DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

COLOMBIA

RURAL AREA WATER SUPPLY AND WASTEWATER MANAGEMENT PROGRAM

(CO-L1105)

LOAN PROPOSAL

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ELECTRONIC LINKS

REQUIRED

1. Annual work plan http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=36511998

2. Monitoring and evaluation arrangements http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=36511790

3. Procurement Plan http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=36512009

4. Environmental and Social Management Report http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=36512026

OPTIONAL

1. Technical analysis http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=36483448

2. Socioeconomic analysis http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=36511928

3. Operations Manual (draft) http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=36511954

4. Community development and institutional strengthening http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=36511913

5. Institutional analysis http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=36511936

ABBREVIATIONS

AWP Annual work plan

CPMU Comprehensive Project Management Unit
DANE National Administrative Department of Statistics

DNP Departamento Nacional de Planeación [National Planning Department]

ESMP Environmental and social management plan
ESMR Environmental and Social Management Report

FONADE Fondo Financiero de Proyectos de Desarrollo [National Fund for

Development Projects]

MAVDT Ministry of Environment, Housing, and Territorial Development

MVCT Ministry of Housing, City, and Territory

NDP National Development Plan
PIT Program implementation team

UBN Unmet basic needs

VASB Vice Ministry of Water and Basic Sanitation

PROJECT SUMMARY

COLOMBIA RURAL AREA WATER SUPPLY AND WASTEWATER MANAGEMENT PROGRAM (CO-L1105)

Financial Terms and Conditions								
		Flexible Finan	icing Facility*					
Borrower: Republic of Colombia		Amortization period:	Single payment on 15 August 2026					
		Weighted average life:	14.09 years ¹					
Executing agency: Ministry of Housin	ng, City, and Territory	Disbursement period:	5 years					
		Grace period:	Single payment on 15 August 2026					
Source	Amount	Inspection and supervision fee:	**					
IDB (Ordinary Capital)	US\$60 million	Interest rate:	LIBOR-based					
Other/Cofinancing	0	Credit fee:	**					
Local counterpart	0	Approval currency:	U.S. dollars from the Ordinary					
Total	US\$60 million		Capital resources					
Project at a Glance								

Project objective/description:

The program objective is to help increase the coverage of efficient and sustainable water supply and wastewater management services in rural communities (paragraph 2.1).

Special clauses:

Special contractual conditions precedent to the first disbursement of loan proceeds: (i) creation of a Program Implementation Team and appointment of a program coordinator and the minimum staff needed for execution (paragraph 4.4); (ii) the executing agency will contract the services of the Comprehensive Project Management Unit to carry out the activities that the executing agency is responsible for under the program, in accordance with terms of reference previously approved by the Bank (paragraph 4.2); and (iii) approval and entry into force of the program's Operations Manual, including an Environmental and Social Management Plan (ESMP) prepared in accordance with terms previously agreed with the Bank (paragraph 4.7).

Special execution condition: The executing agency agrees to enter into operation and maintenance agreements with the beneficiaries upon completion of the financing of the water and sanitation systems (paragraph 3.2).

Exceptions to Bank policies: None					
Project qualifies as:	SEQ [X]	PTI [X]	Sector []	Geographic [X]	Headcount []

^{*} Under the terms of the Flexible Financing Facility (document FN-655-1), the borrower has the option of requesting changes to the amortization schedule as well as currency and interest rate conversions. When weighing such requests, the Bank will take operational and risk management considerations into account.

The credit fee and 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 the applicable provisions of the Bank's policy on lending rate methodology for Ordinary Capital loans. In no case will the credit fee exceed 0.75% or the inspection and supervision fee exceed, in a given six-month period, the amount that would result from applying 1% to the loan amount divided by the number of six-month periods included in the original disbursement period.

Maximum weighted average life, which could be lower, depending on the date the loan contract is signed.

I. BACKGROUND AND PROGRAM DESCRIPTION

A. The water and basic sanitation sector in Colombia

- 1.1 **Institutional framework.** The responsibility to ensure delivery of water and sanitation services, including in rural areas, falls on the municipios either directly or through corporate service providers. In rural communities, these services are typically provided by community-based organizations. The departments and the national government have technical, administrative, and financial support roles. The departments play a leading role in promoting regional service delivery arrangements by providing technical, institutional, and financial support to the municipios. The Fondo Financiero de Proyectos de Desarrollo [National Fund for Development Projects] (FONADE) provides financing and technical assistance to sector-specific projects and carries out project formulation, execution, evaluation, and management activities, including for projects financed through multilateral bank loans.
- 1.2 At the national level, policy and technical regulations for the sector are determined by the Ministry of Housing, City, and Territory (MVCT),³ with support from the National Planning Department (DNP), in its capacity as coordinator of public investment by the government. Regulation of services, in terms of rates, quality, and efficiency of service providers, is left to the Water and Basic Sanitation Regulatory Commission, while responsibility for control and oversight of providers rests with the Office of the Superintendent of Residential Public Utilities, which has sanction-wielding authority. The Ministry of Social Protection is responsible for setting water quality standards for human consumption.
- 1.3 Regarding the environment, at the departmental level and under the national rules of the MVCT, the regional autonomous corporations apply environmental policy and issue use and discharge permits for the basins under their jurisdiction.
- 1.4 **Status of water and sanitation services.** As of 2008, 91.2% of the population had access to improved water supply sources and 86.2% had access to adequate sanitation solutions, indicating that 3.9 million inhabitants still required water connection services and 5.9 million still required sewer services. In urban areas,

Law 1176 of 2007 and Decree 028 of 2008, which, in line with the strategy of the Departmental Water Plans (PDA), not only allocates resources to the municipios but sets aside a percentage of the General Participation System (SGP) for the departments.

Pursuant to Law 144 of 2011, the Ministry of Environment, Housing, and Territorial Development (MAVDT) was split in two: the Ministry of Environment and Sustainable Development and the Ministry of Housing, City, and Territory (MVCT). Regarding water and sanitation services, MVCT responsibilities include the following, to be carried out through the Vice Ministry of Water and Basic Sanitation: (i) designing and promoting special water and basic sanitation programs for the rural sector in coordination with the relevant national and local entities; and (ii) determining viability and eligibility criteria for water, sanitation, and solid waste projects and making them viable (Decree 3571 of 2011).

- coverage is estimated at 97.2% for water supply and 91.6% for sewer, compared to 72.6% and 69.3%, respectively, in rural areas.⁴
- 1.5 According to the Rural Health Inventory compiled between 2001 and 2002,⁵ 56% of the rural population had access to some form of water supply, although only 12% had treated water. Regarding sanitation services, 34% of rural inhabitants had some form of wastewater discharge system, 29% had individual onsite solutions such as latrines and septic tanks, and 5% used conventional sewers, while the remaining 66% had no system of any type.
- 1.6 In terms of business structure, rural areas are highly fragmented, with more than 11,500 service providers, which limits their capacity to cover operating costs⁶ and complicates regulatory and control efforts. In addition, the sector faces the following challenges: (i) few lawfully organized providers engaged in providing rural water and sanitation services; (ii) limited support, technical assistance, and training from municipios, departments, and the national government; (iii) highly dispersed and fragmented providers; and (iv) design and construction of water supply and sanitation solutions that are not sustainable and fail to consider the population's social, cultural, and environmental characteristics.
- 1.7 Given the foregoing, the sector's targets in rural areas are to narrow the existing gap with respect to urban areas, by implementing strategies that ensure the sustainability of investments, while optimizing financing mechanisms and institutional arrangements, taking investment impact and efficiency criteria into account, and fostering differentiated solutions that reflect the characteristics of each area. This will allow water supply and sanitation services to be provided on a sustainable long-term basis while promoting the community's management capacity to provide these services.⁷
- 1.8 **Colombian government programs.** The sector policy for the period 2010-2014 is set forth in the National Development Plan (NDP) "Prosperity for all," which seeks not only to consolidate advances in urban areas, but to reduce gaps in the coverage

⁴ National Administrative Department of Statistics (DANE), 2008. Major Comprehensive Household Survey (GEIH), 2008. Rural coverage includes individual water supply and wastewater management solutions.

⁵ MAVDT, 2004. Water supply and basic sanitation public policy for rural areas in Colombia.

According to the 2006 -2009 Water and Sewer Sector Report, providers serving fewer than 2,500 users have the lowest rates in the country and fail to properly calculate costs, which they are thus unable to recover.

Various studies highlight the need to emphasize sustainability mechanisms, including: IRC, 2009, Climbing the water ladder; IRC, 2004, Scaling up Community Management of Water Supply; World Bank, 2000, Rural Water Projects – Lessons from OECD Evaluations. Those focusing on the Colombian case include: Carrasco and Bernal, 2011, Apoyo al Gobierno Nacional en la definición de lineamientos de política para agua y saneamiento rural [Support for the national government in setting rural water and sanitation policy guidelines], and SSPD, 2010, Estado del Arte: prestación de los servicios de acueducto y alcantarillado en áreas rurales [State of the Art: Delivery of water and sanitation services in rural areas].

and quality of services in rural Colombia, emphasizing areas of greater poverty and unmet basic needs (UBN). In addition, the NDP contains strategic guidelines for: (i) improving the efficiency of service providers; (ii) developing a national policy for risk management and climate change impact on urban drainage; (iii) increasing levels of wastewater treatment; and (iv) reviewing and, if necessary, adjusting the sector's institutional, regulatory, and legislative framework.

B. Bank strategy

- 1.9 The country strategy with Colombia (document GN-2648-1) identifies water and basic sanitation as a priority sector, while effective access to these services helps attain the Millennium Development Goals and, in line with the NDP, contributes to the targets associated with an increase in the number of rural households with access to such services. In addition, the program will help attain the targets of the "3,000 rural communities" component of the Bank's Water and Sanitation Initiative (document GN-2446-3). Furthermore, the program is consistent with the lending program priorities of the Ninth General Capital Increase (Poverty Reduction and Equity Enhancement), since it improves quality of life in the beneficiary communities by increasing the coverage and quality of these services.
- 1.10 **Bank policies in the sector.** The operation fosters access to water and sanitation services by the rural population, promotes the financial sustainability and administrative and operational efficiency of the community-based organizations responsible for managing the systems, enhances quality of service, and promotes a comprehensive analysis of interventions for the purpose of preventing and/or minimizing environmental problems. It also promotes actions that will contribute to the sector's development, such as the formulation of appropriate social assistance strategies and active civil society participation. Thus, the operation is consistent with the objectives set forth in the Bank's Public Utilities Policy (Operational Policy OP-708) and Basic Environmental Sanitation Policy (Operational Policy OP-745).

C. Program design

1.11 The program seeks to narrow water supply and wastewater management coverage gaps in rural areas, ¹⁰ prioritizing communities in municipios with high levels of

MVCT estimates show that the coverage targets in rural areas in the period 2011-2014 will require investments of US\$180 million. This amount is covered in part by this loan and with cooperation funding from the Government of Spain in the amount of US\$20 million, to be executed in rural areas over the next five years.

This component is designed to address the needs of rural communities through technical assistance and investment, relying on community-based organizations capable of making their own technical and financial decisions, which the component seeks to encourage via strengthening and empowerment actions.

¹⁰ This document adopts the definition of rural stratification according to the DNP and DANE, which describes rural areas as the space between the boundary of the municipal seat of government or urban perimeter and the municipal boundary.

- poverty and unmet basic needs.¹¹ The program has been designed as a bid program, in which eligible municipios will propose projects to be executed under their jurisdiction.
- 1.12 This operation will finance the execution of projects in communities that are willing to institute appropriate management, operation, and maintenance arrangements designed to make their water and sanitation systems technically and financially sustainable. The public-sector contributions will serve as an incentive for communities to adopt community-based business structures when advisable and commit to rate schedules that promote the medium- and long-term sustainability of the services. In addition, the operation will seek to leverage resources from the territorial government authorities and, whenever possible, from the communities and other donors. The program will be executed in close coordination with the Ministry of Agriculture and Rural Development with respect to rural housing policy, and with other areas of the MVCT with respect to Comprehensive Water Resource and Climate Change Management policies.
- 1.13 The rules of access will be set forth in the Operations Manual (paragraph 4.7), which will govern all aspects of the program, from the program's promotion in potential beneficiary communities to the consensus-based selection and subsequent implementation of a technological alternative and management method for the systems. This operation is aimed at reducing poverty through geographic targeting. The program beneficiaries will be poor rural communities needing financing for new water supply and wastewater management projects or for rehabilitation and expansion of existing systems. To support the communities with the greatest shortfalls and the lowest management capacity, the program will finance the preparation of projects ensuring community participation in the project cycle and promoting community-based arrangements for management, operation, and maintenance of the systems.
- 1.14 A Comprehensive Project Management Unit (CPMU) will support the projects' execution and will manage the program throughout the project cycle, from the promotion and prefeasibility studies phase to the implementation and post-construction support phases.

II. OBJECTIVE, COMPONENTS, COST, AND EXPECTED OUTCOMES

2.1 **Objective.** The general objective of the program is to increase the coverage of water supply and wastewater management in rural communities based on operational and financial sustainability criteria. The focus will be on encouraging and consolidating arrangements for community management of the systems, based on operational and financial sustainability criteria, including examining post-

Based on a sample of 100 rural communities, it was found that those located in municipios with unmet basic needs (UBN) exceeding 50% had water and sanitation coverage of 54.46% and 20.59%, respectively, while those located in municipios with UBN below 50% had 88.45% and 49.17% coverage, respectively.

construction support arrangements for the community enterprises created to manage and operate the services. In addition, in order to ensure effective household connection to the services, the program will finance the implementation of in-home water and sewer connections.

- 2.2 Component 1. Community development and institutional strengthening of service providers. The objective of this component is to involve the community in the formulation, execution, operation, and maintenance of the constructed systems. Financing will be provided through this component for: (i) community development activities, including training workshops that will foster community engagement and participation from project formulation through operation and maintenance; and (ii) creation or strengthening of community-based organizations for the delivery of water and/or wastewater management services in rural areas, to ensure the sustainability of the systems' operation and management.
- 2.3 This component will finance: education and training actions in the legal, technical, accounting, administrative, and financial areas, and community training and awareness activities on health, hygiene, rational water use, gender equity, and water source protection. All actions carried out in the community will be required to promote the active participation of women. This component, which will be executed in close coordination with the infrastructure component (paragraph 2.4), may finance the procurement of works, goods, and services for the following activities: (i) establishing and/or strengthening community-based organizational structures to manage and operate the systems; (ii) training in operation, maintenance, and administrative and financial management; (iii) health and environmental education; and (iv) guides, manuals, and teaching materials. These actions will be tailored to the needs, abilities, and peculiarities of each beneficiary community.
- 2.4 **Component 2. Infrastructure.** The objective of this component is to structure and execute pilot projects for the construction, expansion, and rehabilitation of water supply and wastewater management systems in rural communities, increasing their access and quality. Financing will be provided through this component for: (i) preparation of comprehensive projects, including a full diagnostic assessment in keeping with local conditions and a prefeasibility study and analysis of alternatives. which will conclude with the agreement by the community and the municipal authorities on the selection of the solution to be implemented, considering technologies that are consistent with the community's socioeconomic characteristics, interests, and capacities. For the agreed upon solution, studies and final designs will be put forward for construction. The selection of the municipios for intervention will be undertaken in accordance with the prioritization model mentioned in document 3715 of 2012 of the National Council on Economic and Social Policy (CONPES); (ii) construction, expansion, and/or rehabilitation of water supply and wastewater management systems in rural areas according to the prioritization model, as well as the basic health units, including, as applicable, the

- purchase of property; and (iii) inspection and/or supervision of diagnostic assessments, studies, designs, and execution in works and other program activities.
- 2.5 Component 3. Technical assistance and post-construction support models in rural areas. This component seeks to foster and consolidate post-construction support arrangements for the community enterprises to be created to manage and operate the services. It will finance: (i) legal, financial, and institutional design diagnostic assessments and studies required to identify, promote, and implement partnering arrangements for the delivery of water and wastewater management services in rural areas in line with their local social, economic, cultural, and institutional characteristics; (ii) actions to establish and/or administratively, financially, and technically consolidate associations of community-based organizations to support the management and operation of the community systems; and (iii) support for the community-based organizations after the delivery of the systems, for proper performance of operation, maintenance, and business management activities.
- 2.6 **Component 4. Management, monitoring, and evaluations.** This component will finance the general operating costs of the MVCT for program execution, monitoring, and evaluation. It considers the formation of a Program Implementation Team (PIT) inside this ministry, which will be responsible coordinating the various stakeholders involved in the program, monitoring execution of the categories of investment and of the components of each of the projects, and verifying fulfillment of the proposed objectives in accordance with the planned activities and the execution plan. It will also include the costs of inspecting the projects, costs of the CPMU, and contingencies.
- 2.7 **Program cost and financing.** The total program amount is estimated at up to US\$60 million from the Bank's Ordinary Capital resources under the Flexible Financing Facility. This operation will be executed as a multiple works program, financing a series of physically similar but independent projects. Table II-1 shows the estimated distribution of costs (figures in US\$ thousands), including those associated with monitoring and evaluation. There is no local contribution under this program.

Table II-1 (US\$ thousands)

Table 11-1 (OS\$ thousands)								
CATEGORY/COMPONENT	Total	%						
Management and supervision	6,881	11.47%						
1.1 Program management	3,474	5.79%						
1.2 Inspection and supervision of works	3,408	5.68%						
2. Infrastructure	49,558	82.60%						
2.1 Rural water and sanitation	48,678	81.13%						
2.2 Rural schools	880	1.47%						
3. Community development and institutional strengthening of service	1,000	1.67%						
providers								
4. Sustainable service delivery arrangements	1,000	1.67%						
5. Audit and monitoring	600	1.00%						
6. Unallocated costs and contingencies	962	1.60%						
TOTAL	60,000	100.00%						

2.8 **Expected outcomes.** The indicators and outcomes for the various components are listed in Annex II (Results Matrix). The most significant indicators and their expected values are as follows:

Table II-2

Indicator	Target value
Beneficiary rural households with access to a water supply system	8,500
Beneficiary rural households with access to a wastewater management system	10,200
Systems designed, implemented, operated, and maintained according to technical, environmental, and social specifications	41
Community-based organizations created and/or strengthened	41

III. FINANCING STRUCTURE AND RISKS

A. Financing structure

- 3.1 **Financing conditions.** The Bank's loan will have an amortization period through 15 August 2026. The loan's original weighted average life is 14.09 years. The original disbursement period is five years from the effective date of the loan contract, and the grace period will extend until the date of the single payment on 15 August 2026. The deadline for substantial commencement of work is four years.
- 3.2 Conditions precedent to the first disbursement of loan proceeds. (i) Creation of the PIT with institutional, administrative, and financial capacity, and appointment of a program coordinator and the minimum staff needed for execution; (ii) the executing agency will contract the services of the CPMU to carry out the activities the executing agency is responsible for under the program, in accordance with terms of reference previously approved by the Bank; and (iii) approval and entry into force of the program's Operations Manual, including an ESMP prepared in accordance with terms previously agreed upon with the Bank. As a special execution condition, the executing agency agrees to enter into a transfer of assets, operation, and maintenance agreement with the respective beneficiary municipio or community upon completion of the financing of the water and sanitation systems.
- 3.3 **Disbursement schedule.** The tentative disbursement schedule is shown in Table III-1:

Table III-1 Tentative disbursement schedule (millions)

Amount	Year 1	Year 2	Year 3	Year 4	Year 5
Proceeds to be disbursed (Col\$)	44,000	46,994	33,049	15,887	8,321
Proceeds to be disbursed (US\$)	2.22	26.05	18.32	8.81	4.61
%	3.70%	43.41%	30.53%	14.68%	7.69%

3.4 **Disbursement of proceeds.** Loan proceeds will be disbursed on an advance of funds basis, in accordance with the Financial Management Policy for IDB-financed Projects (document OP-273-2) and the Operational Guidelines for Financial Management of IDB-financed Projects (document OP-274-2). The Bank will review the disbursements on an ex post basis.

B. Environmental and social safeguards

- 3.5 The program is expected to have a positive environmental and social impact in its area of influence by improving the environmental quality of the program's intervention areas. In accordance with the guidelines of the Environment and Safeguards Compliance Policy (Operational Policy OP-703), the proposed operation has been classified as category "B": it is only expected to create localized, short-term adverse environmental and social effects for which effective mitigation measures are available. These effects, associated with the construction works, include noise, dust, solid and liquid waste, traffic disruption, and risk of work accidents. The process of preparing the operation included an environmental and social analysis and an ESMP as required under Operational Policy OP-703 for category "B" operations.
- 3.6 The program's environmental and social analysis was performed on a sample of 13 projects selected on a preliminary basis by the MVCT from various municipios in Colombia as potential program beneficiaries (see Environmental and Social Management Report (ESMR)). This sample combines various technical, environmental, and social characteristics that may be found in the projects that are ultimately selected. The analysis was supplemented by an evaluation of a sample of six projects, made viable by the MVCT through the single-window mechanism, with a view to extracting lessons learned in the execution of these projects and including the lessons in the design and implementation of works under the program. These representative project samples were analyzed for major environmental and social impacts, the general conclusion being that such impacts are in fact consistent with projects classified as category "B" operations.
- 3.7 Since part of the program's beneficiary population consists of ethnic minorities in the form of indigenous and Afro-descendant communities, the projects will be viable once they are shown to comply with the Indigenous Peoples Policy (Operational Policy OP-765) and Colombian legislation on the subject (Law 21 of 1991 adopting ILO¹³ Convention 169).
- 3.8 Based on the technical studies and visits conducted to date, the works under the program are not expected to require the resettlement of inhabitants or economic

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² Projects with surface and groundwater catchments, projects with various catchment structures, treatment systems and distribution networks, projects in ethnic minority areas, projects located in different climate and topographical zones, projects located in areas vulnerable to floods.

¹³ International Labour Organization.

- activities. However, should this prove necessary, a resettlement plan will be prepared in accordance with the guidelines of Bank Operational Policy OP-710.
- 3.9 **Social viability.** The program's social viability was evaluated on the basis of the sample projects selected for the environmental and social analysis, which show an explicit and clear interest by the communities in satisfying their basic water supply and wastewater management needs. Nevertheless, each project's social viability will be evaluated during the project's diagnostic assessment and determination phase. To this end, the program will promote coordination between the projects' technical and social aspects to ensure that the technical solution addresses both the expectations of the communities and their capacity to manage, operate, and maintain the systems in a sustainable manner.
- 3.10 **Mitigation measures.** The relevant environmental management measures, which are well known and easily applied, are an integral part of the ESMP and are summarized in the ESMR. To mitigate temporary impacts during the construction phase and reduce the risks, the projects' budget will provide the funds required to implement the prevention and mitigation measures set forth in the design. Furthermore, the MVCT will provide an environmental specialist to supervise compliance with these measures.

C. Special and viability considerations

- 3.11 **Technical viability.** The dimensioning, cost, and engineering practices evaluation study was conducted on a sample of water supply and wastewater management projects consisting of new systems, expansions, and reconstructions in various municipios in Colombia that are currently in operation. The analysis shows that the proposed works are feasible. The projects are prepared in accordance with current national regulations, which are consistent with generally accepted engineering practices. The technical analysis (see link) shows the project sample used, including information on type of work, cost, population, etc. The operation provides for technical cooperation in the comprehensive design of a set of projects, thereby ensuring the availability of enough designs to cover the first year of program execution.
- 3.12 The program's projects will be determined on the basis of feasibility and design studies, taking a comprehensive view of the service cycle (guaranteeing that any water supply intervention ensures adequate wastewater management), in order to minimize any problems resulting from improper wastewater disposal or from the frequent lack of individual or collective wastewater collection, treatment, and disposal systems. The proposed solution will be discussed and agreed upon by the relevant community, thus subsequently facilitating its proper operation and subsequent sustainability. In addition, the program will endeavor to ensure effective household connection to water supply and wastewater management services by supporting the construction of the corresponding in-home connections when so required, and will ensure that schools and health centers in every beneficiary community are likewise connected to the services.

- **Institutional viability.** The MVCT¹⁴ is authorized to operate as an executing 3.13 agency, is duly independent within the scope of its purview, and has executive and technical staff trained for proper program management. However, the Ministry does not have the capacity to execute programs of the magnitude of the one proposed under this operation. Therefore, it plans to obtain support from FONADE to develop the CPMU. During program preparation, the institutional and fiduciary capacity of the MVCT and FONADE were assessed since they are the main stakeholders in the program's execution. The Institutional Capacity Assessment System (ICAS) yielded an overall score of 85.6% for the MVCT, concluding that its institutional capacity does not entail any risk for program execution from the procedural standpoint. For FONADE, the institutional capacity assessment yielded an overall score of 89.9%, showing that the institution meets the basic criteria and possesses sufficiently developed characteristics in the programming and organization (91.9%), activity execution (86.6%), and internal control capacity (93.2%) areas. The above makes it possible to classify the operation as low risk.
- 3.14 **Financial viability.** The financial viability of each project will be evaluated during the project's diagnostic assessment and determination phase, working with the community on a solution that is consistent with the community's ability to pay. The MVCT will ensure that the service rate covers at least the operating and maintenance costs of the systems and, if possible, depreciation of short-lived assets. The program will encourage creating emergency and maintenance funds to be managed by each community-based organization, when this arrangement is adopted for service management.
- 3.15 Works financed and built with program resources will be operated and maintained by the beneficiary rural communities, when this is the most efficient option. The executing agency will verify that the community-based organizations responsible for managing the systems generate sufficient revenues to support the technical staff and the means necessary for proper operation and maintenance.
- 3.16 **Economic viability.** The analysis was performed on a project sample evaluated and financed by the MVCT in previous years. The method used by the ministry consists in verifying whether the per-capita costs are lower than a cutoff value. The objective of the analysis was to confirm whether this method could be used in this new program.
- 3.17 The individual project analysis involved preparing: (i) an analysis of alternatives; and (ii) a cost-benefit analysis of the best alternative, comparing scenarios with and without the project, to obtain the series of net benefits. The costs considered in the assessment were investment, operating, and maintenance costs valued at efficiency

While the institutional capacity and project risk management assessment was applied under the structure of the former Ministry of Environment, Housing, and Territorial Development, the ministry's split and the resulting creation of the new MVCT do not affect the assessment's conclusions or score, as the authority and responsibilities regarding the water and sanitation subsector, as well as the internal procedures and control mechanisms, have been seamlessly inherited by the new Ministry.

prices. The benefits considered in the case of water supply projects were savings in resources (time saved in water haulage or economic value of purchase or transport in tanker trucks) and increase in consumption. For sanitation projects, the analysis assumed a willingness to pay equal to the cost of a septic tank's drainage structure, which is analogous to a least-cost analysis.

- 3.18 The analysis was performed on a sample of 27 projects valued at Col\$37.5 billion (US\$20.8 million), 20 of which were water supply projects and seven for wastewater management. Of this sample, 15 water projects and five wastewater management projects are viable. A sensitivity analysis was performed for each project's net present value and economic internal rate of return with respect to the assumed variables, which in this case were limited to the economic benefit. It was found that if the benefits were to fall by 10%, 14 of the projects would be viable, and if they were to fall by 20%, 12 of the projects would be viable. This shows that the results are not very sensitive to changes in the assumptions. In view of these results, it was decided to exhaustively analyze the sample of projects being prepared for execution in 2012. The results of this sample will yield the cutoff values to be used for assessing the program's remaining projects. The preliminary values obtained from the analyzed sample are: Col\$790,000 (US\$439) per inhabitant for water projects and Col\$740,000 (US\$411) for sewer projects. The results of the analysis and the details of the methodology employed are shown in the economic analysis (see link).
- 3.19 Community development and institutional strengthening. Support for the communities in the design, implementation, and post-construction phases¹⁵ will be deepened through a social assistance and community participation plan (see link) that will become an annex to the Operations Manual. Community development activities will be carried out by the MVCT directly or through third parties. As described in component 1, a series of activities aimed at creating capacities in participatory design, management, operation, and maintenance of the systems, as well as in health and environmental education and proper use of water and sanitation services, will be implemented as part of the projects. In addition, the projects will promote women's involvement in the participatory diagnostic assessments, water committees, and training events, as well as in the system management activities.
- 3.20 **Poverty-targeted investments/social equity projects.** This operation is consistent with the sector priorities of the Ninth General Capital Increase (Poverty Reduction and Equity Enhancement), and qualifies as a poverty-targeted investment project under a geographic criterion.
- 3.21 **Risks.** The main identified risks are: (i) execution: the project cycle needs to be properly managed in order to ensure timely fulfillment of the program targets. To

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Community development (training and education) and institutional strengthening activities will be carried out in parallel with the execution of the works. In addition, the program includes a post-construction support phase to consolidate local capacities.

mitigate this risk, the MVCT will hire a CPMU and will establish a PIT that will coordinate and comprehensively supervise the program, interacting with the CPMU and other participating institutions; and (ii) sustainability: potential program risks include improper maintenance of the constructed infrastructure resulting in poor infrastructure sustainability. To mitigate this risk, the plan is to carry out a specific program design to strengthen community operators, providing them with tools that will allow them to improve their operating and financial management capacity.

IV. IMPLEMENTATION AND MANAGEMENT PLAN

A. Execution arrangements

- 4.1 **Borrower, executing agency, and beneficiaries.** The borrower will be the Republic of Colombia. The executing agency will be the MVCT, with the support of the CPMU,¹⁶ and the beneficiaries will be the participating municipios. The MVCT will assume technical and fiduciary responsibility vis-à-vis the Bank and coordinate the program through its Vice Ministry of Water and Basic Sanitation (VASB), with support from the Advisory Planning Office for Work with Multilateral Banks and the Finance and Budget Office. It is worth noting that the VASB has a permanent team of professionals performing technical, economic, social, environmental, and financial evaluations of water and sanitation projects through the single window. The VASB will be responsible for program execution and for coordinating all technical and operating activities during program implementation and monitoring, including compliance with the Operations Manual.
- 4.2 Once the MVCT contracts the CPMU's services, it will transfer the program's resources to the CPMU. Once the eligibility of the program's beneficiary projects has been verified through the VASB single window, the CPMU will be responsible for planning the works, goods, and services procurement processes, including the relevant supervision activities, in accordance with the Bank's procurement policies. In addition, the CPMU will contract auditing services and consultants to conduct the program's evaluations. As a condition precedent to the first disbursement, the executing agency will contract the services of the Comprehensive Project Management Unit to carry out the activities that the executing agency is responsible for under the program, in accordance with terms of reference previously approved by the Bank.
- 4.3 **Financial and accounting management of the program.** The CPMU's responsibilities will include: (i) keeping specific accounting and budget accounts for purposes of managing the loan proceeds; (ii) having a detailed ancillary and financial accountability system for the management, accounting, and payment of works contracts and procurement of goods and consulting services; (iii) submitting

The initial plan is to contract FONADE as the CPMU. The contracting of the CPMU is essential, from both the viewpoint of the executing agency and in the technical opinion of the project team, to ensure proper execution of the proposed program, given the Ministry's limitations in terms of execution.

the program's consolidated financial reports in timely fashion and making any required accounting information available to the Bank and the independent auditors; (iv) keeping proper records of disbursement requests; (v) maintaining a proper filing system for documents that support eligible expenses for verification by the Bank and the independent auditors; (vi) preparing and submitting in timely fashion an account of the use of program resources and any other information needed by the MVCT for its reports to the Bank; and (vii) having supervision mechanisms in place, including on-site visits to the constructed works.

- 4.4 **PIT.** During the effective term of the program, the MVCT will, with the operation's resources, maintain a PIT, responsible for overall control and monitoring of the operation, and appoint a coordinator who will be responsible vis-à-vis the Bank, who will be supported by a technical team in charge of the project cycle, supervision of the works, and institutional and socioenvironmental issues. As part of the execution arrangements, the PIT will be supported by the operating areas in the VASB. **Prior to the first disbursement, the executing agency will appoint the required program coordinator and work team, with a description of their responsibilities and professional profiles.**
- 4.5 **Project cycle.** The project cycle will include four stages: (i) program dissemination, aimed at disseminating and communicating the program's objectives and scope to potential beneficiary municipios and communities; (ii) preinvestment, aimed at selecting the program's beneficiary communities and preparing the projects to be financed. During this stage: (a) socioeconomic surveys will be conducted to determine compliance with eligibility criteria; (b) the communities' eligibility will be reviewed; (c) the project scope will be agreed upon by signing a commitment letter; (d) the detailed designs for the projects will be prepared; and (e) the process of designing community-based organizations to operate and maintain the systems will be supported, when applicable. This stage will conclude with the presentation of the final designs to the community and community acceptance of the selected technological alternative and management structure; (iii) investment, aimed at system construction and community development. During this stage, the MVCT, through FONADE, will move forward with the bidding, procurement, and execution, and payment processes against certificates of progress, as well as contracting inspections and supervision of the work, and will monitor implementation of the community development component. Also during this stage, the MVCT, through the CPMU and the municipal authorities, will perform the final settlement and deliver the systems to the community, concluding with the signing of a transfer and operation agreement; and (iv) post-investment, aimed at ensuring system sustainability. During this stage, the MVCT, through FONADE and in coordination with the PIT, will monitor and technically support the communitybased organizations in the operation and management of the systems for a period of at least six months.
- 4.6 **Prioritization and eligibility criteria.** The preliminary criteria selected by the MVCT for identifying the departments and municipios to be targeted under the

program included: (i) rural population (2010); (ii) rural MPI¹⁷ (2005); (iii) National Plan for Territorial Consolidation (2011); (iv) effects of the 2011 winter flooding; (v) Familias Red Unidos [United Network of Families] in the rural area (2011); and (vi) municipios that are members of the Fronteras para la Prosperidad [Frontiers for Prosperity] plan (2011). These are weighed at 44%, 44%, 3%, 3%, 3%, and 3%, respectively. The eligibility criteria for project preparation include the beneficiary community's commitment to adopt a management structure that ensures the technical, operating, and financial sustainability of the systems, including collecting a rate that covers at least the operating and maintenance expenses.

4.7 **Operations Manual.** The Operations Manual will establish the eligibility criteria for beneficiary municipios and projects, as well as criteria for the allocation of nonreimbursable resources. In addition, it will list the responsibilities, rules, and procedures for: programming activities and preparing annual work plans; project review and approval; handling and filing support documentation for bidding processes; financial and accounting management; audits; and the) program monitoring and evaluation plan. The Operations Manual will include annexes containing the Bank's procurement policies and the ESMP, which has already been prepared and included in summary form in the ESMR, with a strategy designed to mitigate the potential adverse environmental and social impacts of the projects to be executed, as well as their monitoring. **The approval and entry into force of the program's Operating Manual, including the ESMP, in accordance with terms previously agreed upon with the Bank, will be a contractual condition precedent to the first disbursement.**

B. Procurement of works, goods, and services

4.8 **Procurement.** The processes of selection, bidding, and procurement of works, goods, and services will be carried out in accordance with the Bank's procurement policies, contained in documents GN-2349-9 and GN-2350-9. On an ex ante basis, the Bank will review the international competitive bidding processes for works, goods, and services and the selection of consulting firms involving amounts higher than US\$500,000. The MVCT will submit the proposed procurement plan for Bank review and approval in accordance with the Bank's procurement policies. This procurement plan must be updated at least every 12 months during program execution and every updated version be submitted to the Bank for review and no objection. The executing agency may contract the services of FONADE directly as CPMU to plan the selection and procurement processes for works, goods, and services, including the relevant supervision activities, in accordance with the Bank's procurement policies. The direct contracting of FONADE is warranted, pursuant to paragraph 3.10.b of document GN-2350-9, as it is the national government entity responsible for providing program management services to the various agencies of the State. FONADE knows and applies multilateral banking standards to selection and procurement processes, as well as preparation and

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¹⁷ Multidimensional poverty index.

- reporting. The result of its institutional capacity assessment as executing agency indicates its high level of competence for these activities.
- 4.9 **Procurement review.** Procurement under the program will be reviewed on an ex post basis, unless otherwise provided in the procurement plan. All procurement carried out will be included in the Bank-approved procurement plan and follow the methods and ranges established therein. The MVCT and the Bank will agree on a procurement plan for the first 18 months of execution.
- 4.10 **Contracting of studies and designs:** The preliminary diagnostic studies, analyses of alternatives, and final designs for each feasible project, as well as the oversight of each such activity, will be contracted with consultants or firms specializing in the relevant project type. The community and social support activities in the preinvestment stage will be included with the design activities to ensure that the technical, environmental, and social components are integrated from the outset.
- 4.11 **Execution of works.** Works will be procured with engineering firms specialized in the relevant project type. The community and social support activities will be included with the construction activities in order to ensure integrated solutions. Oversight of the work will be subcontracted to third parties. The program budget will include the necessary execution and supervision costs (paragraph 2.5).

C. Program monitoring and evaluation

- 4.12 **Monitoring and evaluation.** These activities will be performed using the Bank's supervision instruments, based on a program execution plan (link), a procurement plan, and a Results Matrix data collection plan prepared by the MVCT and approved by the IDB. The MVCT will be responsible for monitoring and evaluation of the projects, for which it may contract independent consulting services previously approved by the Bank. The costs of these activities are duly included in the program budget (paragraph 2.5).
- 4.13 The annual work plan (AWP) will be reviewed annually. For program monitoring purposes, the MVCT will submit semiannual reports indicating progress made, results obtained in the execution of activities, and an action plan for the following six-month period. Every year, the Bank and the MVCT will review the degree of fulfillment of program objectives, analyze problems arising during execution, and agree on any relevant adjustments.
- 4.14 The Bank will participate in the following stages of the project cycle: (i) preinvestment: once a project's eligibility has been verified, the MVCT will send the Bank, for information purposes, a project profile confirming compliance with the eligibility criteria; (ii) investment: unless otherwise provided in the procurement plan, the procurement processes will be reviewed on an ex post basis; and (iii) post-investment: a consulting firm acceptable to the Bank and contracted by the borrower will perform a midterm program evaluation no later than the time 50% of the loan proceeds have been committed, in order to analyze progress on the projects with respect to the indicators, confirm the relevance of the execution risk control

actions, and identify relevant adjustments to facilitate execution and fulfillment of the objectives. Likewise, a final evaluation will be performed once 90% of the loan proceeds have been committed. Both evaluations will be based on the targets and indicators agreed upon with the Bank in the Results Matrix. The terms of reference and selection of the consulting firm to perform the evaluations will require prior IDB approval.

- 4.15 **Audits.** Within 120 days following the end of each fiscal year, the MVCT will present the program's financial statements duly audited by an independent accounting firm acceptable to the Bank. The contracting and scope of these audits will be in accordance with the Bank's financial policies, as set forth in the Financial Management Policy for IDB-financed Projects (document OP-273-2) and the Operational Guidelines for Financial Management of IDB-financed Projects (document OP-274-2). Audit costs may be financed with the loan proceeds.
- 4.16 **Ex post evaluation.** The MVCT will compile the data and information required to evaluate fulfillment of the program's targets. This will make it possible to evaluate the program's efficiency and effectiveness in attaining its objectives and benefit from lessons learned.

Development Effectiveness Matrix										
Summary										
I. Strategic Alignment	Summary									
1. IDB Strategic Development Objectives	Aligned									
Lending Program	Lending for poverty reduction and equi									
Lenang i rogiani	zenamy to potenty reduction and equi	ty cimanocinent								
Regional Development Goals	Incidence of waterborne diseases (per 1	100,000 inhabitants).								
Bank Output Contribution (as defined in Results Framework of IDB-9)	(i) Households with new or upgraded w	rater supply, and (ii) Households with new	or upgraded sanitary connections.							
2. Country Strategy Development Objectives		Aligned								
Country Strategy Results Matrix	GN-2648-1	(i) Increase in coverage of water services sanitation services.	s, and (ii) Increase in coverage of							
Country Program Results Matrix	Not Available	This project is included in the 2012 Coun	ntry Program Document.							
Relevance of this project to country development challenges (If not aligned to country strategy or country program)										
II. Development Outcomes - Evaluability	Highly Evaluable	Weight	Maximum Score							
	8.4		10							
3. Evidence-based Assessment & Solution	7.4	25%	10							
4. Ex ante Economic Analysis	10.0	25%	10							
5. Monitoring and Evaluation	6.2	25%	10							
6. Risks & Mitigation Monitoring Matrix	10.0	25%	10							
Overall risks rate = magnitude of risks*likelihood		Medium								
Environmental & social risk classification		В								
III. IDB's Role - Additionality										
The project relies on the use of country systems (VPC/PDP criteria)	yes	Budgeting and treasury systems.								
The project uses another country system different from the ones above for implementing the program										
The IDB's involvement promotes improvements of the intended beneficiaries and/or public sector entity in the following dimensions:										
Gender Equality	Yes	The project will design a program of community development focused or gender equality. The activities of the program will inform women of ker aspects regarding hygiene and environmental protection. It will also prothe inclusion of women in the decision making involving the selection of technical solutions as well as their participation in the water committees								
Labor										
Environment	Yes	The project will include a series of workshops that will disseminate material o environment developed by the MAVDT to the beneficiary communities. The workshops will cover topics such as: water quality and disinfection; education on environment, efficient use of water, protection and management of water sources, and management of solid wastes.								
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 The ex-post impact evaluation of the project will produce evidence to close knowledge gaps in the	Yes	Two Technical Cooperations are being p Operational Input (CO-T1262) to suppor and sanitation projects in rural areas, ar G1001) to develop pilot projects to test i improve the understanding of fundame of the water and basic sanitation service Colombia.	t the structuring of the integral water nd an Investment Grant (CO-T1269 y CO- innovations in management and ntal aspects to ensure the sustainability							
sector that were identified in the project document and/or in the evaluation plan.										

The objective of the project is to increase the coverage of water and sanitation services in the poorest rural areas of Colombia in a financially and operationally sustainable manner.

The project classifies as a highly evaluable project. The POD presents the problems as well as the factors contributing these problems. The diagnosis presents its sources of information. Greater information regarding the magnitude of the problems is required. Although the POD does present the percentage of rural households living in the poorest municipalities that do not have water and sanitation services, we do not know the total number of household in these municipalities. This is important in order to establish the number of households to be attended by the program. The proposed interventions are clearly linked to the problems that have been identified in the diagnosis.

The results matrix has vertical logic. The impacts have been clearly presented and its indicators are SMART. The indicators have baselines, however, the baseline starts at zero. This should not occur unless it reflects the current situation in the rural areas. The baseline should include the percentage of households in the rural areas that do not have access to water and sanitation services. Likewise, the target should show how this percentage will change once the project is completed. With regards to the outcomes, the matrix presents some outcomes that are outputs instead of outcomes. The project will finance the household connections to the water and sanitation services and as such represent an output. The outcome is that the users have services that work adequately. For example, that the household have water 24 hours a day and that this water be potable. All the outcomes indicators are SMART. The indicators have baselines, however, these baselines are zero. Unless this represents the current situation in the poorest municipalities of Colombia (where the project will intervene) the outcome baseline should not be zero, but the percentage of households in these municipalities that currently have adequate water and sanitation services. Likewise the target should show the expected change in this percentage at project conclusion. With respect to the outputs, some activities have been misclassified as outputs. For example, the design of the aqueducts is an activity required to obtain the output. All outputs have indicators but not all of them are SMART since some are not specific and thus difficult to measure. For example, the word optimized" is not specified. All indicators have baselines and targets.

With regards to the data for the PMR, all outputs have annual targets, however, only the costs of the infrastructure component has its costs broken down by outputs as are presented in the results matrix.

The project was analyzed using a cost-benefit analysis. All economic benefits were adequately quantified, the costs used reflect real resource costs, assumptions were spelled out and a sensitivity analysis was undertaken of the assumptions. The operation has an evaluation and monitoring (M&E) plan, however, there needs to be consistency between the outcomes and outputs presented in the plan and the results matrix presented in the POD. The operation will be evaluated using an ex-post cost-benefit analysis. The budget for the M&E plan is broken down by activity in each of the corresponding areas.

Finally, the risk matrix presents the projects risks which are rated for magnitude and probability. Mitigation measures are presented for each risk as well as indicators to monitor its implementation.

Results Matrix

2011 figures.

2011 figures.											
General objective:	General objective: To help increase the coverage of efficient and sustainable water supply and wastewater management services in rural communities and increase effective coverage in extremely poor urban areas.										
Indicators	ld Indicator	Baseline	Year 1	Year 2	Year 3	Year 4	Year 5	Project target	Means of verification / person responsible / cost / financing / frequency	Comments	
Program indicators											
Rural households with in-home access to drinking water through new, expanded, or rehabilitated systems.	Household	0	-	1,087	4,684	1,594	1,135	8,500	Contract monitoring reports / VAS - MVCT / Included in the project / chargeable to the program / semiannual		
Rural households with new, adequate sanitation solution [1].	Household	0	1	2,679	4,684	1,594	1,243	10,200	Contract monitoring reports / VAS - MVCT / Included in the project / chargeable to the program / semiannual		
		Compor	ent I: (Commu	ınity de	velopn	nent ar	nd local in	stitutional strengthening		
Outputs											
Community organizations providing water and/or sanitation services created or strengthened [2]	Organiza- tions	0	-	7	20	6	8	41	Semiannual executing agency progress reports Organizational documents Performance indicators required of a works contractor	These values are based on the assumption that there is no formal provider. Field visits should be used to check the possibility of regionalization and whether a formal provider exists in the population center, and the projections will be adjusted accordingly.	
Technical, operating, and administrative management support material for the community organizations	Sets of records	0	-	-	-	-	3	3	Documents prepared Progress reports	The initial suggestion is at least one for water and another for sanitation.	
						O	utcome	S			
Systems operating sustainably (technical operating performance in line with design parameters; revenue covering operating, administrative, and maintenance expenses)	Systems	0	-	-	7	20	6	41	Monitoring reports	Upon completion of the work, the contractor must monitor operation for one year, at the end of which the contractor must deliver the system operating sustainably and satisfying administrative, financial, and business performance standards.	

Component II: Engineering and infrastructure										
Outputs										
Water supply designs prepared	Project designs	0	20	6	8	-	-	34	Terms of reference Contracts Oversight reports Certificates	
Wastewater management project designs prepared	Project designs	0	20	6	8	-	-	34	Terms of reference Contracts Oversight reports Certificates	
Water supply systems built, expanded, and/or optimized.	Systems	0	-	7	20	6	8	41	Management reports Contracts Works certificates Oversight reports	It may be advisable to adjust the name to reflect Colombian terminology.
Wastewater management systems built, expanded, and/or optimized.	Systems	0	1	7	20	6	8	27	Management reports Contracts Works certificates Oversight reports	It may be advisable to adjust the name to reflect Colombian terminology.
Outcomes										
Households with in-home connection to drinking water through new or expanded systems	Households		-	1,087	4,684	1,594	1,135	8,500	Executing agency report / VAS - MVCT / Included in project / chargeable to the program / semiannual	
Households with a new, working sanitation solution [2]	Households	0	-	2,679	4,684	1,594	1,243		Executing agency report / VAS - MVCT / Included in project chargeable to the program semiannual	-
Educational institutions benefited by new or enhanced access to sanitation network or by a new individual sanitation solution	Households	0	-	ı	7	20	6		Executing agency report / VAS - MVCT / Included in project / chargeable to the program / semiannual	
			Comp	onent	III: Sus	tainabl	e servi	ce deliver	y arrangements	
Outputs										
Models of post-construction support for community organizations operating water and sanitation systems	Models	0	1	1				2	Executing agency report / VAS - MVCT	It is assumed that one second-tier association will be created for each department; this figure is subject to review based on the results of technical cooperation operation consulting work
Outcomes										
Second-tier associations created and providing post-construction support to community organizations	Models	0	-	-	1	1		2	Executing agency report / VAS - MVCT	It is assumed that one second-tier association will be created for each department; this figure is subject to review based on the results of technical cooperation operation consulting work

^[1] Refers to a sanitation solution that hygienically prevents human contact with human excrement (network sewage system, pour flush latrine connected to septic tank or ventilated improved pit latrine, pit latrine slab, composting toilet).

^[2] Creation and strengthening includes educational and training workshops.

FIDUCIARY AGREEMENTS AND REQUIREMENTS

Name: Colombia

Project number: CO-L1105

Name: Rural Area Water Supply and Wastewater Management Program

Executing agency: Ministry of Housing, City, and Territory (MVCT)

Prepared by: María Eugenia Aguirre Gutiérrez

I. EXECUTIVE SUMMARY

A Comprehensive Project Management Unit (CPMU) will support the projects' execution and will manage the program throughout the project cycle, from the promotion and prefeasibility studies phase to the implementation and post-construction support phases. In principle, it has been planned for the CPMU to be developed by the Fondo Financiero de Proyectos de Desarrollo [National Fund for Development Projects] (FONADE).

The fiduciary management of the Ministry of Housing, City, and Territory (MVCT)¹ and the FONADE was evaluated using the Institutional Capacity Assessment System (ICAS) and Project Risk Management (PRM) tools. No fiduciary risks were identified. During the project execution phase, the evaluation results will be monitored using risk matrix developed in order to confirm implementation of actions to mitigate the identified risks.

The MVCT develops and regulates policies, plans, programs, and projects in the areas of the environment, water, and basic and environmental sanitation. While it has a quality management system in place and its mandated processes and procedures are duly certified under the ISO-9001 Standard, the operational execution of projects is not one of its objectives.² Consequently, the MVCT proposes the direct contracting of FONADE to support program execution. The evaluation concludes that the MVCT and FONADE have sufficient capacity to perform fiduciary management and administration of the loan proceeds.

According to the Public Expenditure and Financial Accountability (PEFA) evaluation, Colombia's Sistema de Gestión Financiera Pública [Public Finance Management System] (SGFP) is mature and performs well in most areas but is not yet fully compliant with international standards. In addition, while the Sistema de Contratación Pública [Public

Formerly the Ministry of the Environment, Housing, and Territorial Development, transformed pursuant to Decree 3.571 of 2011.

² Article 1 of Decree 216 of 2003.

Procurement System] is considered adequate and consistent with internationally accepted practices from a regulatory standpoint, its operating practices are still far from adhering to these standards. Both the MVCT and FONADE apply the Colombian SGFP. Program execution will be supported by the Sistema Integrado de Información Financiera II [Integrated Financial Information System II] (SIIF II) for budget control and treasury functions. Moreover, FONADE has technological support tools for project implementation and is supervised by the Superintendencia Financiera [Office of the Financial Superintendent].

II. FIDUCIARY CONTEXT OF THE EXECUTING AGENCY

1. The Ministry will report on program execution based on the information provided by the MVCT's and FONADE's SIIF. FONADE will have financial management responsibilities. FONADE has a Finance Department, which reports to the General Manager. This department consists of a Budget and Accounting Group, an Investment Negotiation Group, a Project Execution Fund Group, and a Project Structuring and Evaluation Group. With the support of SIIF II, Helisa accounting software, and an operating plan, and in coordination with the financing entities and the MVCT, these groups establish an operating budget and a corresponding chart of accounts for each project to be executed, and the flow of funds is handled through a specialized account.

Both the MVCT and FONADE have the experience required to execute the program. Although the Operations Manual is in the process of being prepared, each institution's internal processes are clearly defined.

- 2. The ICAS tool was used to evaluate FONADE's capacity to manage procurement processes (see optional link 5: Institutional analysis). FONADE has a Procurement Department, which is in turn comprised of three specialized areas: preliminary studies, selection processes, and contract management. This department interacts with the Technical Department, which includes the Office of Internationally Financed Projects, responsible for the execution of programs and projects financed by multilateral banks and other external sources. It is comprised of a group of professionals with expertise and experience in applying multilateral bank policies, rules, and procedures and with access to information technology tools, methodologies, indicators, and processes that reflect the specific requirements of each program or project type. For each project, a contract manager will be assigned to assist the Procurement Department during the procurement stage with the support of a multidisciplinary team.
- 3. FONADE's Finance Department and Procurement Department have the required experience in handling this type of project financed by multilateral and/or bilateral institutions.
- 4. It should be noted that the project's detailed operating plan is being prepared; a first draft is available for discussion with sector authorities and revision. FONADE has the methodology and experience required to complete it satisfactorily.

- 5. FONADE has an Office of Internal Control, which performs its work based on the use of an internal control system and standard internal control model (MECI), as well as semiannual self-evaluation surveys. This has resulted in an appropriate internal control environment for the staff.
- 6. Risks are managed through a specialized office that reports to the General Manager and has specific methods for assessing, mitigating, and auditing operating risks. In addition, as an entity supervised by the Office of the Financial Superintendent, FONADE is required to manage financial risks.
- 7. External control is exercised by the Office of the Comptroller-General of Colombia (CGR) and by the Office of the Financial Superintendent. The MVCT will contract an independent auditing firm acceptable to the Bank, in accordance with Bank policies.³

In general, from a procedural standpoint, the fiduciary systems of the MVCT and FONADE are considered satisfactory, and the associated risks will be reviewed as part of the periodic updates of the Results Matrix.

III. FIDUCIARY RISK EVALUATION AND MITIGATION MEASURES

In general terms, based on the results of the ICAS and PRM, there was no evidence of fiduciary risks to program execution requiring the design of mitigation plans.

IV. CONSIDERATIONS FOR THE SPECIAL CONDITIONS OF CONTRACTS

- a. The Bank will disburse the loan proceeds as advances of funds to an account at Banco de la República, based on the executing agency's liquidity needs for a period not to exceed six months, in accordance with the investment schedule and the flow of funds required for such purposes. The exchange rate for the rendering of accounts for the loan proceeds will be used to convert the disbursed resources from U.S. dollars to Colombian pesos (conversion rate), while the exchange rate in effect on the request preparation date will be used for the counterpart resources and for expense reimbursements.
- b. The annual financial statements and the eligibility of project expenses will be audited each year by a second tier independent auditing firm acceptable to the Bank and contracted by the MVCT. The project's audited financial statements will be sent to the Bank no later than four months following the end of each fiscal year of the executing agency or within any other time frame agreed by the parties, in accordance with procedures and terms of reference previously agreed upon with the Bank.

Document AF-200.

V. AGREEMENTS AND REQUIREMENTS FOR PROCUREMENT EXECUTION

The fiduciary agreements and requirements for procurement establish the applicable provisions for the execution of all procurement under the program.

1. Procurement execution

The applicable policies will be the Policies for the Procurement of Goods and Works Financed by the Inter-American Development Bank (document GN-2349-9) of March 2011 and the Policies for the Selection and Contracting of Consultants Financed by the Inter-American Development Bank (document GN-2350-9) of March 2011. In addition, it is agreed that the executing agency will use the Procurement Plan Execution System (SEPA) for procurement planning and monitoring and the Procurement Administration and Management System (SAGA) for procurement administration and management.

- a. **Procurement of works, goods, and nonconsulting services:** Contracts for works, goods, and nonconsulting services⁴ to be procured under the program and subject to International Competitive Bidding (ICB) will be executed using harmonized Standard Bidding Documents (SBDs) issued or approved by the Bank. Bidding processes for the procurement of works subject to National Competitive Bidding (NCB) will be executed using national bidding documents harmonized for Colombia and issued or approved by the Bank.
- b. **Selection and contracting of consultants:** Contracts for consulting services arising under the program will be executed using the Standard Requests for Proposals (SRFPs), harmonized for Colombia and issued or approved by the Bank. Reviewing the terms of reference for the contracting of consulting services is the responsibility of the project's sector specialist.

Direct contracting of FONADE: In principle, the MVCT has proposed that FONADE will support execution of the projects and will manage the program throughout the project cycle, from the promotion and prefeasibility studies phase to the implementation and post-construction support phases. FONADE, a government industrial and commercial enterprise of a financial nature associated with the National Planning Department (DNP), provides financing and technical assistance to sector-specific projects and performs project formulation, execution, evaluation, and management activities, including for projects financed by multilateral bank resources.

Since the earliest stages of program design and its execution arrangements, the Ministry raised the need to contract the program's management to a government entity in light of the Ministry's own execution limitations and to ensure timely and effective action. In Colombia, FONADE is the national government entity responsible for providing program management services to the various State

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Policies for the Procurement of Goods and Works Financed by the Inter-American Development Bank (document GN-2349-9), paragraph 1.1: Nonconsulting services are treated as goods.

agencies. FONADE is familiar with and applies multilateral bank standards for selection and procurement processes and for the preparation and presentation of reports. The results of an evaluation of its capacity as an executing agency indicate a high level of competence in this regard. Moreover, the Ministry has historically contracted the services of FONADE under various modalities through inter-administrative agreements, resulting in the execution of 538 multiple-works water and sanitation projects in Colombia, similar in nature and range to the projects contemplated in the program.⁵

Direct contracting of tickets: Tickets may be purchased from the provider currently serving FONADE and previously selected under a competitive bidding process.

Any direct contracting, whether for the procurement of works, goods, services, or consulting services, will require the Bank's no objection.

Selection of individual consultants: The applicable policies will be the Policies for the Selection and Contracting of Consultants Financed by the Inter-American Development Bank (document GN-2350-9) of March 2011.

c. Others: The projects include the acquisition of land, rights, and easements needed for project execution. The consulting contracts for the performance of studies and final designs of the project's works will include a legal analysis of the property titles to the land and the corresponding appraisals, in order to ensure unconditional availability of the land prior to the start of the selection and procurement processes for the works.

2. Table of thresholds (US\$ thousands)

	Works			Goods ⁶	Consulting					
International Competitive Bidding	National Competitive Bidding	Shoppin	Shopping International Competitive Bidding		Shopping	International advertisement Consulting	Short list 100% national			
≥ 10,000	350 – 10,000	≤350	≥ 1,000	≥ 1,000 50 − 1,000		≥ 200	≤ 500			
Ex post review thresholds (US\$ thousands)										
	Works		Goo	ds		Consulting services				
	< 10,000		< 1,0	000		< 200				

With the exception of the **first** procurement process for works, consulting services, and goods, the ex post review will, subject to prior written notice from the Bank, apply to processes involving procurement amounts below the thresholds to be

FONADE has taken part in several Bank-financed operations, including loans 910/OC-CO, 1483/OC-CO, and 1742/OC-CO).

⁶ Includes services other than consulting services.

established in the loan contract. The thresholds for Bank examination of the procurement processes through ex post review procedures may be lowered when indicated by the institutional evaluation and subject to prior written notice from the Bank.

Note: The established thresholds for ex post review are based on FONADE's fiduciary execution capacity and may be modified by the Bank by written notice to the extent that such capacity changes.

Major Procurement Processes

Description of planned procurement	Estimated amount in US dollars	Procurement method [1]
1. CONSULTING SERVICES		
Consulting services 1 Year 2012		
Miscellaneous contracts for comprehensive project design in the departments of	\$1,051,000	QCBS (ICB)
Antioquia and Etnias Córdoba		
Consulting services 2 Year 2013	\$388,000	QCBS (ICB)
Miscellaneous contracts for comprehensive project design in the department of Bolívar	Ψ300,000	QСВБ (ICB)
Consulting services 3 Year 2014		
Miscellaneous contracts for comprehensive project design in the department of La	\$233,000	QCBS (ICB)
Guajira		
Consulting services 4 Year 2015	\$234,000	QCBS (ICB)
Miscellaneous design contracts for the municipios of Cauca and Nariño	Ψ23 1,000	QCDS (ICD)
Consulting services 5	\$500,000	$QCBS^7$
Program audit with firm selected from a list of auditors acceptable to the Bank.		
Comprehensive project management	\$2,700,000	DC ⁸
Contract for MVCT support staff: Program Implementation Team	\$1,000,000	Individual consultants
Consulting services 6		Consultants
Support material for technical, operating, and administrative management of		QCBS/ Individual
community organizations.	\$300,000	consultants
	Ф100 000	Individual
Midterm and final program evaluations	\$100,000	consultants
Consulting services 7		
Miscellaneous contracts for oversight of comprehensive project design	\$133,420	QCBS/ Individual
	•	consultants
Contract for Córdoba I project oversight	\$600,000	QCBS (ICB)
Contract for Antioquia and Córdoba II project oversight	\$1,500,000	QCBS (ICB)
Contract for Bolívar project oversight	\$550,000	QCBS (ICB)
Contract for Guajira project oversight	\$250,000	QCBS (ICB)
Contract for Cauca and Nariño project oversight	\$350,000	QCBS (ICB)
3. WORKS		
Works 1 Year 2012 Contract for project works in the Department of Córdoba		
Municipio of Cereté Severa – Valparaíso	\$4,011,000.00	NCB
Municipio of Cereté Campanito de los Venados	\$1,022,000.00	NCB

⁷ According to the document for external audits of IDB-financed projects (AF-200).

⁸ The rationale for direct contracting is set forth in section V.1.b of the Fiduciary Agreements and Requirements on Procurement.

Description of planned procurement	Estimated amount in US dollars	Procurement method [1]
Municipio of PlanetaRica Arenoso, Loma Azul, and Medio Rancho	\$1,652,000.00	NCB
Municipio of Sahagún La Ye – Guayabal and Sabaneta	\$2,404,000.00	NCB
Works 2 Year 2013 Contract for project works in the department of Antioquia and		
Etnias Córdoba		
Municipio of Cáceres Manizales and Piamonte	\$2,595,000.00	NCB
Municipio of Caucasia Santa Rosita, Palomar, and Puerto Colombia	\$1,374,000.00	NCB
Municipio of El Bagre el Perico, Caño Claro, and Las Dantas	\$2,656,000.00	NCB
Municipio of Necoclí Pueblo Nuevo, Mulatos, and Las Changas	\$4,459,000.00	NCB
Municipio of Turbo Nueva Granda, San José de Mulatos, and Nuevo Oriente	\$2,803,000.00	NCB
Municipio of Lorica Cotoca Abajo, Candelaria, and El Playón	\$4,207,000.00	NCB
Municipio of San Andrés de Sotavento Cruz del Guayabo, Las Casitas, and Los Castillos	\$4,335,000.00	NCB
Works 3 Year 2014 Works contract for projects in the Department of Bolívar		
Municipio of Magangue Punta Cartagena and Playa Las Flores, Madrid, and		
Henequén	\$4,431,000.00	NCB
Municipio of Pinillos Palenquito, Santa Coa, and Las Florez	\$3,776,000.00	NCB
Works 4 Year 2015 Works contract for projects in the Department of Guajira		
Municipio of Riohacha Villa Martín, Galán, and Arroyo Arena	\$1,363,000.00	NCB
Municipio of Dibulla	\$2,134,000.00	NCB
Works 5 Year 2015 Works contract for projects in the Departments of Cauca and		
Nariño		
Municipio of La Vega Arbela, Los Uvos, and Barbillas	\$3,031,000.00	NCB
Municipio of Tumaco San Jose de Guayabo, and Dos Quebradas	\$1,871,000.00	NCB
4. GOODS AND SERVICES		
Tickets	\$250,000.00	DC

3. Procurement supervision

Unless otherwise justified, supervision will be performed on an ex pos basis. The contracting of individual consultants, including those associated with the program implementation team, will be subject to ex ante review by the Bank. Responsibility for the procurement plan and its supervision rests with the Project Team Leader.

4. Special provisions

- a. **Measures to reduce the likelihood of corruption:** The provisions of documents 2349-9 and 2350-9 regarding prohibited practices (lists of companies and individuals deemed ineligible by multilateral institutions) will be fulfilled.
- b. Other special procedures: The evaluation of FONADE's fiduciary capacity to execute the project's procurement processes concludes that FONADE does not have any significant institutional deficiencies. Recommended actions to be implemented with the advance for the project's design, preparation, and execution include:
 - Create a work group responsible for project procurement within the Procurement Department, with an indication of profiles, roles, and responsibilities; flow chart, graph of procurement process responsibilities and interaction of the Procurement Department and its associated areas with all those involved in the project's execution within FONADE;

- Have the Procurement Department assign management and major responsibilities for procurement processes to its permanent staff, provided that in the event of staff changes, the professional profile of the replacement staff must be at least equal to that of the personnel being replaced;
- Describe the first procurement plan in the start-up workshop. Once the loan operation has been approved and the start-up workshop has been conducted, the following actions will be implemented:
- Create a timetable for execution of the procurement processes based on the length of time required for each stage of the processes, and use this timetable as an input when preparing the procurement plan;
- Prepare a procurement plan and enter it in the SEPA;
- Continue to participate in the training seminars periodically held by the Bank.

5. Records and files

The program's Operations Manual is being drafted. However, the files held by FONADE are properly managed and have been digitized and uploaded to the system for access by staff as needed.

VI. FINANCIAL MANAGEMENT

1. Programming and budget

The national government, through the National Public Budget Office and the National Planning Department (DNP), is responsible for budgetary programming, a procedure that concludes with National Congressional approval of the Annual Budget Law. The loan proceeds are included in the national budget through an investment project for which changes are subject to prior DNP approval. Once this appropriation is entered in the SIIF II national system by the MVCT's Finance Division – Budget Group, execution can begin by the program implementation team and FONADE. The program's design does not provide for a local counterpart contribution.

2. Accounting and information systems

The governing body for public accounting in Colombia is the General Accounting Office (CGN), which issues guidelines on how to keep accounts at the entities comprising the National Public Budget. The official public accounting system is the SIIF national system, which becomes a source for downloading information that is then sent to the CGN through the Treasury and Public Information Consolidation System. Both the MVCT and FONADE use the SIIF national system, which integrates the budget, accounting, and treasury functions and makes it possible to control the program's resources through internal allocations (cost centers). In addition, FONADE has an ancillary accounting system (Helisa) for project support. MVCT responsibilities will include coordinating the project-related financial and administrative procedures, such as budgets, treasury, general accounting, and reporting. The MVCT will send the program's audited financial reports to the Bank on an annual basis.

3. Disbursements and cash flow

External credit resources, as well as all other national government resources, are executed through the SIIF II national platform in accordance with the platform's regulatory rules and procedures, including those related to cash flow programming. SIIF II operates through the administration of the annual payment program (established on a monthly basis). Project resources will be managed through a special, foreign-currency bank account to be opened at Banco de la República exclusively for the loan proceeds. The Bank will disburse the project resources into this account as advances of funds based on the program's liquidity needs for a period not to exceed six months, in accordance with the investment schedule and the cash flow required for such purposes. The Bank may advance further funds when it can be shown that at least eighty percent (80%) of all funds advanced have been expended. The MVCT will order the Ministry of Finance to electronically transfer the funds (in Colombian pesos) directly to FONADE through the SIIF national system.

The exchange rate used to submit evidence of expenditures will also be used to convert the resources disbursed in United States dollars into Colombian pesos (conversion rate); the rate to be used for counterpart resources will be the exchange rate for the date on which the request is prepared. While the rendering of accounts need not be accompanied by documents supporting expenses incurred or payments made, this does not imply Bank approval of such payments. In the event that the Bank or the auditors identify an expense as ineligible, the relevant amount must be returned to the designated account or directly to the Bank.

4. Internal control and internal audit

Both the MVCT and FONADE use the standard internal control model (MECI), which is described in Colombian legislation as including strategic control, management control, and evaluation control subsystems. The basic role of this model is to guide entities toward the achievement of their objectives and their contribution to the fundamental purposes of the State. To this end, the MECI model is divided into three major subsystems: strategic control, management control, and evaluation control.

At both entities, the internal control system is reliable, its various elements having been institutionalized. The permanent staff at the MVCT includes an Internal Control Office, which reports directly to the minister and consists of officials with the profile and competencies required to properly manage the risks involved in the strategic, mission-related, and support processes. They use Administrative Department of Public Service (DAFP) methodology to identify, analyze, evaluate, and monitor the risks arising in these activities. As a result, the internal control environment is adequate throughout the ministry.

In addition, FONADE has an Internal Control Area that provides advisory services to the Office of the General Manager and applies a specialized risk management methodology. As an entity supervised by the Office of the Financial Superintendent, FONADE employs a financial risk management system and has consequently developed an adequate internal control environment, supported by codes of ethics and continuous improvement.

At both entities, the Internal Control Office is responsible for internal audits, in line with lawfully mandated competencies and responsibilities. Quality audits are scheduled and performed on all processes. The reports are delivered to those responsible for the process or to the area manager and, based on the findings, improvement plans are prepared and periodically tracked.

5. External control and reports

External control is performed by the Office of the Comptroller-General (CGR) in the form of selective, ex post public audits of the entities for purposes of verifying compliance with regulations, proper use of resources, observance of processes and procedures, attainment of goals and objectives, etc. The auditing methods employed by the CGR are consistent with international best practices. However, they are not properly employed by the auditors and the control findings are shallow, poorly documented, and therefore not reliable. Consequently, the CGR is not eligible to audit Bank-financed projects. The MVCT and FONADE are constitutionally subject to external supervision by the Office of the Comptroller-General. This supervision has given rise to reports on the visits conducted, including on the management of resources of projects and programs procured by the MVCT and FONADE. The auditing methods used by the CGR comply with international best practices but are not always properly employed by the auditors.

In addition, FONADE is under the supervision of the Office of the Financial Superintendent and receives annual audit inspections from this agency.

At the time of preparing the ICAS assessment, the final reports were not available for either of the two entities. However, the 2009 reports are clean and did not warrant any intervention.

The annual financial statements and the eligibility of project expenses will be audited each year by a Tier-II independent auditing firm acceptable to the Bank, to be contracted by the MVCT. The auditing services will be financed by the loan proceeds and will have an approximate cost of US\$600,000. The project's audited financial statements will be sent to the Bank no later than four months following the end of each fiscal year of the executing agency or within any other time frame agreed upon by the parties, in accordance with procedures and terms of reference previously approved by the Bank.

6. Financial supervision plan

Tested through the ICAS tool, the financial management systems of the MVCT and FONADE obtained scores of 91.3% and 91.1%, respectively, which ranks their fiduciary risk as low. As a result, the financial specialist will conduct an annual onsite review and desk reviews of the audited annual financial statements. The financial supervision visits will include verification of the financial and accounting arrangements used in managing the project and monitoring of the implementation of the independent project auditor's recommendations.

7. Execution arrangements

The execution arrangements are based on harmonizing the authority of the MVCT, as public policy maker for the water and sanitation sector and business strengthening, with the knowledge, specialized expertise, and sector-specific technical experience of FONADE in the development of social projects. The project will be managed by FONADE under MVCT supervision.

Since the MVCT is responsible for full program coordination and supervision with FONADE and for direct execution of the first stage of the program cycle, a team with the requisite skills and experience must be assembled to perform these activities in the Ministry. This is expected to be done with funds from the Bank-approved technical cooperation operation. In addition, it is essential to document the procedures to be followed during this phase to ensure timely achievement of the program objectives in due form.