iii) the SIIRAyS being implemented; and (iv) the water and environment information system created and operating in the lead agency and being harmonized with the information systems of the sector's institutions.

#### C. Expected outcomes and benefit

1.41 The most important indicators and their expected targets are presented below (<u>REL#3</u>)

Impact indicator	Baseline	End of project
Total number of households with potable water service (coverage)	2,267,357 (80.75)	2,452,080 (82.60)
Total number of households with sanitation service (coverage)	1,479,772 (52.70)	1,633,335 (56.03)
Surface under irrigation (hectares)	303,201	360,000
Outcome indicator	Baseline	End of project
Collections efficiency (%)	79.42	85
Index of unaccounted-for water (%)	37	36

#### **Table of Key Impact and Outcome Indicators**

<sup>&</sup>lt;sup>21</sup> This notwithstanding, the MMAyA and SENASBA remain in a dialogue with the education sector authorities to include the Environmental Health Education Plan in future study plans

<sup>&</sup>lt;sup>22</sup> Through the Ministerial Resolution, a new nationally applicable rate policy has been defined that guarantees the financial sustainability of the providers, with only two classes of users and three consumption blocks. It concentrates (crossed) subsidies in the fixed charge and in the first consumption block of "low-income residential users" identified on the basis of socioeconomic studies for which the municipal administrations are responsible.

- 1.42 The new rate policy and development of the PMASs, outputs from this operation, will allow companies to assume investment commitments with greater certainty, more peace of mind, and better financial guarantees. Combined with improved procedures, control mechanisms, and monitoring to be applied by the AAPS, this will provide incentives for achieving the outcomes proposed in terms of coverage, collection, and unaccounted-for water.
- Socioeconomic analysis. A cost-benefit analysis was performed regarding some 1.43 of the program's anticipated outcomes; specifically the increased coverage of PW&S services was analyzed. As mentioned above, it was assumed that increases in coverage will stem from: (i) improving investment planning, better prioritization of resources, design and execution of better projects, resulting in an increase in connections; (ii) defining "program approaches," which helps to improve the identification of projects given that population segments in periurban and rural areas and small towns will be taken into account in order to reduce the coverage gap; (iii) adapting the sector structure in order to adequately address sector demands; (iv) helping to improve the resource allocation system, making it possible to use the same resources to improve prioritization and ensure that projects benefit those households that are still without services; and (v) helping to increase investments through cofinancing. These reforms will achieve the targets established by the government in the PSDSB, which defined investment needs and the annual rates of growth needed in coverage.
- 1.44 The figures used in the analysis include the cost of the reform (cost of implementing and operating new institutions and procedures, or of strengthening the agencies, in order to increase coverage or improve service) and the incremental investment and operation and maintenance costs.
- 1.45 The results of the analysis show that the coverage expansion program is viable and produces benefits in present value terms amounting to US\$1.3 billion, for investments of US\$1.1 billion (US\$840 million in present value terms) with a net present value of US\$458 million and an internal rate of return of 21.2%. An analysis of the sensitivity of economic return indicators to changes in the assumptions was performed. The results show that the program's economic viability is secure against changes in the annual rate of growth in coverage. The analysis, its methodology and the calculations are presented in OEL#1.
- 1.46 In addition, a cost-benefit analysis was carried out on the program's anticipated economic impacts in relation to sector reforms in the management of water resources and irrigation. The main direct economic benefit is improved compliance with execution deadlines provided in the long-term planning of the irrigation subsector. This analysis was done by comparing a "without project" alternative assuming that the customary nine-month delay in executing interventions under the sector's irrigation programming continues. Meanwhile in the "with project" alternative, as a result of sector reforms, compliance with the programmed execution schedules is anticipated, thus generating the benefits of programming within the anticipated timeframes. The results of the analysis show that, with respect to the WR&I management sector, the program is viable in socioeconomic terms, with the present value of the quantified benefits amounting to US\$60.1 million, for costs of US\$12.2 million, thus obtaining a net present value of

US\$47.9 million and an internal rate of return of 26.9%. The analysis, its methodology, and the calculations are presented in <u>OEL#1</u>.

# II. FINANCING STRUCTURE AND RISKS

# A. Cost and financing

2.1 This operation, the second and final in a series of two consecutive operations, has been designed as a programmatic policy-based loan (PBP), in accordance with document CS-3633-1, for up to US\$90 million, expected to disburse in the second quarter of 2016, with 85% of the loan amount charged to the Ordinary Capital (OC) and 15% charged to the Fund for Special Operations (FSO). The amount of this operation would be equal to approximately 5.7% of the country's financing needs for 2016. Because this operation is a PBP, there will be a single disbursement, to be made once the loan contract has been signed and the policy conditions have been fulfilled, taking into account the means of verification presented in <u>REL#2</u>.

# B. Environmental and social risks

2.2 According to Directive B.13 of the Environment and Safeguard Policy (document GN-2208-20 and Operational Policy OP-703 – <u>OEL#3</u>), no environmental classification is required. The policies to be adopted within the framework of this operation are expected to produce a positive effect on the well-being of society, by improving potable water and sanitation services, as well as the management of water resources through the availability of instruments for irrigation management, including adaptation to climate change.

# C. Other risks

2.3 During preparation of the project, the previously described risks of the operation were discussed with Bolivian government officials. These discussions identified the following risks as medium: (i) macroeconomic and fiscal sustainability risk, due to a probable drop in mineral and gas prices that would affect the central government's revenue and thus the availability of resources for the sectors, which will be mitigated with a higher degree of cofinancing on the part of the various levels of government-central, departmental and local-which will be verified through the increased number of inter-governmental agreements necessary for financing those projects; (ii) delays in the implementation of reforms in public management and governance, due to difficulties in interagency coordination among the various sector entities, for which the MMAyA formed a working group reporting to the General Planning Bureau to coordinate the work among the various actors in the sector, given that it also developed intensive coordinating activity between the MMAvA and the Bank<sup>23</sup> during the preparation phase; and (iii) monitoring and accountability, due to the multiplicity of actors involved in the program, making the collection of information on outcomes and the monitoring function difficult, which will be mitigated by contracting a specialist to gather information on the outcomes achieved and monitor the different institutions involved. In addition, it has been agreed that those risks will be mitigated by the Government of Bolivia's firm

<sup>&</sup>lt;sup>23</sup> In addition, work began on the Policies Matrix in a workshop held in February 2014, with the participation of the highest authorities of the MMAyA.

intention to move ahead with the program, given the importance of this operation to the country for maximizing the benefits of the W&S sector and the leadership provided by the Ministry of Development Planning and the MMAyA.

2.4 **Sustainability of the reforms.** The sustainability of the policy actions developed in the programmatic series is based on: (i) the Bolivian government's commitment to the reforms and the priority given to the sector, as reflected in the government's plans and agendas (paragraph 1.13); (ii) the MMAyA's request to move forward with a new programmatic series that makes it possible to continue and deepen on the reforms for the sector; and (iii) the policy instruments developed have the approvals from the required levels and their validity is established for a medium-term horizon.

# **III. IMPLEMENTATION AND MANAGEMENT PROGRAM**

## A. Borrower and executing agency

- The borrower will be the Plurinational State of Bolivia, represented by the Ministry 3.1 of Development Planning. The executing agency will be the Ministry of Environment and Water (MMAyA), which will coordinate fulfillment of the policy matrix commitments with SENASBA, EMAGUA, and the AAPS. The MMAyA will be responsible for matters relating to: (i) sector planning, risk management, and climate change adaptation; (ii) organizational development and institutional strengthening of the VAPSB, VRHR, VMA, and the UNASBVIs; (iii) establishment of criteria and mechanisms for prioritization, allocation of resources, and cofinancing by subnational governments: and (iv) development of the performance evaluation framework. The AAPS will be responsible for matters relating to definition of the scope of inspection and regulation, its own institutional strengthening, and updates of the rate policy. SENASBA will be responsible for design and implementation of the institutional strengthening policy, community development, professional and technical skills development, and its own institutional strengthening. EMAGUA will be responsible for the implementation of its institutional strengthening strategy.
- 3.2 Special contractual conditions precedent to the first disbursement of the financing: the single disbursement of funds for the second operation in this programmatic policy-based loan is subject to fulfilment of policy reform measures or institutional changes, in line with the content of this document, as well as achievement of the targets agreed upon and set out in the Policy Matrix.

## B. Monitoring and evaluation

3.3 The MMAyA will coordinate fulfillment according to schedule of the commitments corresponding to this second programmatic operation, in addition to the long-term outcomes and achievements stemming from the reform. The MMAyA will be responsible for reporting on progress against the policy matrix and the results matrix. The results matrix indicators will guide the evaluation of program implementation progress, and will be used for the program evaluation to be conducted upon completion of this last programmatic operation. The borrower and the Bank have agreed to monitor program execution through monitoring meetings on dates to be determined by both parties (<u>OEL#2</u>).

3.4 The project completion report will be prepared at the end of the second operation (data as of December 2015, compiled during the first half of 2016). An ex post cost-benefit analysis will be done for W&S. The analysis will be reflexive and will seek to measure changes in the values of the determining variables of the socioeconomic viability of increased coverage before and after implementation of the program. In addition, it will measure the extent to which the objectives of the two operations in the program have been achieved, within six months following completion of the implementation of the reforms under the second operation. The borrower has previously agreed with the Bank on the indicators and baseline for conducting that final evaluation (Results Matrix) and will also gather all information needed for the monitoring and evaluation of the program, and will compile, file, and keep on hand, and make available to the Bank any and all information, indicators, and parameters to help the Bank prepare the project completion report. An ex post evaluation will also be prepared for the water resources and irrigation sector. It will review whether changes have been noted in the values of the key variables used in the analysis of socioeconomic viability. The same methodology as in the ex ante economic evaluation will be used.

## IV. POLICY LETTER

4.1 The IDB has agreed with the Government of Bolivia on the macroeconomic and sector policies included in the Policy Letter that was submitted by the Ministry of the Economy and Finance (MEF), describing the key components of the Government of Bolivia's strategy for this program and reaffirming its commitment to implement the activities agreed upon with the IDB (<u>REL#1</u>).

Summary         I. Strategic Alignment         Aligned         Aligned         Social Inclusion and Equality -Productivity and Innovation -Climate Change and Environmental Sustainability         Regional Context Indicators       Households with new or upgraded access to drinking water (#) -Households with new or upgraded access to drinking water (#)         Country Development Results Indicators       Aligned         Country Strategy Development Objectives       Aligned         Country Strategy Results Matrix       GN-2843       Expand water and sanitation coverage, princ rural areas.         Country Program Results Matrix       Not available       Document under revision         Relevance of this project to country development challenges (if not aligned to country strategy or country program)       Bocument under revision         I. Development Outcomes - Evaluability       Evaluable       Weight       Maximum         3. Evidence-based Assessment & Solution       8.4       33.33%       10         3.1 Program Diagnosis       3.0       3.0       3.1       3.3         3.2 Reposed Interventions or Solutions       2.4       3.33%       10         4.1 The program Ibagnosis       10.0       33.33%       10         4.1 The program Ibagnosis       10.0       33.33%       10	ipally in
1. IDB Strategic Development Objectives       Aligned         Development Challenges & Cross-cutting Themes       -Social Inclusion and Equality -Productivity and Innovation -Climate Change and Environmental Sustainability         Regional Context Indicators       -Households with new or upgraded access to drinking water (#) -Households with new or upgraded access to drinking water (#) -Households with new or upgraded access to sanitation (#)         2. Country Development Results Indicators       -Households with new or upgraded access to sanitation (#)         2. Country Strategy Development Objectives       Aligned         Country Strategy Results Matrix       GN-2843         Country Program Results Matrix       Not available       Document under revision         Relevance of this project to country development challenges (if not aligned to country strategy or country program)       Boutenet aligned       10         1/. Development Outcomes - Evaluability       Evaluable       Weight       Maximum         3. Evidence-based Assessment & Solution       8.4       33.33%       10         3.1 Program Diagnosis       3.0       3.0       3.0       3.33%       10         4. Ex ante Economic Analysis       10.0       33.33%       10       4.0       10	ipally in
Social Inclusion and Equality         Productivity and Innovation         Climate Change and Environmental Sustainability         Regional Context Indicators         Country Development Results Indicators         -Households with new or upgraded access to drinking water (#)         -Households with new or upgraded access to sanitation (#)         2. Country Development Results Indicators         2. Country Strategy Development Objectives         Aligned         Country Strategy Results Matrix         GN-2843         Expand water and sanitation coverage, princ         Country Program Results Matrix         Relevance of this project to country development challenges (if not aligned to country strategy or country program)         II. Development & Solution         8.2       10         3. Evidence-based Assessment & Solution       8.4         3.2 Proposed Interventions or Solutions       2.4         3.3 Results Matrix Quality       3.0         4. Ex ante Economic Analysis       10.0         3.4. Ex ante Economic Analysis       10.0         4.1. The program has an ER/NPV, a Cost-Effectiveness Analysis or a General       4.0	ipally in
Development Challenges & Cross-cutting Themes       -Productivity and Innovation -Climate Change and Environmental Sustainability         Regional Context Indicators       -Households with new or upgraded access to drinking water (#) -Households with new or upgraded access to sanitation (#)         2. Country Development Results Indicators       -Households with new or upgraded access to sanitation (#)         2. Country Strategy Development Objectives       Aligned         Country Strategy Results Matrix       GN-2843       Expand water and sanitation coverage, princ rural areas.         Country Program Results Matrix       Not available       Document under revision         Relevance of this project to country development challenges (ff not aligned to country strategy or country program)       B.2       10         1. Development Outcomes - Evaluability       8.2       10         3.1 Program Diagnosis       3.0       1         3.2 Proposed Interventions or Solutions       2.4       1         3.3 Results Matrix Quality       3.0       1         4. Ex ante Economic Analysis       10.0       33.33%       10         4. The program has an ERR/NPV, a Cost-Effectiveness Analysis or a General       4.0       4.0	ipally in
Country Development Results Indicators       -Households with new or upgraded access to drinking water (#)         2. Country Strategy Development Objectives       Aligned         Country Strategy Results Matrix       GN-2843         Expand water and sanitation coverage, princ rural areas.         Country Program Results Matrix       Not available         Document under revision         Relevance of this project to country development challenges (if not aligned to country strategy or country program)         It. Development Outcomes - Evaluability       Evaluable         8.2       10         3.4 Program Diagnosis       3.0         3.2 Progosed Interventions or Solutions       2.4         3.3 Results Matrix Quality       3.0         4.Ex ante Economic Analysis       10.0         4.The program has an ERR/NPV, a Cost-Effectiveness Analysis or a General       4.0	ipally in
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Country Strategy Results Matrix       GN-2843       Expand water and sanitation coverage, prince rural areas.         Country Program Results Matrix       Not available       Document under revision         Relevance of this project to country development challenges (if not aligned to country strategy or country program)       Document under revision         II. Development Outcomes - Evaluability       Evaluable       Weight       Maximum         3. Evidence-based Assessment & Solution       8.4       33.33%       10         3.1 Program Diagnosis       3.0       1       1         3.2 Proposed Interventions or Solutions       2.4       1         3.3 Results Matrix Quality       3.0       1         4. Ex ante Economic Analysis       10.0       33.33%       10	ipally in
Country Strategy Results Matrix       GN-2843       rural areas.         Country Program Results Matrix       Not available       Document under revision         Relevance of this project to country development challenges (If not aligned to country strategy or country program)       Document under revision         I. Development Outcomes - Evaluability       Evaluable       Weight       Maximum         3. Evidence-based Assessment & Solution       8.4       33.33%       10         3.1 Program Diagnosis       3.0       1       3.2         3.2 Proposed Interventions or Solutions       2.4       1         3.3 Results Matrix Quality       3.0       1         4. Ex ante Economic Analysis       10.0       33.33%       10	ipally in
Relevance of this project to country development challenges (If not aligned to country strategy or country program)       Evaluable       Weight       Maximum         II. Development Outcomes - Evaluability       Evaluable       Weight       Maximum         3. Evidence-based Assessment & Solution       8.4       33.33%       10         3.1 Program Diagnosis       3.0       2.4       3.3 Results Matrix Quality       3.0         4. Ex ante Economic Analysis       10.0       33.33%       10	
country strategy or country program)       Evaluable       Weight       Maximum         10       8.2       10         3. Evidence-based Assessment & Solution       8.4       33.33%       10         3.1 Program Diagnosis       3.0       10         3.2 Proposed Interventions or Solutions       2.4       10         3.3 Results Matrix Quality       3.0       10         4. Ex ante Economic Analysis       10.0       33.33%       10	
8.2         10           3. Evidence-based Assessment & Solution         8.4         33.33%         10           3.1 Program Diagnosis         3.0         10         10           3.2 Proposed Interventions or Solutions         2.4         10         10           3.3 Results Matrix Quality         3.0         10         10           4. Ex ante Economic Analysis         10.0         33.33%         10           4.1 The program has an ERR/NPV, a Cost-Effectiveness Analysis or a General         4.0         4.0	
3. Evidence-based Assessment & Solution         8.4         33.33%         10           3.1 Program Diagnosis         3.0         3.0         3.3         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         4.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         4.0         3.0	Score
3.1 Program Diagnosis         3.0           3.2 Proposed Interventions or Solutions         2.4           3.3 Results Matrix Quality         3.0           4. Ex ante Economic Analysis         10.0         33.33%           4.1 The program has an ERR/NPV, a Cost-Effectiveness Analysis or a General         4.0	
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3.3 Results Matrix Quality         3.0           4. Ex ante Economic Analysis         10.0         33.33%         10           4.1 The program has an ERR/NPV, a Cost-Effectiveness Analysis or a General         4.0         4.0	
4. Ex ante Economic Analysis         10.0         33.33%         10           4.1 The program has an ERR/NPV, a Cost-Effectiveness Analysis or a General         4.0	
4.1 The program has an ERR/NPV, a Cost-Effectiveness Analysis or a General 4.0	
4.2 Identified and Quantified Benefits 1.5	
4.3 Identified and Quantified Costs 1.5	
4.4 Reasonable Assumptions 1.5	
4.5 Sensitivity Analysis 1.5	
5. Monitoring and Evaluation 6.1 33.33% 10	
5.1 Monitoring Mechanisms 1.5	
5.2 Evaluation Plan 4.6 III. Risks & Mitigation Monitoring Matrix	
Overall risks rate = magnitude of risks*likelihood Low	
Identified risks have been rated for magnitude and likelihood Yes	
Mitigation measures have been identified for major risks Yes	
Mitigation measures have indicators for tracking their implementation Yes	
Environmental & social risk classification B.13	
IV. IDB's Role - Additionality The project relies on the use of country systems	
Financial Management: Budget, Treasury, Ac and Reporting, External control, Internal Aud Fiduciary (VPC/FMP Criteria) Yes Procurement: Information System, Shopping Contracting Individual consultant, National P Bidding.	lit. I Method,
Non-Fiduciary Bidding.	
The IDB's involvement promotes additional improvements of the intended	
beneficiaries and/or public sector entity in the following dimensions:	
Gender Equality Labor	
Environment	
Additional (to project preparation) technical assistance was provided to the public sector entity prior to approval to increase the likelihood of success of the project BO, ATN/OC-14316-BO, ATN/OC-14205-BO.	
The ex-post impact evaluation of the project will produce evidence to close knowledge gaps in the sector that were identified in the project document and/or in the evaluation plan	

Note: (\*) Indicates contribution to the corresponding CRF's Country Development Results Indicator.

The Project is Evaluable

The objective of this second and last of a Programmatic series of two consecutive operations to support policy reforms, is to contribute to increasing the coverage and improve the management of potable water and sanitation, and improving Water Resources management in Bolivia, through the development of an institutional and policy framework that includes policy actions directed at: (i) strengthening sector planning; (ii) strengthening the organizational and institutional development of sector entities; (iii) supporting the effective implementation of financial policies; and (iv) developing monitoring and evaluation instruments. The disbursement for the second PBP operation of this program is subject to policy reforms and institutional changes agreed with the Bank, in accordance to the targets set out in the policy matrix.

The main problems and the magnitudes of the gaps being addressed are identified and the proposed solutions are formulated in acordance with this diagnosis. The Results Matrix has vertical logic.

A cost-benefit analysis is presented for both the water and sanitation and irrigation sectors. The evaluation plan will include an ex post cost-benefit analysis.

# POLICY AND REFORMS MATRIX

<b>-</b>		Program cor		
Policy reform and objective	Reform outputs	First operation	Second operation	Long-term goals
1. COMPONENT: MACROECONOMIC STABIL	ІТҮ			
This component shows no reforms as the program supports only sector reforms	This component shows no reform outputs as the program supports only sector reforms	To help maintain a macroeconomic context consistent with the program's objectives	To help maintain a macroeconomic context consistent with the program's objectives	The reforms are developed within the framework of a stable macroeconomic climate.
2. COMPONENT: SECTOR PLANNING				
2.1 Water and sanitation investment planning. To help improve water and sanitation investment planning at the national, departmental, and municipal levels, and establish policy guidelines to ensure sustainability.	A Water and Sanitation Sector Development Plan that sets coverage targets for the different population segments, identifies investment programs, and quantifies the overall investment required to achieve these targets is monitored.	2.1.1 The Basic Sanitation Sector Development Plan (PSDSB) 2011-2015 is approved by the Ministry of Environment and Water (MMAyA).	2.1.1.1. 2016-2020 PSDSB, approved.	National investments are planned, budgeted, and executed in accordance with the guidelines established in the plan.
	Departmental PSDSBs that set coverage targets for the different population segments, investment programs, and quantify the overall investment needed to implement the plans are approved.	2.1.2 Guidelines for preparing the departmental PSDSBs are approved.	2.1.1.2. Two departmental PSDSBs are approved by the respective departmental authorities.	Departmental investments are planned, budgeted, and executed in accordance with the guidelines established in the plans.
	The methodology and scope to develop master plans based on technical, environmental, socioeconomic, financial, and institutional criteria are approved and being implemented.	2.1.3 Guidelines for developing the water and sanitation master plans for small and mid-sized cities are approved.	2.1.3.1 The water and sanitation master plans are approved by the MMAyA.	The infrastructure projects are designed and built in accordance with master plan specifications.
2.2 Establishment of policy and program guidelines to help increase coverage – "programmatic approaches." To help produce development programs for each population segment to reduce coverage deficits and improve service delivery.	The programmatic approach, with the methodology and scope to prepare investment programs to expand and improve service delivery to periurban, small town, and rural population segments is in effect.	2.2.1 A sector-wide approach for water and sanitation for rural communities with fewer than 2,000 inhabitants and periurban communities with more than 10,000 inhabitants has been developed.	2.2.1.1. A sector-wide approach for water and sanitation for rural communities with fewer than 2,000 inhabitants, and in areas with between 2,000 and 10,000 inhabitants, approved by the MMAyA.	The investment programs to increase coverage and improve service delivery are structured and executed in accordance with programmatic approach specifications.

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Delies actions and all is the		Program cor		
Policy reform and objective	Reform outputs	First operation	Second operation	Long-term goals
2.3 Inspection and regulation planning. To contribute to the proper planning of service oversight and regulation activities to ensure they are effective.	An operating and financial plan specifying oversight and regulation activities is approved.	2.3.1 Guidelines for defining the scope of oversight and regulation functions are approved by the Water and Basic Sanitation Social Oversight and Control Authority (AAPS).	2.3.1.1 An oversight and regulation operating plan for each population segment is approved by the AAPS.	The oversight and regulation of water and sanitation services is performed by population segment.
2.4 Risk management planning. To contribute to the development and implementation of an institutional culture in the water resources sector based on risk management.	The methodology and scope to prepare investment plans and programs incorporating risk management is approved.	2.4.1 An intervention strategy for managing risks associated with water resource projects is approved by the MMAyA.	2.4.1.1 Incorporation of the risk management strategy and measures for adapting to climate change in plans, programs, and technical standards of the VRHR is approved by the MMAyA.	Risk management is fully integrated into the structure and execution of investment programs in the water resources and irrigation sector.
	The institutional system tasked with overseeing the effective incorporation of the risk management policy in the water resources and irrigation sector is in operation.	2.4.2 A proposal for the creation of a Risk Management Unit in the Office of the Deputy Minister for Water Resources and Irrigation (VRHR) is formulated.	2.4.2.1 The Risk Management Functional Area of the VRHR has an operating budget and is in operation.	Investment programs in the water resources and irrigation sector are planned and executed in compliance with the risk management policy under the supervision of the Risk Management Unit.
3. COMPONENT: ORGANIZATIONAL DEVEL	OPMENT			
3.1 Adaptation of the sector structure. To help strengthen the organization and management capacities of sector entities responsible for policy-making, capacity-building, project execution, oversight, and regulation to ensure	Organizational development and/or institutional strengthening plans have been implemented that include: (i) the creation of an organizational structure, professional profiles, and an organizational chart; (ii) manuals for functions and procedures, and organization systems and	3.1.1 A proposal to strengthen the organizational structure of the Office of the Deputy Minister for Water and Basic Sanitation (VAPSB) is formulated.	3.1.1.1 Organizational development and institutional strengthening plan of the VAPSB, VRHR and VMA (Office of the Deputy Minister of the	Sector entities have an organizational structure commensurate with sector development demands and sufficient skilled manpower, information and organization
they adequately meet sector demands.	and procedures, and organization systems and methods; and (iii) implementation schedule and budget.	3.1.2 Proposal for strengthening and organizational development of the VRHR is formulated.	– Environment) are approved by the MMAyA.	systems and methods to discharge their duties effectively.

3.1.3 An interagency agreement to implement the second phase of the

3.1.3.1 EMAGUA Institutional Strengthening Strategy approved by

		Program cor	nmitments	
Policy reform and objective	Reform outputs	First operation	Second operation	Long-term goals
		comprehensive program to strengthen the Environment and Water Executing Agency (EMAGUA) is signed by the MMAyA and EMAGUA.	EMAGUA and has an implementation budget.	
		3.1.4 An interagency agreement to implement institutional strengthening of the AAPS is signed by the MMAyA and the AAPS.	3.1.4.1 The AAPS Institutional Strengthening Plan has an implementation budget.	
		3.1.5 An interagency agreement for the institutional strengthening of the National Service for the Sustainability of Basic Sanitation Services (SENASBA) is signed by the MMAyA and SENASBA.	3.1.5.1 The SENASBA Institutional Strengthening Plan has an implementation budget.	
	Implementation of a capacity-building plan for the Water, Basic Sanitation, and Housing Units (UNASBVIs) including: (i) methodology to assess existing capacities; (ii) identification of constraints; (iii) training courses; and (iv) implementation schedule and budget.	3.1.6 A proposal to strengthen the UNASBVIs to assume the functions of receiving and evaluating projects is formulated.	3.1.6.1 Capacity-building plan for the UNASBVIs so they can receive and evaluate water and sanitation projects, with an implementation budget in two departments.	The strengthened UNASBVIs (equipped and trained) receive and evaluate water and sanitation projects in accordance with sector policies.
	Decentralization of the following functions: (i) review and evaluation of departmental irrigation projects; (ii) processes to register and grant irrigation water use rights; and (iii) irrigation training and technical assistance.	3.1.7 At least five Departmental Irrigation Services (SEDERIs) are in operation.	3.1.7.1 SEDERIs with an operating budget established in seven of the country's departments where there are organizations of irrigators.	All projects are reviewed, evaluated, and assisted at the departmental level by the SEDERIS.
	The countrywide dam monitoring and control system is in operation.	3.1.8 A proposal to create a Dam Monitoring Unit under the VRHR is formulated.	3.1.8.1 Creation and implementation of a National Dams Registry.	Dams throughout the country are supervised by a monitoring and control system.
3.2 Management of the entities responsible for providing water and	Guidelines are prepared to develop institutional strengthening plans for the entities responsible	N/A	3.2.1 Guides to prepare institutional strengthening	The EPSAs are strengthened through the implementation of

Annex II Page 4 of 6

		Program cor		
Policy reform and objective	Reform outputs	First operation	Second operation	Long-term goals
sanitation services. To help develop capacity-building programs to improve service management, operation, and administration.	for the operation and maintenance of the urban and periurban water and sanitation infrastructure to meet their planning, technical, environmental, economic and financial capacity- building needs.		programs for the EPSAs are approved by SENASBA.	capacity-building plans prepared based on the guides.
3.3 Community development. To help formulate community development programs at successive project cycle stages, so as to maximize the benefits of the newly constructed infrastructure.	Guidelines are prepared to activate community development at each step of the project cycle (before, during, and after execution of the investment projects), differentiated by population segment.	3.3.1 Guidelines to institutionalize participatory social management mechanisms in the EPSAs are approved.	3.3.1.1 The guidelines for EPSAs to institutionalize community development are approved by SENASBA.	The EPSAs achieve greater sustainability levels for the newly constructed infrastructure, and communities make good use of the services.
		N/A	3.3.2.1 Community development social regulations differentiating population segments for pre-investment and investment are updated and approved by the MMAyA.	Infrastructure investments are designed and constructed taking community needs into account.
3.4 Development of sector capacities. To contribute to strengthening sector capacities to enhance service delivery efficiency.	Technical training institutes are created and have training programs designed to meet the sector's training demand.	3.4.1 Sector training strategy known as the Plurinational Water Institute is approved by the SENASBA.	3.4.1.1 The Plurinational Water Institute has an operating budget.	Service provider staff are trained in areas that will help improve service delivery.
		3.4.2 The National Irrigation Institute is created by the SENARI.	3.4.2.1 The National Irrigation Institute has an operating budget.	Technical staff and producers who are members of irrigation organizations are trained in techniques to manage irrigation systems and the use of water for agricultural production.

#### Annex II Page 5 of 6

Deliau reform and chiesting		Program cor				
Policy reform and objective	Reform outputs	First operation	Second operation	Long-term goals		
4. COMPONENT: FINANCIAL POLICY						
4.1 Prioritization of investments. To help improve the public investment resource allocation system.	Criteria for the prioritization and allocation of resources to enforce the Investment Mechanism for Water and Sanitation Sector Coverage (MICSA) and the Basic Sanitation Investment Area Identifier are being applied.	4.1.1 A proposal to update the prioritization and resource allocation mechanisms in the MICSA framework is formulated by the MMAyA.	4.1.1.1 The resource prioritization and allocation mechanisms are updated and approved by the MMAyA.	Public investment resources are allocated efficiently.		
4.2 Investment cofinancing To help increase sector investments.	Departmental cofinancing criteria are established that take into account, <i>inter alia</i> : poverty level of the beneficiary population, financial solvency of local governments, and existing coverage deficits.	4.2.1 A proposal to update the subnational government coparticipation structure in the MICSA framework is formulated by the MMAyA.	4.2.1.1 The MMAyA implements the structure for local government coparticipation in sector financing.	Water and sanitation investments are cofinanced by local governments.		
4.3 Cost recovery. To contribute to the financial sustainability of the EPSAs so they are able to cover their operating and maintenance costs, thus ensuring service sustainability.	A rate policy is approved to enable the EPSAs to generate sufficient resources internally to cover their operating and maintenance costs.	4.3.1 Guidelines for updating the rate model and an implementation proposal to ensure the financial sustainability of services with a social focus are approved by the AAPS.	4.3.1.1 A rate policy with a social focus to ensure the long-term financial sustainability of EPSAs is approved by the AAPS and the MMAyA, for implementation.	The EPSAs have sufficient financial resources to guarantee their financial sustainability, combining rates with a social focus and transfers.		

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Policy reform and objective	Reform outputs	Program commitments		
		First operation	Second operation	Long-term goals
5. COMPONENT: MONITORING AND EVALUATION				
5.1 Performance evaluation. To contribute to the creation of a performance evaluation framework to monitor achievement of targets.	A performance evaluation framework with periodic output and management targets and indicators for the different intervention segments is approved.	5.1.1 A proposal for a performance evaluation framework for water and sanitation is formulated by the MMAyA.	5.1.1.1 The performance evaluation framework for water and sanitation is approved by the MMAyA.	Sector performance is evaluated based on the performance evaluation framework.
		5.1.2 The performance evaluation framework for the National Watersheds Plan is in operation.	5.1.2.1 The performance evaluation framework for the National Watersheds Plan is updated for the 2013-2017 period.	
5.2 Sector information. To contribute to the development of sector information systems to obtain timely and reliable data.	The Irrigation Information System is implemented.	5.2.2 Guidelines for designing the National Irrigation Information System are approved.	5.2.2.1 The National Irrigation Information System is implemented and in operation.	The VRHR monitors sector performance based on the National Irrigation Information System.
	An integrated regulatory information system to monitor EPSA performance is implemented.	5.2.3 Guidelines for implementing the Integrated Regulatory Information System for Water and Basic Sanitation (SIIRAyS) are approved by the AAPS.	5.2.3.1 The SIIRAyS is being implemented.	The AAPS monitors EPSA performance based on the data they provide.
	The water and sanitation sector information system is in operation.	N/A	5.2.4.1. The water and environment information system is created, operating in the lead agency and being harmonized with the sector institutions' information systems.	The sector has reliable and timely data.

# DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

# RESOLUTION DE-\_\_/16

# Bolivia. Loan \_\_\_\_/BL-BO to the Plurinational State of Bolivia. Reform Program for the Water and Sanitation and Water Resources Sectors in Bolivia. Second Operation

The Board of Executive Directors

**RESOLVES**:

That the President of the Bank, or such representative as he shall designate, is authorized, in the name and on behalf of the Bank, to enter into such contract or contracts as may be necessary with the Plurinational State of Bolivia, as Borrower, for the purpose of granting it a financing to cooperate in the execution of a reform program for the water and sanitation and water resources sectors in Bolivia, second operation. Such financing will be for the amount of up to US\$76.500.000 from the resources of the Single Currency Facility of the Bank's Ordinary Capital, corresponds to a parallel loan within the framework of the multilateral debt relief and concessional finance reform of the Bank, and will be subject to the Financial Terms and Conditions and the Special Contractual Conditions of the Project Summary of the Loan Proposal.

(Adopted on \_\_\_\_\_ 2016)

BO-L1100 LEG/SGO/CAN/IDBDOCS#-40167166-16

# DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

# RESOLUTION DE-\_\_/16

# Bolivia. Loan \_\_\_\_/BL-BO to the Plurinational State of Bolivia. Reform Program for the Water and Sanitation and Water Resources Sectors in Bolivia. Second Operation

## The Board of Executive Directors

### **RESOLVES**:

That the President of the Bank, or such representative as he shall designate, is authorized, in the name and on behalf of the Bank, to enter into such contract or contracts as may be necessary with the Plurinational State of Bolivia, as Borrower, for the purpose of granting it a financing to cooperate in the execution of a reform program for the water and sanitation and water resources sectors in Bolivia, second operation. Such financing will be for the amount of up to US\$13.500.000 from the resources of the Bank's Fund for Special Operations, corresponds to a parallel loan within the framework of the multilateral debt relief and concessional finance reform of the Bank, and will be subject to the Financial Terms and Conditions and the Special Contractual Conditions of the Project Summary of the Loan Proposal.

(Adopted on \_\_\_\_\_ 2016)

BO-L1100 LEG/SGO/CAN/IDBDOCS#-40166864-16