

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

**NICARAGUA**

**MULTISECTOR PROGRAM TO IMPROVE HEALTH DETERMINANTS IN THE  
DRY CORRIDOR**

**(NI-L1143)**

**LOAN PROPOSAL**

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## ELECTRONIC LINKS

### REQUIRED

1. Multiyear execution plan (PEP) and annual work plan (POA)
2. Monitoring and evaluation plan
3. Environmental and social management report (ESMR)
4. Procurement Plan

### OPTIONAL

1. Project economic analysis
2. Technical link and references
3. Management safeguards plan
4. Program Operating Regulations (draft)
5. Status of investment projects
6. Environmental filters

## ABBREVIATIONS

AWP	Annual work plan
BEVPS	Base de datos estadísticas vitales y producción de servicios [database on vital statistics and service production]
CGR	Contraloría General de la República [Office of the Comptroller General]
DALY	Disability-adjusted life year
DES	División de Estadísticas de Salud [Health Statistics Division]
DGAF	Dirección General Administrativa Financiera [Financial Administration Department]
DGSS	Dirección General de Servicios de Salud [Directorate General of Health Services]
ENDESA	Encuesta Nicaragüense de Demografía y Salud [Nicaraguan Demographic and Health Survey]
ES	Estelí
ESMR	Environmental and social management report
ICAS	Institutional Capacity Assessment System
ICB	International competitive bidding
IICQ	International individual consultant selection based on qualifications
INIFOM	Instituto Nicaragüense de Fomento Municipal [Nicaraguan Municipal Development Institute]
JI	Jinotega
MHCP	Ministry of Finance
MINSa	Ministry of Health
MOSAFC	Modelo de Salud Familiar y Comunitario [Family and Community Health Model]
MT	Matagalpa
MTI	Ministry of Transportation and Infrastructure
MZ	Madriz
NCB	National competitive bidding
NS	Nueva Segovia
PAHO	Pan American Health Organization
PROCOSAN	Programa Comunitario de Salud y Nutrición [Community Health and Nutrition Program]
RACCS	Región Autónoma de la Costa Caribe Norte [Autonomous Region of the North Caribbean Coast]
SEPA	Procurement plan execution system
SIASAR	Sistema de Información de Agua y Saneamiento Rural [Rural Water and Sanitation Information System]
SIGFA	Sistema Integrado de Gestión Financiera Administrativa [Integrated Financial Management System]
SIGFAPRO	Sistema Integrado de Gestión Financiera Administrativa para Proyectos [Integrated Financial Management System for Projects]
SILAIS	Sistemas Locales de Atención Integral de Salud [Local integrated health care systems]
SIVIN	Sistema de Vigilancia de Intervenciones Nutricionales [Nutrition Interventions Surveillance System]
UCFE	Unidad Coordinadora de los Fondos Externos [External Funds Coordination Unit]

## PROJECT SUMMARY

### NICARAGUA MULTISECTOR PROGRAM TO IMPROVE HEALTH DETERMINANTS IN THE DRY CORRIDOR (NI-L1143)

Financial terms and conditions			
Borrower	Source	%	Amount (US\$)
Republic of Nicaragua	IDB (regular Ordinary Capital):	60	79,800,000
	IDB (concessional Ordinary Capital):	40	53,200,000
	IDB:	100	133,000,000
Executing agency	Local:		5,000,000
Ministry of Health (MINSa) Ministry of Transportation and Infrastructure (MTI)	Total:		138,000,000
	Regular Ordinary Capital (FFF) <sup>(a)</sup>		Concessional Ordinary Capital
Amortization period:	25 years		40 years
Disbursement period:	5 years		
Grace period:	5.5 years		40 years
Interest rate:	LIBOR-based		0.25%
Credit fee:	(b)		N/A
Inspection and supervision fee:	(b)		N/A
Weighted average life (WAL):	15.25 years		N/A
Currency of approval:	U.S. dollars		
Project at a glance			
<b>Project objective/description:</b> The objective of the program is to improve public health through regional management of health care and some of its most significant determinants in priority areas, promoting healthy practices and improving access roads and the coverage and quality of health services to accelerate the reduction in maternal and child morbidity and mortality and check the advance of the main chronic diseases.			
<b>Special contractual conditions precedent to the first disbursement of the loan:</b> The following will be special contractual conditions precedent to the first disbursement of the loan: (i) approval and entry into force of the program Operating Regulations previously agreed upon by the borrower and the Bank; and (ii) contracting by the MINSa of a core technical/operating team to work exclusively on program execution (paragraph 3.14).			
<b>Special contractual conditions of execution:</b> (i) Precedent to disbursement of the funds corresponding to component 1, the following will be necessary: (a) the institutions involved will sign an interagency agreement setting out the responsibilities of each institution and coordination arrangements; and (b) management teams to coordinate investments in each prioritized municipio will be created (paragraph 3.5); and (ii) during program execution: (a) MINSa will submit evidence semiannually that it has carried out the actions established in the current management safeguards plan and reached an agreement with the Bank on updates to the plan (paragraph 3.16), and (b) the coexecuting agencies comply with the special socioenvironmental conditions established in Annex B to the <a href="#">environmental and social management report (ESMR)</a> (paragraph 2.4).			
<b>Exceptions to Bank policies:</b> None			
Strategic alignment			
<b>Challenges:</b> <sup>(c)</sup>	SI <input checked="" type="checkbox"/>	PI <input type="checkbox"/>	EI <input type="checkbox"/>
<b>Crosscutting themes:</b> <sup>(d)</sup>	GD <input checked="" type="checkbox"/>	CC <input checked="" type="checkbox"/>	IC <input type="checkbox"/>

<sup>(a)</sup> Under the Flexible Financing Facility (FFF) (document FN-655-1), the borrower has the option of requesting changes to the amortization schedule, as well as currency and interest rate conversions. The Bank will take operational and risk management considerations, market conditions, and the level of concessionality of the loan into account when reviewing such requests, in accordance with the Bank's applicable policies.

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

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

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

## I. DESCRIPTION AND RESULTS MONITORING

### A. Background, problem addressed, and rationale

- 1.1 **Health challenges amidst multiple transitions.** In Nicaragua, the improvement in national health indicators<sup>1</sup> exists alongside sharp regional disparities at the expense of remote rural areas where the highest poverty is also concentrated. In the North Caribbean, North Central, and Las Segovias regions (Map 1.1), between 30% and 50% of the population falls into the poorest quintile of the national well-being distribution.<sup>2</sup> These same regions, which encompass the departments of Madriz (MZ), Nueva Segovia (NS), and Estelí (ES) (Las Segovias) and Jinotega (JI) and Matagalpa (MT) (North Central), have the worst health and nutrition indicators. The departments of Madriz and Nueva Segovia present the highest incidence of low birthweight (12%), which is one third higher than the national average and affects nutritional status and health throughout life. One of every three low-weight newborns will suffer from chronic malnutrition in childhood (double the general rate), and this condition establishes a vicious circle by increasing the propensity to contract infections—which further erode the child’s nutritional health—and the risk of developing the most prevalent chronic diseases in adulthood: diabetes, high blood pressure, and chronic kidney disease. Mortality from diarrhea and pneumonia in children under the age of 5 is 30 deaths per 1,000 children, compared with 21 nationally. The epidemiological transition is apparent in the five local integrated health care systems (SILAIS)<sup>3</sup> in the North Central and Las Segovias regions. Although the problem of transmissible diseases, malnutrition, and perinatal disorders is easing, it continues to be significant in rural areas, and the entire country is experiencing rapid growth in noncommunicable chronic diseases and the burden of disability (caused by congenital disorders, the consequences and complications of accidents, vector-borne diseases such as chikungunya, dengue, and Zika, and noncommunicable chronic diseases themselves), increasing demand for special primary care and specialized care.
- 1.2 Another transition is climate change, which constitutes an additional factor in deteriorating health, particularly apparent in the municipios in the so-called “Dry Corridor” of Nicaragua, which include the Las Segovias and North Central regions. In this corridor, the chronic and worsening drought (largely due to unsustainable use of natural resources) is causing water shortages as well as water and air pollution. This affects the population’s resilience, with multiple impacts on health owing to nutritional status, caused by diseases related to contaminated water, air pollution, and dust. In particular, the incidence of vector-borne diseases—with malaria and dengue being the most significant—is rising once again due to the proliferation of vectors such as mosquitos, spurred by climate change and enabled specifically by improper water storage, among other factors. The Ministry of Health (MINSa) reports a 46.9% increase in the malaria rate per 10,000 population, and a 16.6%

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<sup>1</sup> Between 2005 and 2015, life expectancy rose from 68 to 75 years, maternal mortality fell from 89 to 38 deaths per 100,000 live births, and neonatal mortality fell from 16 deaths per 1,000 live births in 2007 to 8 deaths per 1,000 live births in 2012. (See [OEL#2](#) [1], [2], [3]).

<sup>2</sup> [OEL#2](#) [3].

<sup>3</sup> SILAIS: Deconcentrated MINSa office responsible for administering the public system in its region, which generally corresponds to a department. In this document, SILAIS may refer to the entity or to the region served, depending on the context.

increase in cases of suspected dengue, between April 2016 and April 2017. Surveillance has its limitations, and laboratories do not have the capacity to diagnose malaria or dengue quickly, which causes delays in treating these diseases and containing their spread.

- 1.3 The simultaneous transitions create rival demands on the health system, which means that more cost-effective ways must be found to improve the coverage and quality of services and attend to the multiple burdens on all treatment levels in the health care system.

**Map 1.1. Chronic malnutrition in children under 5**



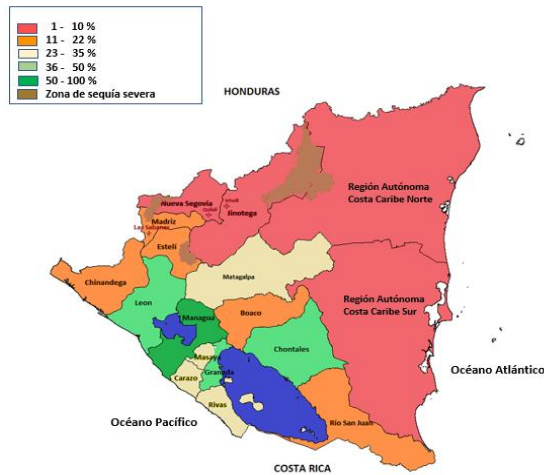
- 1.4 **Determinants outside the health sector, such as environmental sanitation and geographic accessibility, affect the health of the poorest.** Disparities in health are linked to gaps in access to basic services and to the quality and use of sanitation services, which necessitates a comprehensive approach to various health determinants. The main determinants are, first, environmental health, which is conditioned by the availability and quality of water and sanitation services, and, second, the geographic accessibility of the health system. There is a positive correlation between environmental quality, health, and access to water and sanitation.<sup>4</sup> In Nicaragua, the economic losses caused by the lack of sanitation and hygiene amounted to US\$95 million in 2009,<sup>5</sup> 75% of which were related to deterioration in health. The Rural Water and Sanitation Information System (SIASAR) indicates that in February 2017, just 43.6% of rural households in the country had access to an improved water source and just 49.8% had access to improved sanitation, while those indicators for Latin America are 84% and 64%, respectively. The lack of sanitation and hygiene causes more than 4.6 million

<sup>4</sup> [OEL#2](#) [4].

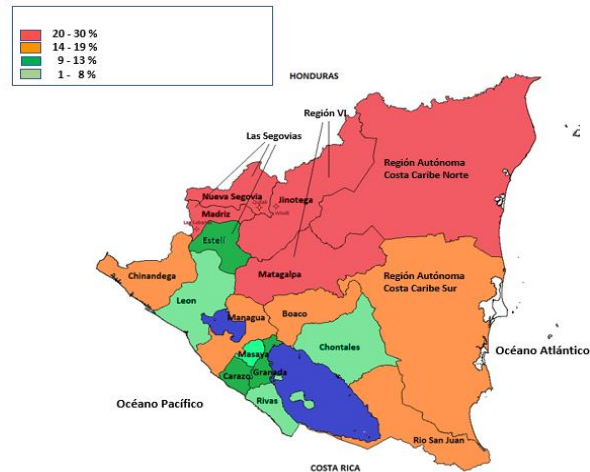
<sup>5</sup> [OEL#2](#) [5].

episodes of illness or infection and nearly 500 premature deaths per year.<sup>6</sup> Map 1.2 illustrates the regional disparities. Where potable water is unavailable, the rural population draws water from sources that are not always safe and stores that water and handles it in ways that can transmit diseases or allow vectors to proliferate.

Map 1.2. Potable water in the home



Map 1.3. Chronic malnutrition in children under 5



- 1.5 In water and sanitation, the Bank has supported the development of urban water, drainage, and sanitation systems and is preparing a project for the improvement and sustainable management of water and sanitation services in urban and periurban areas (NI-L1145), while the government is adjusting the institutional framework in that sector to attend to rural areas. Complementarily to this program, operation NI-L1145 includes upgrades to water and sanitation systems in the urban cores of two of the three municipios targeted in component 1. Other donors (such as the Swiss Agency for Development and Cooperation) have documented that in the countryside in particular, community participation<sup>7</sup> and user engagement, on the one hand, and the integration of sector and local actors, on the other hand, through localized interventions and decentralized mechanisms have produced results that are sustainable thanks to a sense of community ownership. The interventions in environmental sanitation proposed in this program seek to tap MINSA's experience and the development of the community health system, if not to impact water and sanitation coverage (which does not fall within the MINSA's purview), then to work towards safer use and protection of water resources (paragraph 1.25).
- 1.6 **Public transportation and road conditions limit access by the rural population to the health system.** The most recent Nicaraguan Demographic and Health Survey (ENDESA, 2011-2012) reports lack of transportation as a major reason for not using essential services, particularly in the prioritized regions and the Caribbean. An impact evaluation performed in Nicaragua indicates that improving rural roads has a positive impact on public well-being, reducing travel times and developing

<sup>6</sup> [OEL#2](#) [5].

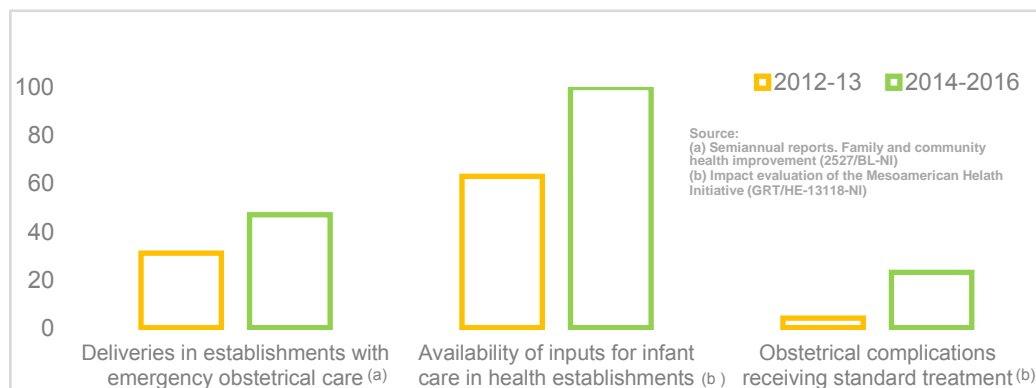
<sup>7</sup> Healthy family, school, and community method (very small scale interventions with community participation and a strategy to induce behavioral changes) [OEL#2](#) [6].



transportation services, and improving education and health indicators.<sup>8</sup> Access to district hospitals in the Las Segovias and North Central regions is via 5,959 km of unpaved roads, on which the average speed is 20 km an hour, and via an additional 1,349 km of surfaced roads. The lack of road integration in rural areas is a constraint on access to basic health services, which limits the use and timeliness of care (paragraph 1.10), given that just 30% of the main collector roads are paved.

- 1.7 **Weaknesses in the operation of public transportation.** The inter-municipal public transportation service is regulated by the Ministry of Transportation and Infrastructure (MTI), and intra-municipal service is the responsibility of the municipal governments. Carrying 30 passengers or more, most vehicles have been in service for more than 20 years, have high operating costs, and are uncomfortable. Frequency is poor. Small motor boats (*pangas*) that carry 20 to 30 passengers are used on navigable rivers that connect municipal seats with more remote regions (in Jinotega and Nueva Segovia), but river-based public transportation offerings are poorly developed, irregular, and even more infrequent than overland services.
- 1.8 **Gaps persist in health care coverage and quality, which make it necessary to continue to implement a community-based, integrated health care model.** The progress in maternal and infant health mentioned at the outset of this document is the outcome of improvements in health care coverage and quality by MINSA, which has reinforced services under the Family and Community Health Model (MOSAFC). Bank-financed programs have contributed to this progress (Figure 1.1). The model is based on deconcentrated service management by the SILAIS (footnote 3) and is founded on solid primary care coordinated with more complex services in integrated networks. The model promotes public participation in addressing health problems through strategies that rely on an increasingly active community platform (paragraph 1.12).

**Figure 1.1. Improvements in coverage and quality of maternal and child services with IDB support**



- 1.9 MINSA has hired new primary health care staff with funds freed up from a retirement plan—with financing from the program for strengthening of community health and extension of health and nutrition services in communities in the Dry Corridor region (2986/BL-NI)—and has prioritized the creation of family health teams to take charge of community care at health posts and community-based care centers known as *casas bases comunitarias* for the population in a given “sector” (basic regional unit

<sup>8</sup> [OEL#2](#) [7].

of the MOSAFC). The family health teams still only have an average of two people (not the required three), and given the newness of the staff and the clinical and managerial changes called for by the model, ongoing training and support are required. Expansion of the model into rural areas requires agile mechanisms and incentives such as those described in paragraphs 1.14 and 1.28.

- 1.10 **Expansion of primary and community care draws attention to the need to complete or upgrade infrastructure** at the health posts and the community-based care centers, or *casas bases comunitarias* (the “sector offices”). In the five prioritized SILAIS (see paragraph 1.1), between 20% and 50% of the sectors have no offices of their own or have buildings that are not suitable for providing public care or for guaranteeing the safety of personnel during their shifts. Another innovative element in the MOSAFC is the deployment in rural municipios of primary hospitals (which provide a level of service midway between health centers and general hospitals). The primary hospitals reduce the so-called “second wait,” a critical factor in preventable morbidity and mortality,<sup>9</sup> by offering emergency care, basic surgery, and essential obstetric and neonatal care in rural municipios, so that rural dwellers do not have to travel over a day from their communities for basic care. In the prioritized area, seven of the thirteen primary hospitals require improvements to bring them up to MINSA standards. With Bank support under the program for developing health care networks, phases I and II (1897/BL-NI and 2789/BL-NI), the two hospitals in the North Central regions have been rehabilitated, reducing the number of referrals to Managua, but Las Segovias did not receive support, owing to lack of funds, and has been given priority in the proposed operation.
- 1.11 **Better care throughout life and more proactive users.** The epidemiological transition mentioned in paragraph 1.1 demands an improvement in maternal and child care, prevention, timely and comprehensive treatment for noncommunicable chronic diseases, and “special care” (prevention and treatment of disabilities) under an integrated model. Just seven of the fifty health centers and primary hospitals in the five SILAIS offer special care (physiotherapy/stimulation), and there is no continuity between the primary care that is offered with hospital rehabilitation services (concentrated in Managua and the regional hospitals) or with the community-based care offered under *Todos con Voz*, the program for the inclusion of persons with disabilities.
- 1.12 MINSA is promoting community strategies, such as the Community Health and Nutrition Program (PROCOSAN) and youth clubs as part of the Adolescent Health and Comprehensive Development Strategy, which are aligned with best practices for promoting healthy behavior and reducing risky behavior, encouraging people to take charge of their own health. This requires the creation and ongoing training of a network of community promoters who, as peers, model and support healthy behaviors and spread knowledge. The research on which the messages are based needs to be regularly updated to ensure that the messages are relevant, giving the people themselves a voice in identifying the barriers they encounter as they work to improve their health. PROCOSAN needs to update the research (performed in 2002) behind its counselling strategy and its approach to adolescents should make more use of the media that this sociodemographic group prefers: messaging and mobile telephones. Lastly, evidence shows that investments in infrastructure (health, roads,

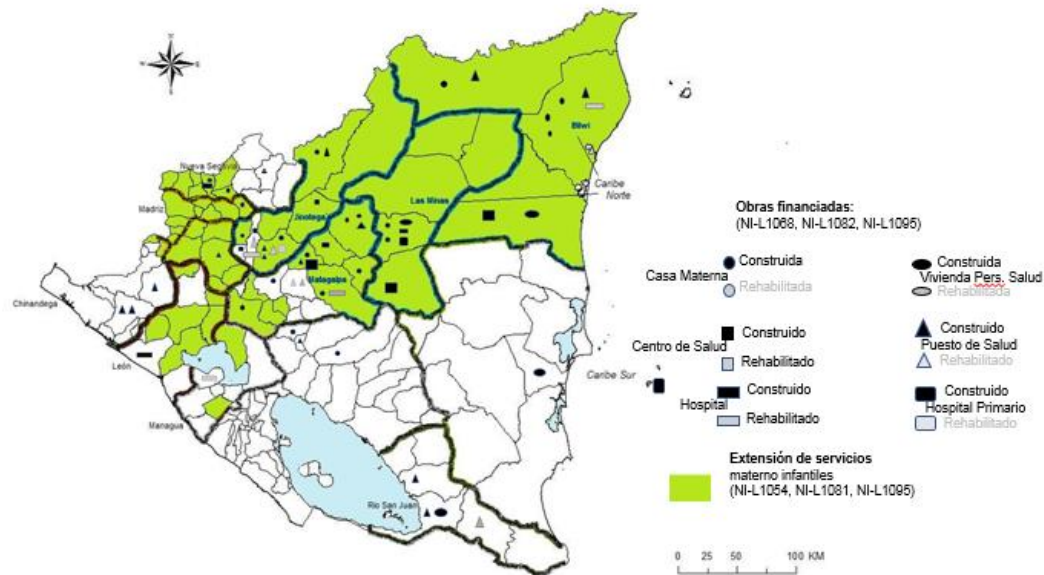
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<sup>9</sup> [OEL#2](#) [8]. The first wait is to decide to seek care, the second is to approach the services network, and the third is to receive treatment. Transportation and treatment capabilities (infrastructure and qualified staff) influence the second wait.

water and sanitation) have a positive impact on health only if the target groups change their hygiene habits inside and outside the household, use preventive services, and seek timely care.

- 1.13 Lastly, morbidity and mortality caused by noncommunicable chronic diseases are rising steadily, which translates into high demand for outpatient and hospital services. Cardiovascular diseases and cancer cause 40% of all deaths. Between 1997 and 2014, in the over-50 age group, the mortality rate due to cardiovascular disease rose from 563 deaths to 648 deaths per 100,000 population and diabetes rose from 147 deaths to 195 deaths per 100,000 population. Cervical cancer is the leading cause of death among women and, at a rate of 31 deaths per 100,000 women, is the highest in Central America. The mortality rate due to chronic kidney disease is 42.8 deaths per 100,000 population. The absence of a primary care model for people with chronic diseases that covers systematic early detection and diagnosis and good quality treatment means that a large percentage of patients are diagnosed in advanced stages or with acute complications, overwhelming the specialized services and making diseases more lethal. Timely treatment reduces the risk of serious complications (hypertensive crises, decompensated diabetes) and delays the onset of chronic complications, preventing unnecessary hospitalization. Establishment of the chronic kidney disease patient registry needs to be expedited and linked to the general registry of patents with chronic diseases (with hypertension, diabetes, and/or cancer).
- 1.14 **Lessons learned and linkage to other Bank operations.** The current portfolio of health programs initially stressed maternal and child health in the North Caribbean and North Central regions (2010-2013) (Map 1.4), contributing to the progress described. The Program to Improve Family and Community Health developed an innovative mechanism of transfers to MINSA per person assisted, which supports the expansion of services known to be cost-effective and verified through technical audits. MINSA receives a declining portion of the incremental cost of providing the services against evidence that the public is receiving care. One lesson learned is that patient-based transfers have been critical for reaching rural communities, minimizing transaction costs, and incentivizing effective coverage, which has improved the end indicators for maternal safety and infant survival. Accordingly, the proposed program will use this mechanism to support the deployment of new services such as the detection and primary treatment of chronic diseases, as well as support for people with disabilities by providing special care in the community and at the primary treatment level (see paragraph 1.28).

Map 1.4. Map of existing health programs



- 1.15 Projects to rehabilitate health infrastructure are rationalizing the use of power and water, renewing electrical and hydro-sanitary systems and hospital equipment, and investing in maintenance, and therefore component 2 prioritizes investments of this kind.
- 1.16 Investments in transportation have recently been channeled through the MTI, which executes operations to address road improvement needs in priority rural areas, helping to reduce poverty and facilitating access to basic services for the low-income population and access to areas of consumption for zones with productive potential. In addition, the MTI has executed programs with major maintenance activities similar in technical scope and environmental impact to the works envisaged in the proposed program.
- 1.17 This program proposes to integrate multisector interventions known to improve health determinants by attending to the basic needs of the rural population, including geographic accessibility and sanitation of housing and the environment, in a framework of sustainability, through the promotion of healthy practices,<sup>10</sup> which will create synergies and mitigate the impact of climate change on health. One lesson has been that in order to expedite multisector programs in Nicaragua and in similar contexts, each stakeholder must feel a sense of ownership of the overall program objective while identifying the specific objectives related to their mandates. Defining operating mechanisms that give stakeholders sufficient autonomy while also ensuring that they are ultimately working towards the same goal will make for a nimble operation and adequate sequencing without sacrificing the synergies that arise between interventions. The arrangement proposed for component 1 (paragraphs 3.1 to 3.5 and 3.9) seeks to strike this balance between the coexecuting agencies.

<sup>10</sup> The program will be supported by the technical-cooperation project to promote healthy practices in Nicaragua (NI-T1249) [OEL#2](#) [10-11-12].

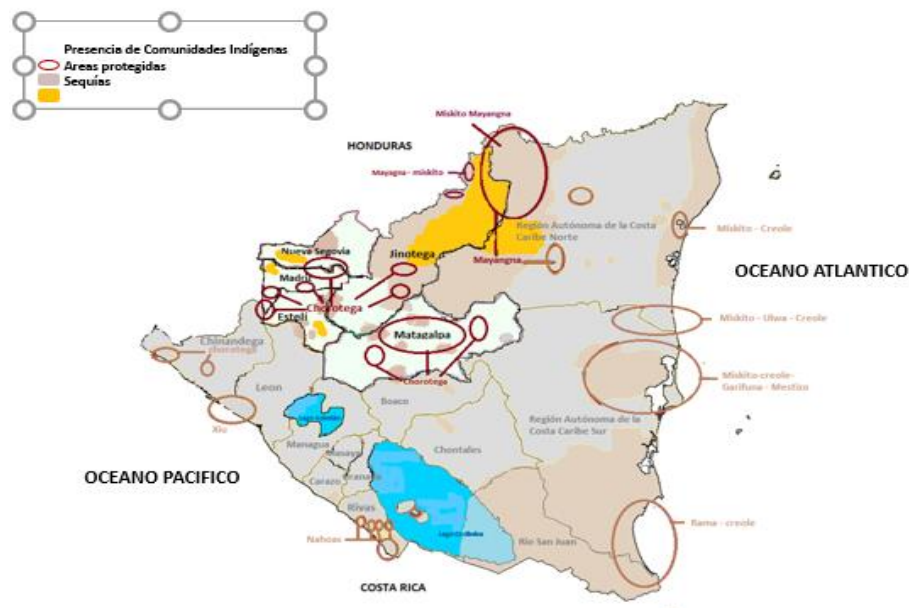
- 1.18 **Strategic alignment.** The program is consistent with the Update to the Institutional Strategy 2010-2020 (document AB-3008) and is strategically aligned with: (i) the development challenge of social inclusion and equality through better access, coverage, and quality of health care services and connectivity, targeting areas with high rates of poverty, and thus helping to reduce transmissible diseases and maternal and child mortality. The program is also aligned with the crosscutting theme of gender equality and diversity since it expands services for women of reproductive age, pregnant women, and mothers and enhances services for adolescents, which will promote the inclusion of vulnerable, underserved groups.
- 1.19 The program will contribute to the Corporate Results Framework 2016-2019 (document GN-2727-6) through a reduction in maternal and child mortality and an improvement in the indicator for people benefitting from health care services. The selection of comprehensive and cost-effective interventions and support for community health and an integrated network based on primary care are consistent with the Health and Nutrition Sector Framework Document (document GN-2735-7). Component 1 is consistent with the Sustainable Infrastructure for Competitiveness and Inclusive Growth Strategy (document GN-2710-5) since it will build and maintain infrastructure to provide quality services that promote sustainable and inclusive growth, and it is also aligned with the Transportation Sector Framework Document (document GN-2740-7) inasmuch as it will pursue the rehabilitation of road system to ensure full utilization of existing assets and support interventions with a multisector approach to meet basic needs for rural and isolated locations and for small countries.
- 1.20 The operation will help to: (i) improve the quality of care throughout the life cycle; and (ii) strengthen sustainable and participatory practices, consistent with the Bank's Country Strategy with Nicaragua 2012-2017 (document GN-2683), which gives priority to reducing chronic child malnutrition, lowering maternal and neonatal mortality in poor rural areas, and improving access to basic services and markets through upgraded road infrastructure. The program is included in the 2017 Operational Program Report (document GN-2884).
- 1.21 The operation is aligned with the crosscutting theme of climate change and environmental sustainability. It is estimated that 4.16% of program resources will be invested in climate change mitigation activities, according to the [the multilateral development banks' joint methodology for tracking climate finance](#). These resources contribute to the IDB Group's target to increase financing for climate-change-related projects to 30% of all approvals by the end of 2020.

**B. Objective, components, and cost**

- 1.22 The objective is to improve public health through regional management of health care and some of its most significant determinants in priority areas, promoting healthy practices and improving access roads and the coverage and quality of health services to accelerate the reduction in maternal and child morbidity and mortality and check the advance of the main chronic diseases.
- 1.23 **Targeting.** Map 1.5 identifies the geographical area targeted by the program as a whole and the specific municipios that will receive support under component 1. The prioritized SILAIS are located in the departments of Nueva Segovia, Madriz, Estelí,

Matagalpa,<sup>11</sup> and Jinotega, have a population of 1.7 million including about 250,000 children under the age of five and 459,000 women of reproductive age. The program has three components. Component 1 targets the municipios of Wiwilí (Jinotega), Quilalí (Nueva Segovia), and Las Sabanas (Madriz) taking into account that these municipios: (i) have wide gaps in water and sanitation services,<sup>12</sup> access, and health services, and require a multisector intervention<sup>13</sup> to improve their health indicators; (ii) each one belongs to a different SILAIS; and (iii) they have different geographic characteristics. The multisector aspect is reflected in integrated territorial management that views the impact of road conditions and transportation services as determinants of health: improvements to the physical condition of the roads as well as the operation of the service are justified as part of a holistic approach to quality of health care, in terms of accessibility (see paragraphs 1.6 and 1.7). The improvement consists of more extensive maintenance, involving new surfacing of the entire road. There are also plans for basic maintenance, which involves new surfacing only in specific areas that are damaged.

Map 1.5. Program targeting



1.24 **Component 1. Regional management of health determinants (US\$23.4 million).** The objectives of this component are: (i) to manage and develop a series of investments in health, environmental sanitation, and access to basic services, taking a multisector approach; and (ii) to implement a strategy to promote healthy practices in the home and environs.

<sup>11</sup> Although, politically, Waslalá is part of the North Caribbean region, administratively, it is served by the department of Matagalpa (with respect to health, by the SILAIS-Matagalpa), due to its distance from the regional seat, and for purposes of this program, it is included in that SILAIS.

<sup>12</sup> The water and sanitation activities involve improvements in water quality by MINSA, implemented principally by community volunteers and health practitioners.

<sup>13</sup> The scope of the outputs is described in the results matrix.



- 1.25 Financing will be provided for the following in each prioritized municipio: (i) establishment of a management team responsible for implementing the investment plan for each participating municipio; and (ii) implementation of each plan, which includes: (a) construction/opening of health centers, health posts, *casas base comunitarias*, and maternity waiting homes; (b) the delivery of packages and sanitation to improve household water quality in 70 rural communities and in the urban cores of the prioritized municipios; (c) improvements in rural collector roads that provide access to the health units in Quilalí and Wiwilí;<sup>14</sup> (d) regulatory measures to improve inter-municipal public transportation routes to the health units, adjusting their coverage and frequency; (e) basic maintenance of the upgraded roads—see (c); and (f) other priority road works.
- 1.26 As crosscutting aspects of the investment plans, the following will be implemented: (i) a strategy to raise awareness and promote healthy practices related to hygiene, sanitation, water source protection, filtration, storage, and safe handling, and the timely seeking of medical care, through discussions with the community, peer education, and group counseling, executed by the territorial management teams under the mechanism of transfers from the central level; and (ii) municipal works maintenance plans for each prioritized municipio.
- 1.27 **Component 2. Improvement in the quality of health care (US\$90.6 million).** The objective is to improve the quality of care throughout the life cycle by strengthening clinical management, management of the MOSAFC, and the treatment capacity of the services network.
- 1.28 **Subcomponent 2.1. Consolidation of clinical management throughout the life cycle.** Financing will be provided for the following: (i) implementation of an education strategy to bring about changes in infant feeding and childrearing practices (PROCOSAN, breastfeeding, and micronutrient supplements); (ii) implementation of the national strategy for the health and comprehensive development of adolescents; (iii) improvement in the protocols for detecting and managing the most prevalent noncommunicable chronic diseases at the primary level and expansion of the application of those protocols by making transfers to MINSA for each patient enumerated, registered, and served (applying the mechanism described in paragraph 1.14); and (iv) consolidation of an integrated special care strategy with its respective protocols and expansion of coverage at the community and primary levels, also through transfers to MINSA.
- 1.29 **Subcomponent 2.2. Strengthening of management of the Family and Community Health Model (MOSAFC).** The objective is to enhance the capacity of MINSA staff on the central and regional levels to manage and supervise the main interventions in the MOSAFC, with the emphasis on the sustainability of the model. Financing will be provided for the following in the five SILAIS supported by the program: (i) application of a strategy for continuous improvements in quality; (ii) provision of a vehicle fleet for municipal health departments to mobilize the family health teams and supervisors; (iii) training for staff in implementing MINSA's environmental management framework; (iv) training for technicians in maintaining sanitary infrastructure and equipment; (v) provision of mobile maintenance units; and (vi) replacement and opening of SILAIS-MINSA maintenance workshops (Madriz, Estelí, Matagalpa, Jinotega).

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<sup>14</sup> [OEL#2](#) [12].

- 1.30 **Subcomponent 2.3. Improvement in treatment capacity in the prioritized systems.** Financing will be provided to improve the treatment capacity of the prioritized SILAIS by: (i) replacing the hospital at Ocotal (Nueva Segovia); (ii) rehabilitating the hospital at Estelí and the primary hospital at San Juan de Limay (Estelí); (iii) replacing the primary hospitals at Wiwilí (Jinotega) and Waslala (Matagalpa); (iv) building and equipping the hospital at Jalapa (Nueva Segovia); (v) replacing the health center at La Trinidad (Estelí); and (vi) building 10 and equipping at least 30 physiotherapy and early stimulation rooms in municipios with no service or with shortages of equipment.
- 1.31 **Component 3. Fight to control and eradicate malaria (US\$9.8 million).** Financing will be provided to consolidate the program to control and eradicate malaria at the national level and in municipios with the highest incidence in the SILAIS in the Dry Corridor, including Chinandega, and the North and South Caribbean regions, through two subcomponents.
- 1.32 **Subcomponent 3.1. Strengthening of surveillance of vector-borne diseases.** Financing will be provided for the following: (i) training for specialized staff with an emphasis on detection, targeted use of rapid tests, and epidemiological analysis; (ii) modernization of the equipment at the National Diagnostic and Reference Center and regional laboratories; and (iii) construction and equipping of a regional laboratory (Estelí).
- 1.33 **Subcomponent 3.2. Control of vectors and contagion prevention.** Financing will be provided for the following: (i) the construction and equipping of a regional supply warehouse and the cold chain; (ii) an update to the matrix of intersector water quality surveillance responsibilities and training in its application; (iii) implementation of water surveillance and vector control plans; and (iv) contagion prevention, including management of febrile illness and confirmed cases.
- 1.34 **Program administration and evaluation (US\$2.8 million).** For good program implementation and for learning purposes, especially in relation to the regional and multisector model and the expansion of coverage of new interventions, financing will be provided for the following: (i) technical assistance and incremental staff for MINSA to move ahead in implementing the MOSAFC, expanding coverage, and implementing the quality strategy at the central level, in the SILAIS, and in the prioritized municipios; (ii) a micro-evaluation of multisector intervention processes and impact; and (iii) an independent, reflexive macro-evaluation. The administrative expenses include audits (financial and technical). Lastly, the financing will cover up to US\$6.4 million in interest.

Table 1.1. Cost

Components	IDB (US\$)	Local (US\$)	Total (US\$)
1. Regional management of health determinants	23,435,200		23,435,200
2. Improvement in the quality of health care	90,548,250	5,000,000	95,548,250
3. Fight to control and eradicate malaria	9,750,000		9,750,000
Program administration and evaluation	2,816,550		2,816,550
Finance charges	6,450,000		6,450,000
<b>TOTAL</b>	<b>133,000,000</b>	<b>5,000,000</b>	<b>138,000,000</b>



## **C. Key results indicators**

- 1.35 The results matrix includes public health impact indicators related to problems reflecting the social and health-related vulnerability of the prioritized regions. The impact on the health of women and children (including adolescents) will be reflected in a steady reduction in maternal mortality, child morbidity and mortality, and chronic malnutrition, which will also reduce likelihood of developing noncommunicable chronic diseases in adulthood. For the general population, efforts will be launched to contain noncommunicable chronic diseases (such as cervical/uterine cancer) and control vector-borne diseases, particularly malaria. The foregoing is expected as a result of the following achievements: (i) reduction in the number of episodes and severity of diarrhea and acute respiratory infections; (ii) adoption of healthy and sustainable practices with respect to hygiene, nutrition, and quality of the water consumed in the household; (iii) reduction of barriers to access to health services (by increasing the speed of travel on roads to health units and the supply of public transportation services); (iv) better quality care in institutional deliveries and children's health and nutrition, through an increase in demand and more relevant care, particularly for adolescents and ethnic communities; (v) timely attention (detection of chronic diseases, persons with special needs such as disabilities and the need for rehabilitation, timely hospital admissions); (vi) improved treatment capacity of local systems; and (vii) better surveillance and timely treatment of vector-borne diseases. The impacts on the health of women and adolescents and the reduction in infant morbidity will contribute to greater gender equality and as such will be documented in [REL#2](#).
- 1.36 **Economic analysis.** With regard to the savings in time thanks to road improvements, each household invests the equivalent of US\$20.87 in time worked to pay for inadequate transportation. Considering the costs of the interventions to upgrade roads and using a discount rate of 10%, the net present value is US\$14,650,853.83 with a cost-benefit ratio of 3.23, which justifies the investments in this project. The health benefits resulting from better quality and strengthening of care are estimated in terms of disability-adjusted life years (DALY), which reflect morbidity and mortality avoided as a result of the interventions. The cost per DALY gained is US\$110.85 (adjusted over the five years of project execution), which means that it is highly cost effective according to the thresholds set by the World Health Organization ([OEL#2](#)) [12].

## **II. FINANCING STRUCTURE AND MAIN RISKS**

### **A. Financing instruments**

- 2.1 The program will be financed through a multiple works investment loan. It includes independent projects that are to be tendered during the first two years of program execution. A representative sample equivalent to 56% of the loan proceeds and consisting of the Ocotál hospital and the Quilalí-Wiwilí road was evaluated during program preparation, and there are designs ready for tendering in the first six months of program execution or pre-designs for tendering under the design-build modality. Because this is a multiple works operation, any works that are included in the program will meet the following eligibility criteria: (i) the works will be of the same technical nature as the ones evaluated and will be located in one of the five prioritized SILAIS; and (ii) the works will have the same socioenvironmental

classification.<sup>15</sup> The estimated cost of the program is US\$138 million, of which US\$79.8 million (60%) will be drawn from the Bank's regular Ordinary Capital, US\$53.2 million (40%) will be drawn from its concessional Ordinary Capital, and US\$5 million will be contributed by the Nicaraguan government for maintenance of the hospital infrastructure financed by the program. The disbursement period will be five years.

**Table 2.1 Disbursement schedule (US\$ thousands)**

	2018	2019	2020	2021	2022	TOTAL
IDB	4,300	17,300	78,300	23,000	10,100	133,000
%	3.3%	13.0%	58.8%	17.3%	7.6%	100%
Local	0	0	500	2,500	2,500	5,000

## **B. Environmental and social risks**

- 2.2 Given the nature of the proposed infrastructure interventions and in accordance with Directive B.3 of Operational Policy OP-703, this program has been classified as a category "B" operation. The socioenvironmental impacts will be local, temporary, and short-term, and effective and known mitigation measures are planned in the affected sectors. The works will be executed in a zone that is exposed primarily to earthquakes, droughts, and flooding and presents a medium level of risk (moderate, type 1) according to the Disaster Risk Management Policy (OP-704). Under the Access to Information Policy (OP-102), the environmental and social assessments of the sample and of the program as a whole have been published on the Bank's website. None of the works will require involuntary resettlement or expropriations of land, since they will be built on vacant land owned by the central government.
- 2.3 The projects will be located in zones that include some indigenous communities, and therefore the guidelines of the Operational Policy on Indigenous Peoples (OP-765) will be followed to mitigate and prevent any environmental or social risk or impact on these communities. Public consultations will be held in accordance with operational policy OP-703, with an emphasis on participation by the indigenous communities affected and/or benefited by the program.
- 2.4 The magnitude and intensity of the direct, indirect, and cumulative program impacts is moderate. The possible risks and most critical negative socioenvironmental impacts correspond to the generation of wastewater and solid waste from hospitals; exposure of patients, employees, and visitors to infections; and soil contamination from oil leaks and spills resulting from the use of heavy equipment. The mitigation measures are established in the evaluations of the sample and of the operation as a whole, and implementation of those measures will mitigate the risks and impacts. As a special execution condition, the coexecuting agencies are required to comply with the socioenvironmental conditions established in Annex B to the [Environmental and Social Management Report \(ESMR\)](#). The Bank will periodically supervise compliance with those conditions during the life of the program.

<sup>15</sup> [OEL#5](#) presents the list and status of the projects. The environmental and social analysis and corresponding management plans for the sample were published on the websites of the Bank, MINSA, and the MTI. None is classified as a category "A" project under the Environment and Safeguards Compliance Policy (OP-703).

## **C. Fiduciary risks**

- 2.5 Institutional capacity assessment was conducted using the Institutional Capacity Assessment System (ICAS) methodology. The results suggest that MINSA has the capacity to execute the program, given that it has satisfactory institutional development with low risk. The organization of the External Funds Coordination Unit (UCFE) involved in the financial management of programs should be improved to ensure adequate staffing. The MTI (coexecuting agency of component 1) has solid capacity and fiduciary experience in project execution, as confirmed by the most recent ICAS update, which indicates satisfactory institutional development with low risk. MINSA and the MTI have extensive experience in managing Bank projects. The overall fiduciary risk is moderate, and the arrangements described in section III and in Annex III describe the risk mitigation measures that have been identified.
- 2.6 Lastly, MINSA has a large and complex portfolio that requires the coordination of multiple areas. The implementation plan relies on existing institutional structures (i.e., no ad hoc unit), which contributes to sustainability. However, this affects the timeliness of implementation since the government is attempting to cap staffing at the central and administrative levels, making it increasingly difficult to sustain the quality of execution achieved to date by MINSA. To mitigate this moderate risk, a technical and operational team will be engaged at the central level and in the SILAIS to work exclusively on program execution (incremental staff), an arrangement that will be included in the management safeguards plan described in paragraph 3.2 and included as [OEL#3](#).

## **D. Other project risks**

- 2.7 The main risks are as follows. (i) There is a moderate risk related to achieving effective institutional and multisector coordination between MINSA and the MTI, which will be mitigated through: (a) signature of interagency agreements (see paragraph 3.5); (b) establishment of specific program Operating Regulations (see paragraph 3.2); and (c) establishment of management teams in each SILAIS to answer for the investment plan (see paragraph 3.6). (ii) There is a moderate risk related to effective participation by local governments and stakeholders in the beneficiary communities in the development of the infrastructure works and their subsequent maintenance, to be mitigated through: (a) interventions to promote timely maintenance and willingness to pay (for public transportation); and (b) preparation of a community participation manual and a maintenance plan backed by the municipal budgets. (iii) There is a moderate risk related to limited local institutional capacity to execute the program. This risk especially applies to the environmental sanitation interventions in rural areas, which consist of many small-scale actions at scattered points and in settings with severe socioeconomic limitations. This means high logistics and administrative costs that could make the actions unattractive to for-profit suppliers. This risk will be addressed through: (a) an execution mechanism based on transfers to MINSA for each milestone attained in the rural investment plan (see paragraph 3.7); and (b) contracting by MINSA of a management team to carry out the environmental sanitation interventions, with professional profiles and levels of experience agreed upon beforehand with the Bank. (iv) There is a moderate risk of lack of contractors interested in working in the rural area in an integrated manner (transportation and health), which would limit the

works or make them more expensive. As a mitigation measure, potential bidders<sup>16</sup> will be identified prior to project eligibility, in coordination with MINSA and the MTI.

### III. IMPLEMENTATION AND MANAGEMENT PLAN

#### A. Summary of implementation arrangements

- 3.1 **Executing agency, coexecuting agency, and coordinated institutions.** The main executing agency for the program will be the Ministry of Health (MINSA), which has a mandate to promote and improve public health. The Ministry of Transportation and Infrastructure (MTI) will be the coexecuting agency of component 1, responsible for investments and technical assistance to improve roads and public transportation services, in its capacity as lead agency in charge of the road integration program. On account of their mandates, other institutions will participate in the strategic coordination of the program: the Ministry of Finance (MHCP), responsible for public expenditure and investment, and the Nicaraguan Municipal Development Institute (INIFOM), responsible for regional development. Table 3.1 shows the distribution of component 1 resources between the executing and coexecuting agencies.

Table 3.1 Breakdown by executing agency. Component 1 (US\$)

Executing agency	IDB	Total
MINSA	5,715,000	5,715,000
MTI	17,720,200	17,720,200
<b>TOTAL</b>	<b>23,435,200</b>	<b>23,435,200</b>

- 3.2 **Minimum content of the program Operating Regulations.** The program will have Operating Regulations that establish the functions and responsibilities of each institution, coordination mechanisms, the technical and fiduciary supervisory structure, the criteria for the eligibility review of expenditures for the transfers planned for the SILAIS and MINSA under components 1 and 2, respectively, and the frequency and minimum content of the monitoring reports, with special attention to component 1 (see paragraph 3.5). The Operating Regulations will also establish the arrangements for complying with the environmental and social safeguards established in Annex B to the ESMR, including the scope of the respective annual reports, and will include MINSA's management safeguards plan as an annex ([OEL#3](#)). The plan establishes actions to ensure that portfolio management will meet minimum targets, with Bank support. MINSA will be responsible for complying with the management safeguards plan, particularly the assignment of a core technical/operating team (at the central level and in the SILAIS) for timely delivery of the outputs defined in the multiyear execution plan. This team will be contracted as incremental staff using loan proceeds.<sup>17</sup> The procedure will be described in an annex to the program Operating Regulations.
- 3.3 The MTI has a project coordination unit staffed with in-house personnel in charge of internal coordination of technical, contractual, socioenvironmental, and financial aspects of implementation.
- 3.4 The fiduciary requirements and agreements (Annex III) establish the framework for financial management and planning and procurement supervision and execution.

<sup>16</sup> See section VI, [OEL#2](#).

<sup>17</sup> Or as institutional personnel.

The financial accounting records will be governed by the operational guidelines for the financial management of IDB-financed projects (document OP-273-6).

- 3.5 To put the coordination required for component 1 into effect it will be necessary to: (i) have the institutions involved sign an interagency agreement setting out the responsibilities of each and the coordination mechanisms; and (ii) establish management teams to coordinate the investments in each prioritized municipio. These teams will come under the structure of the corresponding SILAIS, and their responsibilities are described in the following paragraph. Compliance with the multiyear execution plan, the Operating Regulations, and the interagency agreements will also be reviewed by a council that meets quarterly, chaired by the MHCP. The Bank will participate in the meetings held at the six-month mark as part of the portfolio review.
- 3.6 The management teams will be responsible for coordinating implementation of the integrated investment plan for their municipio, including: (i) relations with and strengthening of the municipal government (investment unit); (ii) a single bidding process and contract per municipio that covers all the works to be financed in each municipio;<sup>18</sup> (iii) contracting, supervision, and/or management of the technical assistance, inputs, and operating expenses required for the health and community participation interventions; (iv) resident supervision and external supervision of works; and (v) consolidation of the physical and financial status reports on the interventions, including MTI inputs. The SILAIS have the competence and experience to contract the personnel that will form these regional management teams and to carry out deconcentrated execution of the health and community participation activities required in the regions.
- 3.7 Lastly, the investments in environmental sanitation and community participation will be executed by MINSA's regional management teams under a mechanism whereby MINSA issues transfers to each team, as described in paragraph 3.11 and in the lessons learned (paragraph 1.14).
- 3.8 **Procurement and direct contracting.** The policies for the procurement of works and goods financed by the IDB (document GN-2349-9) and the policies for the selection and contracting of consultants financed by the IDB (document GN-2350-9) will be applied, and each executing agency will implement the procurement plan through its existing procurement units. MINSA will directly contract the Pan American Health Organization (PAHO) to conduct the technical audit of the expanded health services in recognition of the exceptional value that the experience of this specialized agency represents, in accordance with paragraph 3.10 (d) of document GN-2350-9. PAHO will apply the methodology it used for similar services under the Community Health Program for Rural Municipios (3696/BL-NI).
- 3.9 **Financial management.** Each coexecuting agency will be responsible for reporting, control, and preparation of the audited financial statements for the funds allocated to it. MINSA will manage Bank disbursements in a single fund (Account 1) for the health and environmental sanitation activities in component 1, the other components, and the administrative expenses; the MTI will manage another fund (Account 2) for the investments in road access under component 1.

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<sup>18</sup> The management teams will coordinate with the Project for the Improvement and Sustainable Management of Drinking Water and Sanitation Services in Urban and Periurban Areas (NI-L1145).

- 3.10 **Execution of the environmental sanitation interventions and promotion of healthy practices.** Central MINSA will transfer funds to each management team (SILAIS) in preestablished amounts<sup>19</sup> against evidence of the attainment of milestones and outputs corresponding to the community interventions in component 1. Attainment of the milestones will be verified through the technical audits (see paragraphs 1.14, 1.34, and 3.8). In the case of component 2, for the transfers to MINSA, the latter will present, as part of the itemization of expenditures on its disbursement requests, a statement, consolidated by municipio, of the total number of individuals served, in accordance with each established indicator. The ex post reviews of disbursements will analyze the eligibility of the expenditures based on the criteria set in the program Operating Regulations (see paragraph 1.28).
- 3.11 **Disbursements.** For component 1: (i) MINSA, through its External Funds Coordination Unit (UCFE), will request advances or direct payments from the Bank; (ii) the funds will be transferred to a separate account for each municipio, in accordance with the annual work plan of the pertinent municipal health department, with a copy to the corresponding SILAIS; (iii) the municipal health department will submit documentation supporting the disbursements to the SILAIS for validation and delivery to the UCFE-MINSA; and (iv) the UCFE-MINSA will revise, approve, and submit the supporting documentation for the use of resources to the Bank.
- 3.12 The ex post reviews of disbursements and procurements will verify that the expenditures made with loan proceeds correspond to items predefined as eligible.
- 3.13 **Financial audits.** MINSA, in coordination with the MTI, will use loan proceeds to contract an independent firm acceptable to the Bank to audit the financial statements separately for the funds managed by each institution. MINSA and the MTI will receive advances in amounts sufficient to cover disbursements under a financial plan covering a period of up to six months, including in MINSA's case, transfers to the SILAIS as indicated in paragraph 3.10. The two institutions will use the modality of advances of funds of up to a maximum of six months, depending on the liquidity needs related to the program of each executing agency, and must justify at least 50% of the previous advance before a new one will be processed.
- 3.14 **The following will be special contractual conditions precedent to the first disbursement of the loan: (i) approval and entry into force of the program Operating Regulations previously agreed upon by the borrower and the Bank; and (ii) contracting by the MINSA of a core technical/operating team to work exclusively on program execution.**
- 3.15 Having program Operating Regulations and a core technical/operating team in place at startup is indispensable given the multisector nature of the operation and the large number of interventions involved, as well as to identify and ensure the necessary technical and operational coordination of activities from the outset.

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<sup>19</sup> Estimated cost of personnel, materials, and inputs needed for the interventions. Transfers from central MINSA to the SILAIS are eligible expenditures, and prior approval of a work plan will not be required for these interventions. The expenditures made by each SILAIS will be reported and verified ex post, through a financial audit to ensure that they: (i) correspond to eligible items; (ii) are related to the delivery of the following outputs in the multiyear execution plan: "Rural families benefiting from a package of support for healthy practices in the home and environs," "Infrastructure of rural sector offices improved," and "Community social agreements that include the promotion of health practices in rural communities signed and evaluated by the community and the municipal health department"; (iii) have been made in the prioritized areas; and (iv) comply with procurement procedures agreed upon in advance.



- 3.16 Special execution conditions: As a condition precedent to disbursement of the funds corresponding to component 1, the stipulations of paragraph 3.5 (i) and (ii) must be fulfilled. These conditions are necessary to agree promptly on the responsibilities of each institution and to have human resources in place to implement them. During program execution, MINSA will submit evidence semiannually that it has carried out the actions established in the current management safeguards plan and reached an agreement with the Bank on updates to the plan. This is a binding condition to facilitate formal monitoring by the Bank and the borrower as part of their portfolio reviews. If, in a six-month period, the parties find substantial noncompliance with the management safeguards plan, the operation will be placed on alert status.

**B. Summary of arrangements for monitoring results**

- 3.17 Program activities will be planned using the multiyear execution plan, which contains strategic targets for the entire program. Operational planning and monitoring will be done through the annual work plan (AWP), which may be modified based on real progress, with prior approval by the Bank. Annual reviews of the multiyear execution plan will be remitted to the Bank for approval.
- 3.18 MINSA, with inputs from the MTI in the case of component 1, will prepare the AWP based on the structure of the outputs stipulated in the results matrix and the multiyear execution plan. It will also structure the semiannual progress reports (monitoring and evaluation arrangements) in the same way, which will describe program achievements and progress and challenges for the next six months, and update the plan for the next period.
- 3.19 Two evaluations will be performed: (i) a micro-evaluation of processes and the impact of the multisector investments in the prioritized municipios to determine the impact on public health. Based on the proposed actions to strengthen multisector health interventions through an integrated health services system with a focus on primary care and to expand access to and the quality of health services and promote and improve environmental sanitation, the methodology proposed for the evaluation is to construct synthetic cohorts since an experimental method is not feasible. A quasi-experimental method will be used that takes account of the specific characteristics of the intervention. To construct the cohorts in the health project, information will be taken from the SILAIS in Nueva Segovia, Madriz, Estelí, Matagalpa, and Jinotega. The synthetic control will be composed of all the municipios in the departments of Matagalpa and Estelí, and, after excluding Wiwilí, Quilalí, and Las Sabanas, which are the treatment municipios, the rest of the municipios in Jinotega, Nueva Segovia, and Madriz. To construct the cohorts, data on morbidity and mortality and socioeconomic data such as mortality by disease, prevalence of chronic diseases, percentage of low-income population, aging, percentage of rural population, etc. will be used. (ii) An independent, reflexive evaluation will document progress in the impact and outcome indicators in the results matrix and verify the baseline levels identified during preparation. Factors that influence program performance will be carefully examined. For this purpose, official morbidity and mortality statistics from the beneficiary municipios, MINSA's institutional records, the external reports evaluating the performance of NI-L1095 (3696/BL-NI), any additional information that is provided, interviews of key informants, and data from focus groups will be used. To ensure the robustness of the analysis, the reliability and validity of the information from the different sources and its statistical power will be verified ([REL#2](#)).

Development Effectiveness Matrix		
Summary		
<b>I. Corporate and Country Priorities</b>		
<b>1. IDB Development Objectives</b>	Yes	
Development Challenges & Cross-cutting Themes	-Social Inclusion and Equality -Gender Equality and Diversity -Climate Change and Environmental Sustainability	
Country Development Results Indicators	-Maternal mortality ratio (number of maternal deaths per 100,000 live births) -Beneficiaries receiving health services (#)* -Households with new or upgraded access to drinking water (#)*	
<b>2. Country Development Objectives</b>	Yes	
Country Strategy Results Matrix	GN-2683	i) Help reduce maternal and neonatal mortality, particularly in rural areas of the country, and ii) Reduce chronic malnutrition among children in the 1,000 day window in poor rural and urban fringe communities.
Country Program Results Matrix	GN-2884	The intervention is included in the 2017 Operational Program.
Relevance of this project to country development challenges (If not aligned to country strategy or country program)		
<b>II. Development Outcomes - Evaluability</b>	Evaluable	
<b>3. Evidence-based Assessment &amp; Solution</b>	7.2	
3.1 Program Diagnosis	1.8	
3.2 Proposed Interventions or Solutions	2.4	
3.3 Results Matrix Quality	3.0	
<b>4. Ex ante Economic Analysis</b>	7.0	
4.1 The program has an ERR/NPV, a Cost-Effectiveness Analysis or a General Economic Analysis	4.0	
4.2 Identified and Quantified Benefits	0.0	
4.3 Identified and Quantified Costs	0.0	
4.4 Reasonable Assumptions	1.5	
4.5 Sensitivity Analysis	1.5	
<b>5. Monitoring and Evaluation</b>	9.1	
5.1 Monitoring Mechanisms	2.5	
5.2 Evaluation Plan	6.6	
<b>III. Risks &amp; Mitigation Monitoring Matrix</b>		
Overall risks rate = magnitude of risks*likelihood	Medium	
Identified risks have been rated for magnitude and likelihood	Yes	
Mitigation measures have been identified for major risks	Yes	
Mitigation measures have indicators for tracking their implementation	Yes	
Environmental & social risk classification	B	
<b>IV. IDB's Role - Additionality</b>		
The project relies on the use of country systems		
Fiduciary (VPC/FMP Criteria)	Yes	Financial Management: Budget, Treasury, Accounting and Reporting. Procurement: Information System.
Non-Fiduciary	Yes	Environmental Assessment National System.
The IDB's involvement promotes additional improvements of the intended beneficiaries and/or public sector entity in the following dimensions:		
Gender Equality		
Labor		
Environment	Yes	The program will finance water treatment systems in hospitals and actions to reduce water losses and non rational consumption.
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 sector that were identified in the project document and/or in the evaluation plan	Yes	A cuasi-experimental impact evaluation using the synthetic control method is proposed to assess the effectiveness of component 1.

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

The loan proposal presents as the main problem to resolve the prevailing regional disparities in health outcomes and the increasing incidence of vector-borne diseases in drought areas. As causes of this situation, the document identifies the limited access to water and sanitation services, deficiencies in the state of roads and transport systems to access health centers and various challenges in the functioning of the health system. The project proposes three components: multisector investment plans, improvements of health care services and actions to fight malaria.

The loan proposal includes evidence of the problem identified. However, it only presents partial evidence of the aforementioned causes, their magnitude and relation to the identified problem. In relation to the proposed components, the document does not present complete evidence on their effectiveness. The project's result matrix includes indicators that reflect the components to be financed. The indicators are SMART, include baselines and targets, as well as sources of information.

The economic analysis annex presents a cost-benefit analysis based on an adequate methodology. However, the estimated benefits are not entirely consistent with the logic of the project. Similarly, there is a gap between the costs considered in the analysis and the total budget of the loan.

The monitoring plan is adequate and recognizes the PMR as the main instrument monitor the operation. The PEP presents the annual and total costing of the products of the results matrix. The evaluation plan proposes a quasi-experimental impact evaluation based on the synthetic control methodology to measure the effectiveness of the first component. However, it is not clear that the units proposed to create the synthetic control will be exempt from the interventions of the other components, which could affect the selected variables of interest.



## RESULTS MATRIX

<b>Project objective:</b>	The objective of the program is to improve public health through regional management of health care and some of its most significant determinants in priority areas, promoting healthy practices and improving access roads and the coverage and quality of health services to accelerate the reduction in maternal and child morbidity and mortality and check the advance of the main chronic diseases.
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### EXPECTED IMPACT

Indicator	Unit of measure	Baseline	Baseline year	Final target (2022)	Means of verification	Comments
Triennial maternal mortality rate	Deaths per 100,000 live births	Estelí 0.0	2016	0.0	Evaluation by the Health Statistics Division of the Ministry of Health (DES-MINSA).	Baseline source: MINSA database on vital statistics and service production (DES-BEVPS). Five local integrated health care systems (SILAIS): Estelí, Matagalpa, Jinotega, Madriz, Nueva Segovia.
		Matagalpa 19.4		12		
		Jinotega 69		38		
		Madriz 0.0		15		
		Nueva Segovia 89		62		
Deaths in childhood from pneumonia and acute diarrhea**	Deaths per 1,000 children under 5	Jinotega 3.18	2012-2016	2.7		Baseline source: DES-BEVPS. 3 municipios: Las Sabanas (Madriz), Quilalí (Nueva Segovia), Wiwilí (Jinotega). The rates were averaged for the last five years, 2012-2016.
		Madriz 4.04		3.6		
		Nueva Segovia 2.86		2.0		
Prevalence of chronic malnutrition in children under 5**	Percentage	Jinotega 27.8	2011-2012	24	Nutrition Interventions Surveillance System (SIVIN)	Baseline source: Nicaraguan Demographic and Health Survey (ENDESA) 2011-12.
		Madriz 29.5		26		
		Nueva Segovia 27.7		24		
Age-standardized rate of mortality from cervical/uterine cancer	Per 100,000 women aged 15 and over	10.6	2016	7.8	Evaluation using DES-MINSA data.	Baseline source. BEVPS regional level: Average for 5 SILAIS: Estelí, Matagalpa, Jinotega, Madriz, Nueva Segovia.
Incidence of malaria	Cases per 10,000 population	6	2016	4.8		Baseline source. DES-BEVPS national level: Bilwí, Las Minas, Autonomous Region of the North Caribbean Coast (RACCS), and Chinandega have the highest rate of positive cases (to be defined).

\*\* Disaggregated by gender.

### EXPECTED OUTCOMES

Indicator	Unit of measure	Baseline (year)	Year 3 (2020)	Final target (2022)	Means of verification	Comments
<b>Component 1. Regional management of health determinants</b> (municipios of Quilalí, Wiwili, and Las Sabanas)						
Percentage of children under 5 admitted to hospital for acute diarrhea**	Hospital admissions per 1,000 children under 5	7.8 (2016)	7.3	6.5	Evaluation using DES-BEVPS-MINSA data	
Households with drinking water of acceptable quality	%	N/A		8 percentage points	Baseline and final measurement in 2022	The surveys will be conducted by MINSA as surveillance activities.
Average speed (truck, bus) on the main rural collector roads targeted for intervention	km/hour	20 (2017)	20	40	MTI study	Municipios of Quilalí-Wiwili. Collector roads connect rural communities to a health unit in the municipal seat.
<b>Component 2. Improvement in the quality of health care</b> (national level)						
Timely admission of women in labor and neonates with complications	%	60 (2014)	72	85	Evaluation using DES-BEVPS-MINSA data	
Children under 24 months supported with a child and community nutrition plan**	%	35 (2014)	45	60	SIVIN	The SIVIN survey scheduled for the first quarter of 2018 includes information on micronutrients.
Children under 5 with complete immunizations for their age**	%	54 (2014)	69	84	Evaluation using DES-BEVPS-MINSA data	
Adolescents with unmet family planning needs**	Percentage (%)	16 (2014)	13	10		
Persons requiring special care with access to community rehabilitation services**	%	10 (2014)	15	20	Evaluation using DES-BEVPS-MINSA data	Special care: rehabilitation for disabilities caused by, or secondary to, a chronic disease or accident.
Persons over 25 screened for timely detection of chronic diseases: diabetes, hypertension, overweight/obesity, cervical cancer, chronic kidney disease **	%	30 (2014)	40	60		Detection requires community participation, awareness-raising strategies, continuity with diagnostic protocols and management in primary care and at the secondary level through the MOSAFC strategy.

\*\* Disaggregated by gender.

Indicator	Unit of measure	Baseline (year)	Year 3 (2020)	Final target (2022)	Means of verification	Comments
Patients with chronic diseases who initiate the diagnostic process and receive immediate treatment**	Percentage	50 (2014)	70	85		
Hospital coverage of elective surgery	Percentage of surgeries scheduled in relation to the total number performed	55 (2014)	60	70		An increase is expected as a result of the increase in the supply of hospital services.
Component 3. Fight to control and eradicate malaria (national level)						
Health care establishments reporting cases to the surveillance system following national standards	%	70 (2014)	80	95	Evaluation using DES-BEVPS-MINSA data	Indicators from MINSA's Strategic National Malaria Response Plan 2014-2018.
Cases diagnosed and treated within the first 48 hours	%	70 (2014)	80	100		

\*\* Disaggregated by gender.

## OUTPUTS

Outputs	Unit of measure	2018	2019	2020	2021	2022	Final target	Means of verification	Comments
<b>Component 1. Regional management of health determinants (scope: municipios of Quilalí, Wiwili, and Las Sabanas)</b>									
Management teams established and operating	Teams	3					3	MINSA semiannual status report	Not cumulative. A team is operating when it launches the first bidding process in its municipal investment plan.
Annual investment plans executed and supervised	Plans		3	3	3	3	3		Not cumulative. An annual investment plan is executed when over 80% of the contracts have been awarded and 50% of the funds paid.
Health units (health posts, health centers, maternity waiting houses) in the prioritized area upgraded with improved access to water and sanitation	Health units		3	5	5		13	Certificates of acceptance of the works by MINSA	"Improved access" and upgraded infrastructure entails establishing or reestablishing connections to a water source (system, safe well, piped water) that allows the unit to operate in accordance with MINSA standards.
Sector offices <sup>1</sup> and/or community-based care centers with upgraded infrastructure	Community-based care center	10	15	20	23	15	83		
Rural families with a package of support for healthy practices in the home and environs	Families visited		400	1,000	900	700	3,000	MINSA semiannual status report	Municipios of Wiwili, Quilalí, and Las Sabanas. The package includes participatory interventions to adopt healthy behavior: hygiene, hand washing, rational water consumption, protection of water sources, the goods required for them including household filters, covered containers for proper storage, hand-washing station, materials for safe floors, and technical assistance for minimum interventions with community participation (installation of safe floors, water source protection).

<sup>1</sup> Sector refers to the catchment region or area for primary care, around which the health care model is organized.

Outputs	Unit of measure	2018	2019	2020	2021	2022	Final target	Means of verification	Comments
Community social agreements to promote healthy practices in rural communities signed by the municipal health department and the SILAIS	Agreements*		5	20	40	50	50	MINSA semiannual status report	Not cumulative.
Km of roads upgraded with major maintenance <sup>2</sup>	km			10	28.64		38.64	Certificate of acceptance of the works by MTI	
Km of roads with basic maintenance	km					38.64	38.64		
Public transportation routes on roads upgraded by the program with regulatory measures to optimize service	Routes					2	2	MTI semiannual status reports and contracts with municipal governments/operators	The measures include technical assistance for operators to improve the quality of service (frequency, comfort) and promote their working capital, as well as basic improvements to bus stops.
<b>Component 2. Improvement in the quality of health care (scope: national and the five prioritized SILAIS)</b>									
Child nutrition standards (PROCOSAN, breastfeeding and nutrition) updated and implemented	Strategy			1			1	MINSA semiannual status report	Implemented (5 SILAIS) means that the basic healthcare teams have enumerated children under 2 and have provided counseling in child nutrition.
Municipios equipped and supplied in accordance with child nutrition standards	Municipios			5			5		5 prioritized SILAIS (Estelí, Madriz, Nueva Segovia, Jinotega, and Matagalpa).
Community promoters trained in child nutrition standards	Promotors		60	120	300	300	780		National level.
Strategy for promoting adolescent health implemented	Strategy			1			1	MINSA semiannual status report	Considered implemented when at least 50% of the sectors have strategy promoters.
Protocols for timely detection and management of noncommunicable chronic diseases	Protocols	1	2	1			4	Ministerial circular	Prioritized diseases: hypertension, diabetes, chronic kidney disease, cervical/uterine cancer, and epilepsy.

<sup>2</sup> Three criteria are used to select the roads: (i) location of the prioritized health infrastructure interventions; (ii) travel times to health centers; and (iii) extent of the most efficient intervention needed for the road.

Outputs	Unit of measure	2018	2019	2020	2021	2022	Final target	Means of verification	Comments
New chronic patients captured in the survey	Patients		2,000	8,000	20,000	22,300	52,300	Quarterly report from the Directorate General of Health Services (DGSS)	5 prioritized SILAIS (Estelí, Madriz, Nueva Segovia, Jinotega, and Matagalpa).
Chronic patients enumerated and with three medical visits in the past year	Patients			5,500	17,500	33,650	33,650		5 prioritized SILAIS (Estelí, Madriz, Nueva Segovia, Jinotega, and Matagalpa) Not cumulative.
Care protocols for people with special needs (special care) updated and approved: - Eye exams for older adults and the provision of eyeglasses - Post-trauma (for workplace and traffic accidents) - Degenerative (osteoarthritis – knee, spinal column) - Neurological (secondary to complications of chronic diseases, e.g. diabetes)	Protocols			6			6	Ministerial circular	National level. Post-traumatic rehabilitation for chronic diseases or physical/neurological disabilities with emphasis on the first level of care.
New patients with special needs captured in the survey	Patients			300	1,200	2,000	3,500	Quarterly report from the Directorate General of Health Services (DGSS)	5 prioritized SILAIS (Estelí, Madriz, Nueva Segovia, Jinotega, and Matagalpa).
Patients with special needs, with a semiannual treatment protocol completed in the previous six months	Patients*			200	1,300	3,200	3,200		Not cumulative.
Primary care personnel trained in applying the special care protocol	Personnel			250	250		500	MINSA semiannual status report	
Municipal health departments provided with means of transportation to supervise the MOSAFC	Municipal health departments		15		15		30		Road and/or river transportation, as applicable.
Personnel trained in environmental and social management	Personnel		80	40	10		130		
Maintenance personnel trained	Personnel		30				30		Trained in maintaining medical equipment, inputs, electricity, and plumbing.
First-level mobile maintenance units purchased and in use	Mobile units		5				5		

Outputs	Unit of measure	2018	2019	2020	2021	2022	Final target	Means of verification	Comments
Equipment maintenance workshops for the SILAIS in Madriz, Estelí, Matagalpa, and Jinotega, replaced and up and running	Workshops		1	1	2		4	Certificate of acceptance of the works, MINSA	
Ocotal general hospital replaced and equipped	Hospital			1			1		
Jalapa hospital built and equipped	Hospital				1		1		
Estelí hospital rehabilitated	Hospital			1			1		
Wiwilí (Jinotega) primary hospital replaced	Hospital				1		1		
Waslala (Matagalpa) primary hospital replaced	Hospital			1			1		
San Juan de Limay primary hospital rehabilitated	Hospital		1				1		
Trinidad (Estelí) health center replaced	Health center			1			1		
Physiotherapy rooms built and equipped in health units in the municipal seats	Rooms		4	4	2		10		
Physiotherapy rooms equipped in health units in the municipal seats	Rooms			30			30		

Outputs	Unit of measure	2018	2019	2020	2021	2022	Final target	Means of verification	Comments
<b>Component 3. Fight to combat and eradicate malaria (Scope: Bilwí, Las Minas, RACCS, Chinandega, and 5 prioritized SILAIS)</b>									
National Diagnostic and Referral Center with modernized equipment	Center		1				1	Certificate of acceptance of the works, MINSA	
Regional laboratory built and equipped	Laboratory		1				1		Includes rehabilitated infrastructure and equipment (specialized shelving, inventory management systems, and cold chain).
Regional supply warehouse built and equipped	Warehouse			1			1		
SIL AIS equipped to implement the vector control program	SIL AIS		2	4	2		8		
Municipios (municipal health departments) and SIL AIS provided with a package of equipment for water surveillance and vector control	Municipios		6	15	9		30		Includes fixed and portable means for analysis and treatment.
Personnel trained in vector-borne disease surveillance	Personnel			250		250	500	MINSA semiannual status report	Entomologists and biostatisticians.
Health personnel retrained in water surveillance and vector control	Personnel			500			500		
Municipios with annual vector-control and contagion prevention plans	Municipios			6	21	30	30		Not cumulative.



## **FIDUCIARY AGREEMENTS AND REQUIREMENTS**

<b>Country</b>	Nicaragua
<b>Project number:</b>	NI-L1143
<b>Name:</b>	Multisector Program to Improve Health Determinants in the Dry Corridor
<b>Executing agency:</b>	Ministry of Health (MINSA), executing agency; Ministry of Transportation and Infrastructure (MTI), coexecuting agency
<b>Prepared by:</b>	Santiago Castillo and Osmin Mondragón (FMP/CNI)

### **I. EXECUTIVE SUMMARY**

- 1.1 The Ministry of Health (MINSA) will be the executing agency, and the Ministry of Transportation and Infrastructure (MTI) will be the coexecuting agency for component 1, under their mandates as central government agencies.
- 1.2 These fiduciary agreements and requirements are based on the institutional capacity assessment conducted using the Institutional Capacity Assessment System (ICAS) methodology. The executing and coexecuting agencies have satisfactory development and risk, given their experience in executing Inter-American Development Bank (IDB) projects (MINSA: 2789/BL-NI, 2986/BL-NI, 3306/BL-NI, and 3696/BL-NI; and the MTI: 2979/BL-NI, 3353/BL-NI, 3577/BL-NI, and 3811/BL-NI).
- 1.3 MINSA's financial management has been affected by the volume of operations for which it is responsible, therefore a management safeguards plan will be implemented, and MINSA and the MTI will receive training in the use of the Operational Guidelines for Financial Management of IDB-financed Projects (document OP-273-6).
- 1.4 The program will cost US\$138 million (US\$133 million in the form of a loan and US\$5 million as the local counterpart contribution).

### **II. FIDUCIARY CONTEXT OF THE EXECUTING AGENCY**

- 2.1 MINSA's procurement division manages all processes except for procurements based on price shopping financed with national funds that are handled by the local integrated health care systems (SILAIS) and the hospitals as deconcentrated entities. Program procurement personnel should have technical profiles consistent with the operation's complexity. The MTI has procurement personnel with project experience.
- 2.2 Personnel management at MINSA and the MTI is governed by the Financial Administration and Budget Procedures Act (Law 550), through the budgeting, cash management, accounting, and internal and external control subsystems, which

establishes that government agencies are responsible for their own financial management, regulated by the Ministry of Finance (MHCP). The executing and coexecuting agencies will use the integrated financial management system (SIGFA) and the integrated financial management system for projects (SIGFAPRO)—budgeting, cash management, accounting, and reporting subsystems. The Nicaraguan government is improving its public administration systems, and they will be used by the program when they come on line.

### III. FIDUCIARY RISK EVALUATION AND MITIGATION ACTIONS

- 3.1 **MINSa.** MINSa has a large and complex portfolio that requires the coordination of multiple areas. The implementation plan relies on existing institutional structures (i.e., no ad hoc unit), which contributes to sustainability. However, this affects the timeliness of implementation since the government is attempting to cap staffing at the central and administrative levels, making it increasingly difficult to sustain the quality of execution achieved to date by MINSa. The management safeguards plan calls for the following actions: (i) adjust the organizational structure of the External Funds Coordination Unit (UCFE) in the Financial Administration Department (DGAF); (ii) update the functions and profiles of the staff of the UCFE and the DGA, appointing a coordinator in each area; (iii) update and disseminate the manual of financial management procedures for the UCFE; and (iv) provide ongoing training for financial administration staff for program execution. As for the additional core team required for financial management, the SILAIS will have a financial specialist for reporting and controlling supporting documentation justifying expenses presented to the UCFE. Each municipio involved in component 1 will have a financial analyst for financial administration of the funds received. The UCFE will have two financial analysts for central financial management of the program.
- 3.2 **The MTI.** To maintain its low risk, the following are recommended: (i) keeping its staff up to date on the use of procurement management tools; (ii) acting on the recommendations of the ex post reviews; and (iii) receiving advisory services from the Bank for monitoring the procurement plan execution system (SEPA).
- 3.3 For financial management, the administrative and control capacity of both institutions will be strengthened. The Bank will provide training on the Operational Guidelines for Financial Management of IDB-financed Projects (document OP-273-6).

### IV. CONSIDERATIONS FOR THE SPECIAL PROVISIONS OF THE CONTRACT

- 4.1 To mitigate exchange rate loss, the exchange rate in effect in the country of the borrower on the date the funds are converted from U.S. dollars to Nicaraguan córdobas by the executing agency will be used (option b (1) of the General Conditions of the loan contract).
- 4.2 MINSa and the MIT will present separate financial statements audited by a firm acceptable to the Bank, within 120 days after the end of each fiscal year during the disbursement period (original and extensions).

## V. AGREEMENTS AND REQUIREMENTS FOR PROCUREMENT EXECUTION

### A. Procurement execution

- 5.1 The following provisions will apply to all project procurements.
- 5.2 The policies for the procurements of works and goods financed by the IDB (document GN-2349-9) and the policies for the selection and contracting of consultants financed by the IDB (document GN-2350-9), both of March 2011, will be applied.
- a. **Procurement of works, goods, and nonconsulting services.** Contracts for works, goods, and nonconsulting services generated under the project and subject to international competitive bidding (ICB) will be executed using the Bank's standard bidding documents. Bidding processes subject to national competitive bidding (NCB) will be executed using the national bidding documents agreed upon with the Bank. The project's sector specialist will be responsible for reviewing the technical specifications for procurements.
    - (i) Procurement of information technology systems: Not applicable
    - (ii) Turnkey procurements (supply and installation): Not applicable.
  - b. **Selection and contracting of consultants.** The standard request for proposals issued by or agreed upon with the Bank will be used. The sector specialist will be responsible for reviewing the terms of reference. MINSA **will directly contract** the Pan American Health Organization (PAHO) to perform the technical audit of the expanded health services indicated in paragraph 1.28 of the loan proposal, in recognition of the exceptional value that the experience of this specialized agency represents, in accordance with paragraph 3.10 (d) of document GN-2350-9.
  - c. **Selection of individual consultants.** Expressions of interest may be solicited via local or international notices for the purpose of establishing a short list of qualified individuals. The technical/operational staff required to implement interventions with community participation will be hired as service contractors (paragraph 3.21, document GN-2350-9). The procedure will be established in an annex to the program Operating Regulations.
  - d. **Use of the country procurement system.** The government administrative contracting system (SISCAE) is the country procurement subsystem approved by the Bank for use in publishing notices requesting expressions of interest and/or calls for bids. Any system or subsystem approved in future will be applicable to the operation.
  - e. **Strengthening measures.** Not applicable.
  - f. **Recurrent expenses.** The expenses required to operate the project during execution established in the annual budgets approved by the Bank will be considered recurrent expenses and will be executed following the executing agency's procedures that have been reviewed and accepted by the Bank, provided they do not contravene the fundamental principles of competition, efficiency, and economy. To strengthen the institutional areas and support

program activities, incremental staff<sup>1</sup> with experience in procurement, finance, and management will be contracted at the central level (UCFE, DGA, External Cooperation Department) and at the deconcentrated level (municipal health departments, SILAIS) using loan proceeds and reported as operating expenses. Needs will be established in the management safeguards plan and may include other areas. The contracting procedures will be described in the program Operating Regulations, and the contracts must have the Bank's no objection and be consistent with the terms of reference approved by the Bank.

- g. **Commercial practices, national preference:** Not applicable.
- h. **Advance procurement/retroactive financing:** Not applicable.

**Table of thresholds (US\$ thousands)**

Method	ICB works	ICB goods and nonconsulting services	International short list for consulting services
Threshold	>1,500	>150	>200

**Main procurement items**

Activity	Selection method	Estimated date of call/invitation	Estimated amount US\$
<b>Goods</b>			
Equipment for the Jalapa hospital	ICB	IV-2018	1,300,000.00
<b>Works</b>			
Replacement of the Jalapa primary hospital	ICB	II-2018	3,450,000.00
<b>Firms</b>			
Specialized agency to perform the external technical audit to verify health care (PAHO)	Shopping*	III-2018	291,400.00
<b>Individuals</b>			
Software developers for community and primary care applications	IICQ	III-2018	244,800.00

\*See paragraph 5.2 (b).

## B. Procurement supervision

**Ex post review thresholds**

Works	Goods	Consulting services	
		Firms	Individuals
US\$150,000	US\$25,000	US\$200,000	US\$10,000

- 5.3 The procurement supervision method will be established in the procurement plan, with the most suitable method determined for each selection process and in accordance with the above-mentioned thresholds. Ex post reviews will be performed

<sup>1</sup> Known in Nicaragua as "project employees."

every six months in accordance with the project supervision plan. The thresholds for ex posts review may be modified by the Bank should the executing or coexecuting agencies' fiduciary capacity change.

- 5.4 **General provisions.** To reduce the probability of corruption, the following will apply: (i) the provisions of documents GN-2349-9 and GN-2350-9 on prohibited practices and ineligible companies and individuals; and (ii) other special procedures.
- 5.5 **Records and files.** The procurement unit is responsible for appointing a person to take charge of this activity and for setting aside a specific area for recording and storing evidence of payments to suppliers and contractors. The physical files will be kept for a minimum of three years. The formats and procedures agreed upon and described in the program Operating Regulations will be used to prepare and file the project reports.

## **VI. FINANCIAL MANAGEMENT AGREEMENTS AND REQUIREMENTS**

### **A. Programming and budget**

- 6.1 The country system regulated by Law 550 and the national public investment system will be used, following the national budget approval cycle led by the MHCP. MINSA and the MTI will set aside sufficient funds in their budgets each year to cover their yearly execution commitments. These institutions will use SIGFAPRO as the financial/accounting system for financial records and reporting, and, in the event of any change or upgrade to the SIGFA project management module, the project will automatically migrate to that system.

### **B. Disbursements and cash flow**

- 6.2 IDB disbursements will be made to the Ministry of Finance's centralized cash account (U.S. dollars) at the Central Bank. The program will have two U.S. dollar accounts for financial control, one for each of the institutions, linked to a subaccount in Nicaraguan córdobas. The executing and coexecuting agencies may keep accounts in commercial banks for program operations. Payments will take the form of advances of funds of up to six months, depending on the liquidity requirements agreed upon with each agency, and at least 50% of the previous advance must be justified before a new one will be processed. This is justified by deconcentrated execution and different cash flow requirements in the two sectors. A financial plan will be prepared based on the cost of the activities programmed in the annual work plan (AWP) for the period under consideration. Advances will be reported in accordance with document OP-273-6, and the supporting documentation will be remitted to the Bank electronically.

### **C. Accounting and financial reports**

- 6.3 The program's financial statements will be issued separately by the executing and coexecuting agencies, in accordance with International Accounting Standards as established in the Operational Guidelines for Financial Management of IDB-financed Projects (document OP-273-6). They will be audited annually by an independent firm acceptable to the Bank. The SIGFAPRO system will be used to produce the project's financial accounts.

**D. Internal control and internal auditing**

- 6.4 MINSA and the MTI have acceptable internal control systems, with manuals and defined procedures in each accounting unit of the Financial Administration Department (DAF). Program Operating Regulations will be prepared. MINSA and the MTI have internal audit units that are expected to review program execution at all stages, paying particular attention to monitoring the recommendations of the external auditors.

**E. External control: Project reports**

- 6.5 Since the Office of the Comptroller General (CGR) is not currently eligible to audit Bank-financed projects, the executing and coexecuting agencies will engage the services of a single firm of independent auditors acceptable to the Bank, which will follow Bank procedures.
- 6.6 The executing and coexecuting agencies will present their separate external audit reports within 120 days after the close of each financial year for the effective period of the contract, including the date of the last disbursement.

**F. Financial supervision of project**

- 6.7 The financial monitoring of the program will be based on the unaudited financial reports, and although it is the responsibility of the executing and coexecuting agencies to monitor and control their centralized and decentralized operations, the following steps will be taken: (i) prior to the first disbursement there will be a startup workshop to update the regulatory instruments for fiduciary management; (ii) accounting/financial visits will be made to verify progress in project execution; and (iii) ex post reviews of disbursements will be carried out by Bank staff and the external auditor.