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NICARAGUA

STRENGTHENING OF COMMUNITY HEALTH AND EXTENSION OF HEALTH AND NUTRITION SERVICES IN COMMUNITIES IN THE DRY CORRIDOR REGION

(NI-L1081)

LOAN PROPOSAL

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ELECTRONIC LINKS

REQUIRED

1. Annual work plan (AWP for the first disbursement and first 18 months of execution)
   http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=37833216
2. Monitoring and evaluation arrangements for the operation
   http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=37903600
3. Complete procurement plan
   http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=37905718
4. Safeguard Screening Form for classification of projects (SSF)
   http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=38017056

OPTIONAL

1. Economic costs and viability study
   http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=37833186
2. Dry Corridor situation analysis: Prioritization of municipios
   http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=37905817
3. Operating Regulations for Bank-financed programs with the Ministry of Health
   http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=37903549
4. Analysis of the Talent Optimization Program
   http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=37905864
5. Talent Optimization Program Manual and Implementation Plan
   http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=37870795
6. Diagnostic assessment and Management Safeguards Plan
   http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=37905742
7. Diagnostic assessment of Dry Corridor community strategies
   http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=37903578
8. Program execution plan (PEP)
   http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=37929409

ABBREVIATIONS

AWP	Annual work plan
DALY	Disability-adjusted life year
ECMAC	Entrega Comunitaria de Métodos Anticonceptivos [Community Delivery of Contraceptive Methods]
ENDESA	Demographic and Health Survey
ESAFC	Equipo de Salud Familiar y Comunitario [Family and Community Health Team]
FSO	Fund for Special Operations
ICAS	Institutional Capacity Assessment System
ICB	International competitive bidding
INIDE	Instituto Nacional de Información para el Desarrollo [National Development Information Institute]
INSS	Nicaraguan Social Security Institute
MINSA	Ministry of Health
MOSAFC	Modelo de Salud Familiar y Comunitario [Family and Community Health Model]
NCB	National competitive bidding
OC	Ordinary Capital
PROCOSAN	Programa Comunitario de Salud y Nutrición [Community Health and Nutrition Program]
SCF	Single Currency Facility
SEPA	Procurement Plan Execution System
SICO	Community Information System
SIGFAPRO	Sistema Integrado de Gestión de Proyectos [Integrated Project Management System]
SILAIS	Sistema Local de Atención Integral en Salud [Local Comprehensive Health Care System]
WHO	World Health Organization

PROJECT SUMMARY

NICARAGUA
STRENGTHENING OF COMMUNITY HEALTH AND EXTENSION OF HEALTH AND NUTRITION SERVICES IN COMMUNITIES IN THE DRY CORRIDOR REGION
(NI-L1081)

Financial Terms and Conditions					
Borrower: Republic of Nicaragua **Executing agency**: Ministry of Health (MINSA)				**FSO**	**OC**
			Amortization period:	40 years	30 years
			Grace period:	40 years	5.5 years
			Disbursement period:	4.5 years	4.5 years
Source	**Amount**	**%**	**Interest rate:**	0.25%	SCF-fixed
IDB (FSO)	17,500,000	48.35	**Inspection and supervision fee:**	N/A	*
IDB (OC)	17,500,000	48.35	**Credit fee:**	N/A	*
Local	1,200,000	3.30	**Currency:**	US$	US$
Total	**36,200,000**	100.00			

Project at a Glance

Project objective. The objective of the program is to strengthen the capacity of the Ministry of Health (MINSA) to extend health promotion, prevention, and primary care services to less populated rural communities, with an emphasis on the Dry Corridor region, in order to improve the health status of the most vulnerable population. The objective will be achieved by optimizing the composition of the healthcare workforce and prioritizing the extension of community health and nutrition services, in particular for children under two and women of childbearing age, taking advantage of the 1,000-day window (paragraph 1.11).

Special contractual clauses:

(a) Conditions precedent to the first disbursement: MINSA will present: (i) evidence that it has the technical and operational support staff needed to execute the program (paragraph 2.3); and (ii) the contract award report for the independent firm selected to conduct the semiannual technical external audit of services provided with Component 2 resources (paragraph 3.4).

(b) Execution conditions: (i) MINSA will include with the semiannual reports, evidence of having completed the mitigation actions identified in the management safeguards plan by the agreed upon deadlines (paragraph 2.3); (ii) the Bank and MINSA will review subcomponent 2.2 costing parameters annually against the accounting records to ensure they are consistent with the real costs and will agree on adjustments to the per capita fixed cost financed for periods subsequent to this verification should there be a meaningful discrepancy (paragraph 2.4); (iii) before 31 March of each year, MINSA will submit its budget program for the current year and the previous year's national budget execution report for health promotion and disease prevention activities, and primary care, broken down at the municipal level for the 33 beneficiary municipios and at the SILAIS level for the rest of the country; and (iv) when presenting expenditures related to retiree compensations under the talent optimization plan, the borrower will attach evidence showing the retirements were carried out in accordance with the rules and procedures specified in the Operating Regulations and any modification thereof previously agreed upon with the Bank (paragraph 2.7).

(c) Other special conditions: The agreement between the Bank and MINSA concerning the scope of the implementation manual for the talent optimization plan is considered a basic condition to be fulfilled prior to signature of the loan contract (paragraph 2.5).

Special considerations. In subcomponent 2.2, care will be considered a program output using four interventions as tracer indicators for the set. MINSA will report the number of persons treated, and subcomponent resources will finance a fixed amount per person applying the mechanism established in the Improving Family and Community Health program (loan 2527/BL-NI) (paragraph 1.18).

Exceptions to Bank policies: None

Project qualifies as: SEQ [X] PTI [X] Sector [ ] Geographic [X] Headcount [ ]

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

I. DESCRIPTION AND RESULTS MONITORING

A. Background, problems, and rationale

1.1 **Access to health in less populated rural communities.** Nicaragua has made a striking epidemiological transition with chronic degenerative diseases (Group 2) accounting for a preponderant and increasing proportion of deaths, whereas communicable diseases, perinatal disorders, and nutritional deficiencies (Group 1) make up an increasingly smaller proportion of the mortality rate.[1] Nonetheless, national averages obscure significant regional differences. In less populated and poorer rural areas, Group 1 conditions cause 20% to 30% of deaths, and the probability of dying from causes in this group is 2.5 times greater in these areas than in areas with less poverty. Major efforts are needed to tackle this inequality, bringing health services closer to the most vulnerable communities, while laying the groundwork to address chronic noncommunicable diseases through more effective health prevention and promotion actions and disease management.

1.2 **The Dry Corridor: chronic malnutrition and child morbidity and mortality.** The area known as the Dry Corridor comprises the departments of Madriz and Nueva Segovia, and the municipios of León, Estelí, Chinandega, and Managua in the north, and Matagalpa, Boaco, and Chontales in the west.[2] This less populated rural area is characterized by chronic drought, leading to poverty, food insecurity, and poor air and water quality, all adverse health determinants, resulting in some of the country's highest child malnutrition and morbidity rates. In 2010, the probability of death due to nutritional deficiencies was 3.5 times higher in Madriz that in the rest of the country.[3] The Demographic and Health Survey 2011-2012 (ENDESA) reported prevalence of chronic malnutrition in children under five in Madriz and Nueva Segovia well above the national rate (29.5% and 27.7%, respectively, compared with 17.3%), high rates of diarrheal disease, and hospitalization rates for children under five with pneumonia and diarrhea well above national levels.[4] The 69 municipios in these departments were ranked according to indicators for drought, extreme poverty, and incidence of diarrheal diseases and pneumonia in children under five (see optional electronic link 2), and the 33 highest ranking municipios in

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1 Group 1 accounted for 13.6% of deaths in 2010 vs. 71.8% for Group 2. IDB, analysis of data provided by the Ministry of Health (MINSA).

2 See: Agua, agricultura y seguridad alimentaria en las zonas secas de Nicaragua [Water, agriculture, and food security in Nicaragua's dry regions], Bendaña García, G., 2012. The region has been given priority for productive development and water and sanitation interventions. See National Human Development Plan, p. 106, Rural Development Sector Plan (PRORURAL).

3 Source: Ibid. Footnote 1.

4 In Madriz, 17.9% of children were sick in the two weeks prior to the survey, compared with 15.4% in the rest of the country. Source: ENDESA 2011-2012, preliminary comparisons prepared by the National Development Information Institute (INIDE) for this operation, July 2012. Hospitalization due to pneumonia in 2012 in Madriz and Nueva Segovia: 28.6 per 1,000 children under 5 compared with 19 nationally. Source: MINSA.

Madriz, Nueva Segovia, Estelí, Chinandega, León, Managua, and Matagalpa were selected for the coverage extension proposed in this operation (see paragraph 1.16).

1.3 The Ministry of Health (MINSA) records, despite their limitations (see paragraph 1.4), show low primary care coverage rates. In Madriz, the average number of growth and development check-up visits[5] per child under the age of one in 2012 did not meet the once-monthly frequency specified as the standard for that age group. In addition to the high frequency of consults because of diarrhea and respiratory infections—consistent with malnutrition—Madriz has a high proportion of visits for pneumonia in children under five and one of the highest death rates in the country from this disease. Even though malnutrition and child morbidity are mutually reinforcing,[6] timely access to health services at the onset of a disease reduces the severity of morbidity and the risk of death. Thus, the Madriz data suggest deficiencies in the promotion and timely uptake of health services, and possibly also in the quality of service, problems that are best addressed by integrating prevention and promotion actions at the community level with care delivered at that level as well as at the primary level.[7] Lastly, the fertility rate has an impact on a child's nutritional status: the prevalence of chronic undernutrition increases with the number of children in a family. The high fertility rates (3 children in Madriz and 2.1 in Carazo) and high unmet demand for family planning (14% and 6.4% for the same two departments)[8] in the Dry Corridor region point to the need for better access to sexual and reproductive health services so as to improve the nutritional status of children and mother-child health.

1.4 **Community health: regulatory advances but minimal coverage.** The government has placed priority on the health sector, as demonstrated by the 167% increase in the MINSA budget from 2005 to 2012. In this period, the ratio of public expenditure to total expenditure increased, yet in 2009 the poorest quintile were still spending 11.5% of their income on health.[9] The need to better target public resources to provide pro-poor services is ever present. To this end, MINSA launched the Family and Community Health Model (MOSAFC) in 2008, based on the concept of shared responsibility: it promotes the delivery of services by

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5 Growth and development check-up visits are conducted by health workers, see paragraphs 1.4 and 1.6.

6 Malnutrition leads to a greater propensity for infection, and infections exacerbate malnutrition. See Black RE et al., *Maternal and Child Undernutrition and Overweight in low-income and middle-income countries*, Lancet 2008. Estimates indicate that up to 30% of cases of pneumonia are due to complications from other respiratory infections not treated in good time, and that lack of timely primary treatment is the cause of up to 20% of preventable hospitalizations. See *Poverty related risk for potentially preventable hospitalisations among children in Taiwan*, Chen et al., BMC Health Services Research, 2010.

7 Bhutta, Z.A. et al., *Evidence-based interventions for improvement of maternal and child nutrition.* Lancet, 2013.

8 17.3% for only children compared with 35.8% for children in families with six or more children. ENDESA.

9 Compared with 3.9% for the richest quintile. IDB, based on Living Standards Measurement Survey 2009, INIDE 2011.

healthcare professionals in the communities while also engaging the network of volunteer health workers and midwives to provide care in addition to promotion or prevention activities, in keeping with best practices.[10] The community strategies adopted in the model rely on peer counseling (seeking changes in behavior) and the identification, treatment, and referral of the population by community workers based on their knowledge of symptoms and warning signs. The strategies[11] include: (i) the community health and nutrition standard, known as the Community Health and Nutrition Program (PROCOSAN),[12] which encompasses surveillance of the nutrition of pregnant women and children under two and community case management, formerly known as Integrated Community Care of Common Childhood Illnesses; and (ii) Community Delivery of Contraceptive Methods (ECMAC), to provide family planning counseling, detection, and care services in the community. These two strategies are complemented by community-level identification of pregnant women and the childbirth plan. The standards provide for the best evidence-based practices.[13] For example, nutrition outreach spans the entire pregnancy, prioritizes children under two, and emphasizes breastfeeding from birth as the sole source of nutrition for the first six months and then as a supplement until the age of two; zinc is recommended in the treatment of diarrhea. The diagnostic assessment conducted as part of program preparation[14] found that the ECMAC and nutritional surveillance of children were implemented in fewer than one third of the communities and community case management and monitoring of pregnant women is negligible, while the corresponding standards have only recently been approved, community networks have not been trained by MINSA since approval of the standards, and the provision of materials and specialized forms and documents has been irregular.

1.5 **Community Information System.** Coverage at the primary level and in the communities cannot be inferred from regular records, which report output based on medical visits, or from the target population.[15] To address the record-keeping

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[10] See J. Sapag, et al. *Innovative Care and Self-care Strategies for People with Chronic Diseases in Latin America*, Pan American Journal of Public Health, 2010; *One Million Community Health Workers*, Columbia University Earth Institute, 2012; and *Optimizing health worker roles to improve access to key maternal and newborn health interventions through task shifting*, World Health Organization (WHO), 2012.

[11] PROCOSAN: Standard N-097; ECMAC: Standard N-099; Childbirth Plan (community interventions for institutional delivery); Standard N-104-105-all. MINSA, 2012.

[12] This program updates the content of an earlier program bearing the same name that no longer exists as a vertical program, to which the study *Nutritional Trends* by J. Picado, et al, in *Nicaragua Poverty Assessment*, World Bank, 2008, attributes, along with the nutritional interventions of the social safety net (based on the same materials and protocol), with a high degree of likelihood the reduction in stunting observed in the central rural region from 2001-2005, p. 274. See also *International Food Policy Research Institute*, Social Safety Net Evaluation System: Impact Evaluation 2000-2004, 2005.

[13] See paragraph 1.8.

[14] Optional electronic link 7.

[15] Census projections based on dated and unreliable information at levels lower than the municipio.

weaknesses and develop a better sector-based work plan (see paragraph 1.6), MINSA will roll out the Community Information System (SICO) to support community strategies. SICO collects nominal records and enables georeferencing of community intakes and referrals, although system implementation is still in the very early stages: for now it records data on pregnant women, while the PROCOSAN and ECMAC module is still in the design phase. Using SICO, MINSA is conducting a pilot on the use of mobile technology for surveillance programs, distributing pre-programmed telephones loaded with the SICO message formats to the community and primary care networks. This operation provides an opportunity to scale up these policy and operational innovations and measure their impact in the Dry Corridor region.

1.6 **Human resource gaps.** Health care in the community model is organized by sectors: a catchment area managed by one health station, with the goal of having one sector per 5,000 people in urban areas, and per 1,000 people in rural areas. Each sector is served by (at the health station or via community visits) a Family and Community Health Team (ESAFC), initially designed to comprise a nurse's aide, a nurse, and a physician. Consequently, implementation of the MOSAFC calls for a significant increase in health workers. Although the health workforce shrank and was frozen from 1990 to 2005, MINSA has recruited nearly 7,700 workers since 2007 (64% as aides), a 35% increase in the workforce.[16] Nonetheless, the health worker density is 1.3 per 1,000 inhabitants—well below the WHO standard of 2.5. The greatest shortages affect the more sparsely populated areas, such as the Dry Corridor region. These gaps mean that the ESAFC density in rural areas is about one per 3,000 people, and many have nursing staff only. In practice, there has been a shifting of tasks to nurses in primary and community care settings, in keeping with good practices given the ability of nurses to deliver this type of care (see paragraph 1.8).

1.7 **Suboptimal distribution by profile, age and geography. N**ursing personnel (nurses and aides), which are best suited for the community model, represent the greatest human resources shortage (0.5 per 1,000 inhabitants), especially because no formal nurse's aide training is offered at present. The current ratio of 1.7 physicians per nurse is the reverse of the desirable proportion. Because recruitment was frozen in the period mentioned above, the present age distribution is unbalanced, with an over-representation of personnel hired in the 1980s: more than 32% of the staff is older than 50 and therefore exempt from working night shifts. Furthermore, 7% of the workers meet the combination of 30+ years of service with 50+ years of age, which means they are eligible for a special bonus should they decide to retire from the sector.[17] There will be over 2,100 people in this situation in 2015. Because retirement is voluntary and MINSA honors payment

[16] MINSA, Human Resources Department.

[17] The benefit does not alter the Nicaraguan Social Security Institute pension entitlement, which begins after age 60.

of the bonus over a long term, the critical mass of potential retirees has preferred to remain on the payroll. Lastly, there is a geographic imbalance: as health practitioners, especially physicians, accrue years of service, they seek promotions in urban areas and at more prestigious health facilities. Although these factors constrain a community model, they also offer an opportunity for generational replacement, improving productivity by replacing senior workers with younger ones without this earned benefit, who will work night shifts, have a less specialized profile, and can be deployed to underserved areas. Law 760 on the Civil Health Service, enacted in March 2011, calls for performance evaluations and staff movements to be determined by MOSAFC needs instead of union negotiations as occurred prior to enactment of the law. Today, human resources management is governed by an explicit framework to improve efficiency, and program interventions will conform to this framework.

1.8 **Effectiveness of community strategies and task shifting.** The comparative literature on cost-effectiveness notes that community interventions promoting health and nutrition for children and women are among the more valuable alternatives for improving health and nutrition and avoiding preventable complications.[18] Community delivery makes it possible to provide services directly and also improves awareness about their proper use at the first signs of illness. This awareness and changes in behavior are also key to tackling noncommunicable chronic diseases that account for a growing share of the country's burden of disease and mortality.[19] Interventions include promotion, such as community nutrition counseling (in particular to promote breastfeeding), prevention (vaccinations, nutritional and health surveillance, family planning), and primary care (community case treatment, supplementation, deworming, etc.), elements incorporated in the MOSAFC strategies. Task shifting towards nonspecialized professionals, technical staff, or even community volunteers is considered an effective strategy to organize services to expand coverage, provided the shift follows an organized process, involves sound and continuing training, and provides caregivers with material means, the support of higher level professionals, and conditions that provide greater stability for caregivers and the community network.[20]

1.9 **Complementarity with the Bank's portfolio and other cooperation programs.** To address the specific health and nutrition problem in the Dry Corridor area, the proposed program will support the reform initiated by MINSA to implement a community model. The first order of business is to optimize the profile of the ministry's human resources and intensify the delivery of services to communities. This approach and the area prioritized complement the priorities addressed by the portfolio in execution. Thus, the program Improving Family and Community

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[18] See Jamison, Dean T. et al., *Disease Control Priorities in Developing Countries*, 2010; Bhutta ZA, et. al. *Interventions to address deaths from childhood diarrhoea pneumonia equitably*, Lancet 2013.

[19] See J. Sapag et al. 2010, op. cit. footnote 11.

[20] See WHO 2010, op. cit. footnote 11.

Health (2527/BL-NI) addresses the problem of maternal and neonatal mortality in the North and Atlantic region and proposes scaling a number of services to a second level. Likewise, the program Integrated Health Care Networks (2789/BL-NI) focuses on the diagnostic and treatment capacity of the institutional network and on policy advances to promote the integration of the network and continuity of care, both of which are prerequisites for expanding mother-child services and for driving and sustaining the community strategies emphasized in this operation.[21]

1.10 **The Bank's country strategy and the Ninth General Increase in the Resources of the IDB (GCI-9).** The priority goals of the Bank's country strategy with Nicaragua 2012-2017 (document GN-2683) include reducing chronic malnutrition among children under the age of three and reducing neonatal mortality, especially in poor rural areas. The proposed operation supports the extension of comprehensive community health and nutrition services, with an emphasis on the first 1,000 days, which will help to reduce chronic malnutrition and morbidity and mortality among children. The program is also aligned with two of the goals specified in the Ninth General Increase in the Resources of the Inter-American Development Bank (document AB-2764), contributes to three regional development objectives of the priority area of the Strategy on Social Policy for Equity and Productivity (document GN-2588-4), and will contribute directly to provide access to health and nutrition services, in line with the regional indicator, while also supporting one of the "poor and vulnerable countries."

B. Objectives, components, and cost

1.11 The objective of the program is to strengthen the capacity of MINSA to extend health promotion, prevention, and primary care services to less populated rural communities, with an emphasis on the Dry Corridor region, in order to improve the health status of the most vulnerable population. The objective will be achieved by optimizing the composition of the healthcare workforce and prioritizing the extension of community health and nutrition services, in particular for children under two and women of childbearing age, taking advantage of the 1,000-day window of opportunity.

1.12 **Component 1. Optimization of human resources to expand community-based health** (US$25.6 million). This component will finance the following subcomponents: (i) talent optimization plan; (ii) pre-service and in-service training for workers who match the priority staffing profiles; and (iii) scale-up of community strategy innovations.

1.13 **Subcomponent 1.1. Talent optimization plan.** Loan proceeds will be used to cover the compensation due by law to workers who decide to retire having met the

[21] Loan 2725/BL-NI, with the Ministry of the Family, supports early stimulation visits by the Ministry and also supports care referred to the MINSA in the primary network. A protocol will be developed to finance these services from a single source. The only source of external financing for interventions comes from the World Bank and does not coincide in scope or the geographic universe.

requirements described in paragraph 1.7. The amount budgeted covers the compensation for approximately 1,700 retirees, applying the percentage of candidates estimated by MINSA.[22] The retirements will generate net savings for MINSA (see paragraph 2.6), primarily due to the seniority portion of the retiring employees' compensation. MINSA will then be able to reallocate these funds to increase its caregiving capacity, hiring workers whose skill sets are better aligned with the model and who can be assigned to night shifts and to areas in greater need of personnel.

1.14 **Subcomponent 1.2. Basic and specialized training for replacement staff.** Loan proceeds will be used to finance operating expenses, materials, and pre-service training scholarships for an estimated 1,100 technicians to be recruited to fill vacancies as health aides, hygienists, health educators, surgical technicians, and statisticians. MINSA has already developed the content for this technical training program, which will be short, with courses offered at decentralized venues with support from universities. The selection criteria require that students be local residents. To ensure continuity of care, the program will begin with training for positions for which there is a current shortage. The optimization plan will go into effect at a later stage.[23] Funds will also be available for internships for currently employed primary care workers, to ensure correct application of primary care standards and community health and nutritional surveillance.

1.15 **Subcomponent 1.3. Scale-up of innovative community strategies.** Financing will be provided to scale up ECMAC and PROCOSAN policy and operating innovations and adjustments (see paragraph 1.4). Under this subcomponent, responsibilities will be shifted to technical staff and the community network, technology will be used to optimize support for the community network, and to record and monitor community care. Particular attention will be placed on the continued development of the SICO, financing the reproduction of materials, supplying equipment and machinery, and covering internship expenses for primary care workers for the implementation of these innovations.

1.16 **Component 2. Extension of community health and nutrition services in priority municipios in the Dry Corridor** (US$6.8 million)**.** Component 2 targets 33 municipios (see paragraph 1.2) with some 700 communities and an estimated 681,000 people. Of this population, there are 184,000 women of childbearing age, 28,000 children under two, and 86,000 children under six. The component has two subcomponents.

1.17 **Subcomponent 2.1. Community network capacity-building.** This subcomponent will finance training for more than 3,900 community agents, seeking to certify a

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[22] The document accessed via optional electronic link 4 describes the calculation that was made based on individual human resource data from the MINSA. The estimate assumes that the closer a person is to the INSS retirement age (60 years) the higher the rate of participation will be among the potential beneficiaries in the plan.

[23] See paragraph 2.7 and optional electronic links 4 and 5.

growing proportion of the community network in the contents of the volunteer health workers manual recently issued by MINSA. Financing will also be provided to cover expenditures and materials for health practitioners to support and monitor the work of the community network, provide computers for the municipios, connect them to the MINSA database, provide telephones and data plans for several volunteer health workers in each community to report on intakes, interventions, and community referrals, gradually broadening use of the SICO. Lastly, financing will be used to equip the ESAFC for community visits, providing items such as coolers and basic diagnostic and anthropometric equipment.

1.18 **Subcomponent 2.2. Extension of services.** Under this subcomponent, the program will provide financing in the priority municipios to cover the incremental cost of expanding coverage of community services in accordance with PROCOSAN and ECMAC standards. The program will also cover family planning referrals to the primary level. Interventions will be considered program outputs using the following four health benefits as tracer indicators for the set: (i) women of childbearing age receiving contraceptive care and/or captured by the ECMAC strategy in the monthly patient records; (ii) pregnant or newly-delivered women receiving community surveillance and nutritional counseling; (iii) children under two receiving monthly community surveillance and nutritional counseling; and (iv) children under six treated and/or referred for illness in the community.[24] MINSA will report the number of persons treated, and the loan will finance a fixed amount per person treated, applying the mechanism established in the program Improving Family and Community Health (loan 2527/BL-NI). An external technical audit will certify coverage semiannually and evaluate the quality of care annually (see paragraph 3.4).

1.19 The cost analysis[25] provides details about the services and methodology used. The method describes the production function according to the treatment protocol, applying the expected frequencies according to demographic, epidemiological, and demand conditions for the priority population, establishing the annual average cost per woman and per child in the targeted area. The resulting cost estimate is US$14.20 per year and per woman, and US$17.50 per year and per child under six. Given that current coverage ranges between 10% and 25% depending on the component, the percentage of financing for treatment under the program will be 90% for monitoring of pregnant women and community case management, and 75% for the ECMAC and nutritional surveillance of children, which will make it possible to cover the incremental margin of coverage without shifting the pre-existing financing to the program. The cost estimate will be updated annually (see paragraph 2.3).

1.20 **Component 3. Administration, management, evaluation, and other costs** (US$2.6 million). The last component will finance program administration costs, especially those relating to compliance with the Management Safeguards Plan

[24] The indicators are nominal records reported at regular intervals.

[25] See optional electronic link 1.

described in paragraph 2.3. This includes strengthening the team responsible for program coordination, the costs of supervision by the team, and technical assistance for the audit for verification of the services financed under Subcomponent 2.2, for validation of their cost (see paragraphs 1.18 and 1.19), and for program evaluation. Financing will also cover the financial audit and other finance charges and contingencies.

C. Key results indicators

1.21 The results matrix presents impacts with respect to the nutritional status of children, the reduction of severe morbidity in children, and expanded access to primary sexual and reproductive healthcare services in less populated rural areas. The expected outcomes are an increase in primary care staffing, especially in technical and nursing positions, as well as an expansion of the active community network and improved capacity. The program is also expected to improve record keeping and use of epidemiological data and information on services at the community level. As a final outcome, expanded coverage of primary health care for children and women of childbearing age in less populated rural areas is anticipated. The proposed reforms in the area of human resources are needed because the community model requires not only productivity gains but also a larger workforce. These reforms have been calibrated to make the essence of the model a reality: expanding coverage in the communities combined with transferring or sharing responsibilities with them.

Table I.1: Summary of program costs

Investment categories		IDB NI-L1081	Govt. of Nicaragua	TOTAL
1	**Optimization of human resources to expand community-based health**	**25,641,200**	**0**	**25,641,200**
1.1	Talent optimization plan	23,615,000		
1.2	Basic and specialized training for replacement staff	1,200,000		
1.3	Scale-up of innovative community strategies	826,200		
2	**Extension of community-based services in Dry Corridor municipios**	**6,830,528**	**1,200,000**	**8,030,528**
2.1	Community network capacity-building	2,647,056		
2.2	Extension of community-based services	4,183,472		
3	**Administration, supervision, and evaluation**	**1,260,739**	**0**	**1,260,739**
3.1	Technical assistance, administration, monitoring	858,400		
3.2	External technical audit	167,339		
3.3	Evaluation	35,000		
3.4	Financial audit	200,000		
4	**Finance charges***	**800,000**		**800,000**
5	**Contingencies**	**467,533**		**467,533**
	TOTAL	**35,000,000**	**1,200,000**	**36,200,000**
*Interest may be financed with proceeds from the loan.		**96.7%**	**3.3%**	**100%**

II. FINANCING STRUCTURE AND RISKS

A. Financing instrument

2.1 The program will be financed through a US$35 million investment loan with equal parts contributed from the Bank's Ordinary Capital and the Fund for Special Operations. The Government of Nicaragua will continue to contribute an estimated US$1.2 million in treasury funds through the national budget to cover the remaining portion of the cost of community-based health services in the targeted area during program execution, for a total program cost of US$36.2 million. Treasury funds will be reported as local counterpart funds (needed for the delivery of the corresponding outputs), but will not be reported in the financial statements nor will they be included in the scope of the external financial audit because both the total cost of care and treatment provided will be verified, providing evidence that the supplementary portion of the cost has been covered with additional resources from MINSA, which are audited under the national budget.

B. Environmental and social safeguard risks

2.2 This program does not finance infrastructure costs. In accordance with the Environment and Safeguards Compliance Policy (document OP-703), the program has been classified as a category "C" operation. The program will benefit remote communities, some of which are indigenous, inasmuch as it is financing the expansion of services and supporting the redistribution of personnel to isolated areas. In conformity with the Indigenous Peoples Policy (OP-765), care has been taken to ensure the protocols for the services supported by the program are rooted in social participation and have been validated to ensure they are relevant in the rural areas targeted by the program. The services will enhance access and opportunities to health and nutritional care for women and for their children, whose caretaking primarily falls to women. The Operating Regulations include standards and describe procedures to ensure that gender equity is advanced as part of the direct or indirect benefits of component 1 (e.g., recruiting new staff, enrollment in training programs, etc.).

C. Fiduciary risks

2.3 The most recent procurement review (May 2013) for operations in execution confirms that MINSA handles procurement processes in a satisfactory manner. This program will require few procurements, most of which will have a low level of complexity, such that goods and works procured through national competitive bidding or shopping, and individual consultants contracted through competitive processes, will be subject to ex post review. With respect to the financial capacity, a review was conducted in late 2012 using the Institutional Capacity Assessment System (ICAS), and the semiannual reviews and external audit reports for the operations in execution confirm that MINSA's financial management risk is low. Accordingly, disbursement reviews will be conducted ex post, and advances of funds will be made based on the real liquidity needs for periods of up to six months.

Given the importance assigned to the health portfolio in the Bank's country strategy with Nicaragua, the program will systematize management oversight through a management safeguards plan with measures to ensure that MINSA continues to have adequate management capacities. **As a special contractual condition precedent to the first disbursement, MINSA will provide evidence that it has the technical and operational support staff needed to execute the program**, and as a contractual condition for execution, MINSA will include with the semiannual reports, evidence of having completed the mitigation actions identified in the management safeguards plan by the agreed upon deadlines.[26] Lastly, the accuracy of the per capita cost calculation (paragraphs 1.18 and 1.19) presents a fiduciary risk. To mitigate this risk and as a special contractual condition for execution, the Bank and MINSA will review subcomponent 2.2 costing parameters annually against the accounting records to ensure they are consistent with the real costs and will agree on adjustments to the per capita fixed cost financed for periods subsequent to this verification should there be a meaningful discrepancy.

D. Other risks

2.4 Responsibility for the sustainability of the services partially financed by the program will fall to MINSA given that the annual financing provided under Component 2 is equivalent to 0.5% of the institution's budget, well below the budget increase projected in the Medium-term Budget Framework.[27] Furthermore, this cost is expected to be partially absorbed through a budgetary redistribution across the various levels of care, since greater coverage by effective community-based services tends to decrease demand for higher-cost hospital services in the medium term.[28] In addition, the optimization of human resources increases productivity by having lower-cost personnel delivering more interventions in the targeted areas (paragraphs 1.7 and 2.7). The risk that national funds used to finance community-based services in the beneficiary municipios may be displaced by external financing is avoided because the financing is only partial, which will help to mobilize fiscal revenue towards the municipios where MINSA captures the additional resources. Monitoring will ensure that the additional fiscal financing does not decrease. To this end, a special contractual condition for execution stipulates that before 31 March of each year, MINSA will submit its budget program for the current year and the previous year's national budget execution report for health promotion and disease prevention activities, and primary care, broken down at the municipal level for the 33 beneficiary municipios and at the SILAIS level for the rest of the country. Lastly, the risk of staffing instability in

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[26] See optional electronic link 6. The technical operations team presently consists of five people in procurement and three in financial management. **Precedent to the first disbursement, the following positions will be filled: (i) a technical general manager; (ii) two specialists and four analysts in procurement; and (iii) two specialists and three analysts in financial management.**

[27] 62% between 2011 and 2015, in current córdobas, Ministry of Finance, 2012.

[28] See Jamison, Dean T., op.cit. footnote 17.

remote areas mentioned in paragraph 1.8 will be mitigated by the task shifting strategy. At present, rotation of technical and nursing staff assigned to the primary level is low. In addition, certain indicators will be monitored, such as the density of technical staff in less populated areas, their capacity and the capacity of the community network, and the replacement personnel who will be recruited locally once they have completed their training (see paragraph 1.14).

2.5 Financing the compensations under the optimization plan is justified as a one-time expense needed to achieve the program objective. The plan is a cornerstone of the MINSA institutional reform pursuant to the MOSAFC and the Healthcare Career Law, as it will allow MINSA, with the same payroll, to deliver more and better health interventions under the community model. Once the optimization plan closes, MINSA will continue to honor its obligations vis-à-vis future potential retirees by setting up an installment plan as in the past. Furthermore, once a large cohort has retired, assuming sector growth continues apace, the relative weight of the over-50 group will not return to its current level.[29] Potentially, fewer workers may decide to retire as this is a voluntary plan that offers no compensation over and above that provided for in the labor agreement. The incentive offered through the plan is immediate payment of the full amount. Based on surveys of potential retirees, MINSA estimates an 80% participation rate on average, with older people expected to participate at higher rates. In order to prevent a situation in which more workers take the package than the financing allows and to ensure acceptance of the reform as well as uninterrupted service by the units to which potential retirees are currently assigned, MINSA is planning to phase in the Component 1 interventions as described in the Implementation Manual. The manual proposes to offer the retirement plan once training has been launched to fill the vacancies that will be left by potential retirees. The relevant actors will participate in the decisions to find replacements. Intensive training—for which content has already been developed—will be provided in order to prepare the replacement profiles. The agreement between the Bank and MINSA concerning the scope of the manual is considered a basic condition to be fulfilled prior to signature of the loan contract. When presenting expenditures related to retiree compensations under the talent optimization plan, the borrower will attach, as an execution condition, evidence showing the retirements were carried out in accordance with the rules and procedures specified in the Operating Regulations and any modification thereof previously agreed upon with the Bank.

2.6 An analysis was conducted of the impact of the optimization plan on the health budget and the budget of the Nicaraguan Social Security Institute (INSS), inasmuch as it could present a fiscal risk. Assuming that slightly more than 1,700 people retire, the plan will generate savings in the health budget through hiring of staff without accrued seniority. This savings is estimated at more than US$3.6 million in 2015, while the increase in expenditure by the INSS on pension payments to

[29] From more than 32% at present to 18% in 2018.

retirees over 60[30] on that same date would be between US$4.6 million and US$6.8 million, producing a net impact of between US$1 million and US$3.2 million that year, which represents between 0.3% and 1% of public spending on health in 2012.

2.7 Lastly, the economic study concludes in its ex ante estimate of cost-effectiveness that extending community-based services could produce health gains estimated at 38,000 disability-adjusted life years (DALY) for four years of interventions at an estimated cost of US$105 per DALY gained.[31] Compared with other programs or Nicaragua's per capita GDP, this would seem to be a low-cost investment for the country.

III. Implementation and Action Plan

A. Summary of implementation arrangements

3.1 **Execution agency and disbursement period.** The Ministry of Health (MINSA) will be the executing agency for the program. The disbursement period will be four and a half years starting on the effective date of contract. The External Cooperation Office will be responsible for overall coordination of programs, with technical support from the offices involved in each program, and from the financial administration and procurement divisions. The Operating Regulations for the programs, commonly used for all Bank-financed operations, specify the management mechanisms, such as weekly monitoring of the annual work plan (AWP) by the operational committee, and involvement of the subnational regions as members of the implementation team. In addition, the Management Safeguards Plan establishes standards for project staffing, profiles, and operating and decision-making processes to ensure the timely implementation of programs, detailing the composition of the support team described in paragraph 2.3 and footnote 8.

3.2 **Procurement and financial management.** The program will be implemented in accordance with a procurement plan, managed through the Procurement Plan Execution System (SEPA), and will be governed by the Policies for the procurement of works and goods financed by the IDB and the Policies for selection and contracting of consultants financed by the IDB (documents GN-2349-9 and GN-2350-9), subject to the thresholds specified in Annex III. It is expected that the auditing firm retained in 2012 to audit the financial statements of all Bank-financed operations will be directly contracted, for reasons of continuity of service, in accordance with paragraph 3.1 (a) of document GN-2350-9. Direct contracting will also be used to contract local managers for the SILAIS and priority municipios as

[30] Calculation based on data from the INSS Statistical Yearbook 2012. The impact varies according to the rate of participation in the plan among eligible workers over 60.

[31] Based on WHO data (see footnote 28).

service delivery contractors.[32] MINSA will negotiate an amount to cover operating expenses for connectivity and telephony services to use the SICO with the company or companies providing coverage in the targeted areas. MINSA will use country systems for financial execution (SIGFAPRO) of the program and to publicize procurement procedures (SISCAE). It will receive advances of funds sufficient to cover the projected disbursements for a period of up to six months following the advance, in accordance with the applicable financial plan. In relation to Subcomponent 2.2, to justify expenses when requesting a disbursement, MINSA will submit a consolidated spreadsheet showing for each municipio the absolute number of persons receiving services in the period for the four tracer indicators. Expenditures incurred with proceeds from these transfers will be recorded. Ex post reviews of disbursements will look into the eligibility of expenditures made with loan proceeds to ensure: (i) the items were predetermined as eligible; and (ii) in the case of Component 2, the municipio targeted by the expenditure is one of the 33 priority municipios. A financial audit will be conducted annually, with a scope that has been agreed upon based on the results of financial supervision.

B. Summary of arrangements for monitoring results

3.3 MINSA will prepare annual work plans (AWP) consistent with the expected outputs specified in the Results Matrix. These AWPs will underpin program management and serve as reference for the semiannual reports (see Monitoring and Evaluation Arrangements and Operating Regulations). The reports will describe achievements and advances in optimizing human resources, improving capacity for community-based care, and extending coverage, as well as the challenges for the following six-month period. An analysis will be included of possible programming deviations and any adjustments.

3.4 **As a special contractual condition precedent to the first disbursement, MINSA will present the contract award report for the independent firm selected to conduct the semiannual technical external audit of services provided with Component 2 resources**, in order to certify the volume and quality of interventions reported. The audit will compare a sample of the aggregate data on service output reported by MINSA to the IDB with the breakdown of individual interventions from the primary sources and from community surveys and observation. If consolidation errors are found, the necessary adjustments will be made in the supporting documentation for the advance of funds. Every year, the technical audit will include a review of the delivery of services financed with the per capita as well as population surveys to determine the quality of care received. The terms of reference for the technical audit will be attached as an annex to the Operating Regulations.

[32] The functions, minimum qualifications, terms of employment, selection procedures, and type of review of procedures and documents are included in the Operating Regulations; the process will be included in the procurement plan.

3.5 **Evaluation.** Proceeds from the loan will be used to finance an independent, reflexive evaluation, comprising a midterm evaluation at the completion of four six-month periods counting from the date of eligibility, and a final evaluation at the completion of eight six-month periods from that date. The objective of the evaluation is to document the results of the program against the results matrix and elaborate on factors that have influenced its performance. Inasmuch as the effectiveness of the selected interventions has been proven,[33] the emphasis will be on documenting the quality of implementation while verifying the reliability of records and estimating outcomes in the area compared with the rest of the country. The evaluation will use official morbidity and mortality statistics for the beneficiary municipios and nationwide, reports and additional information from MINSA, data collected independently for the technical audit, and additional qualitative information. Using the midterm evaluation report, the IDB and MINSA will agree on corrective measures or adjustments to the results matrix to contribute to fulfillment of the corresponding targets during the remainder of the operation. The final evaluation will document fulfillment of the agreed impact targets, place those achievements in the context of lessons learned on factors that influenced performance, to be shared at program completion.

[33] See footnotes 6, 7, 12, 17, 18, 19, and 28.

Development Effectiveness Matrix			
Summary			
I. Strategic Alignment			
1. IDB Strategic Development Objectives	**Aligned**		
Lending Program	**i) Lending to small and vulnerable countries, and ii) Lending for poverty reduction and equity enhancement.**		
Regional Development Goals	**i) Gini coefficient of per capita household income inequality, ii) Infant mortality ratio, iii) Incidence of waterborne diseases (per 100,000 inhabitants), and iv) Percent of children under 5 whose birth was registered.**		
Bank Output Contribution (as defined in Results Framework of IDB-9)	**Individuals (all, indigenous) receiving a basic package of health services.**		
2. Country Strategy Development Objectives	**Aligned**		
Country Strategy Results Matrix	**GN-2683**	**Reduce chronic malnutrition among children in the 1,000 day window in poor rural and urban fringe communities.**	
Country Program Results Matrix	**GN-2696**	**The intervention is not included in the 2013 Country Program Document.**	
Relevance of this project to country development challenges (If not aligned to country strategy or country program)			
II. Development Outcomes - Evaluability	**Highly Evaluable**	**Weight**	**Maximum Score**
	8.0		**10**
3. Evidence-based Assessment & Solution	**10.0**	**33.33%**	**10**
4. Ex ante Economic Analysis	**7.6**	**33.33%**	**10**
5. Monitoring and Evaluation	**6.5**	**33.33%**	**10**
III. Risks & Mitigation Monitoring Matrix			
Overall risks rate = magnitude of risks*likelihood	**Low**		
Identified risks have been rated for magnitude and likelihood	**Yes**		
Mitigation measures have been identified for major risks	**Yes**		
Mitigation measures have indicators for tracking their implementation	**Yes**		
Environmental & social risk classification	**C**		
IV. IDB´s Role - Additionality			
The project relies on the use of country systems (VPC/PDP criteria)	**Yes**	**Financial Management: i) Budget; ii) Treasury; and iii) Accounting and Reporting. Procurement: i) Information System.**	
The project uses another country system different from the ones above for implementing the program			
The IDB's involvement promotes improvements of the intended beneficiaries and/or public sector entity in the following dimensions:			
Gender Equality	**Yes**	**The project will contribute to improving women's health conditions in the Corredor Seco region through a community based approach with gender focus.**	
Labor	**Yes**	**The project will train empirical personnel in the Corredor Seco region, so that they become technical personnel in areas related to health.**	
Environment			
Additional (to project preparation) technical assistance was provided to the public sector entity prior to approval to increase the likelihood of success of the project	**Yes**	**Technical assistance will be provided to support project implementation and the preparation of the operations manual, and to comply with the required conditions for the first disbursement.**	
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			

The operation is an investment loan to the Republic of Nicaragua for US$ 36.2 million, to be financed by the Bank's Fund for Special Operations (US$ 17.5 million) and Ordinary Capital (US$ 17.5 million), and by counterpart funding (US$ 1.2 million). The objective of the project is to improve health conditions of the country's most vulnerable population, by strengthening the capacity of the Ministry of Health to offer services in isolated rural communities, especially in the Corredor Seco region.

The loan proposal presents an adequate diagnosis. Based on empirical evidence, it describes prevailing health challenges in the country, mainly in the Corredor Seco region, where communicable diseases, perinatal conditions and nutritional deficiencies still cause a great proportion of the population's mortality and morbidity. The document identifies as causal factors of this situation, the environmental characteristics of this geographic region, as well as the limitations of the services currently offered. In particular, it emphasizes existing barriers in terms of the allocation of human resources to community services and primary care. Taking this into consideration, the document proposes a personnel optimization plan, largely characterized by a generational shift that will allow the Ministry to save financial resources and offer a better health care that responds to the country's needs. The loan proposal cites evidence on the effectiveness of this type of interventions, both for Nicaragua and other countries in the region.

The project´s results matrix is adequate. It presents clear impacts, outcomes and outputs, with SMART indicators to measure their implementation. The economic analysis is appropriate. Based on reasonable assumptions, it presents a fiscal analysis of the human resources optimization plan and a cost-effectiveness analysis of the community services extension in the Corredor Seco region. The operation has a monitoring and evaluation plan with a reflexive methodology.

The risk matrix is adequate. It identifies and rates project risks, and proposes mitigation measures with indicators to monitor their implementation.

RESULTS MATRIX

Project Objective	To strengthen the capacity of the Ministry of Health (MINSA) to extend health promotion, prevention, and primary care services to less populated rural communities, in order to improve the health status of the most vulnerable population. The objective will be achieved by optimizing the composition of the healthcare workforce and prioritizing the extension of community health and nutrition services, in particular for children under two and women of childbearing age, taking advantage of the 1,000-day window.				
Expected impacts	**Indicator**	**Baseline**	**Source**	**Final target (year)**	**Comments**
Nutritional status of children	Chronic malnutrition in children under two in the Madriz and Nueva Segovia SILAIS	19.6% (2011-12)	ENDESA 2011-12	14% (2016)	The Madriz and Nueva Segovia SILAIS are typical of the Dry Corridor region and used as such in existing sources where the priority municipios are not represented. For 2011-2012, this indicator scored 12.8% nationally. ENDESA 2016 will be used as the source to document the final impact. International evidence shows that community-based surveillance and counseling interventions have achieved impacts similar to those anticipated.
Severe childhood morbidity	Hospitalization rate due to acute diarrheal disease in children under five in the Madriz and Nueva Segovia SILAIS	8.8 per 1,000 children under five (2012)	MINSA National Statistics Office	6 per 1,000 children under five (2017)	Obtained from the regular records of the MINSA National Statistics Office. The final target assumes changes thanks to the promotion, prevention, and community care work whose effectiveness is supported by evidence in contexts similar to that of the intervention.
	Hospitalization rate due to pneumonia in children under five in the Madriz SILAIS	28.6 per 1,000 children under five (2012)	MINSA National Statistics Office	20 per 1,000 children under five (2017)	Obtained from the regular records of the MINSA National Statistics Office. The final target assumes changes thanks to the promotion, prevention, and community care work whose effectiveness is supported by evidence in contexts similar to that of the intervention.

Access to sexual and reproductive primary care services	Unmet demand for family planning services in the Madriz SILAIS	14% (2011-12)	ENDESA 2011-12	12.5% (2016)	Unmet demand is calculated as the percentage of women of childbearing age who respond they do not wish to get pregnant at the time of the survey (or had not wanted to in the case of pregnant women), who have a partner but no modern family planning method. The target is a modest reduction (10%) because current community coverage is low and may take time to increase. ENDESA 2016 will be used as the source for impact data.

Expected outcomes	Indicators	Baseline	Target (at program completion)	Comments
Primary care staff assigned to rural areas and expansion of community networks	Primary care nurses and aides per 10,000 inhabitants in the SILAIS of Madriz, Nueva Segovia, Estelí, Chinandega, and León	60.42 (2013)	64.88	MINSA data
	Number of community agents per sector in the priority municipios	15 community agents per rural sector and 25 per urban sector (2013)	20 community agents per rural sector and 25 per urban sector	MINSA data
Improved skills for primary care staff and community networks	Percentage of experiential technical personnel (statisticians, hygienists, health educators, and nurse's aides) in the prioritized SILAIS	75% experiential (2013)	25% experiential	72% of statisticians are experiential today. Source: MINSA data
	Percentage of active community agents in the priority municipios who are certified in the contents of the volunteer health worker manual.	0% (2013)	20%	Assuming the program can finance training for 3,960 community agents (120 per municipio), but there may be some dropouts. Source: MINSA data

Improved record keeping and use of epidemiological data and information on community-based services.	Percentage of priority municipios whose community interventions and information report is uploaded for the SILAIS on a monthly basis using the SICO	50% of priority municipios (2013)	90% of priority municipios	MINSA data
Final outcome				
Improved primary care coverage for children and women of childbearing age in less populated rural areas	Percentage of 23-month old children in the prioritized area who have received all scheduled immunizations	67.5% (2013)	80%	Initial source ENDESA 2011-2012, using the Madriz SILAIS as representative of the Dry Corridor. Final source: ENDESA 2016
	Prevalence of modern family planning methods in the targeted area	75.8% (2013)	80%	Initial source ENDESA 2011-2012, using the Madriz SILAIS as representative of the Dry Corridor. Final source: ENDESA 2016

Component 1. Optimization of human resources to extend community services in less populated rural areas	**Baseline (2013)**	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Final target**	**Comments**
<u>Outputs</u> Staff accepted into the voluntary early retirement plan	0	800	438	400	0	1,638	Calculated as 78% of eligible staff in 2015, which can be absorbed by the budget
Trained technical staff	0	350	200	100	0	650	Assumption: 300 nurse's aides, 100 hygienists, 100 health educators, 75 surgical technicians, and 75 statisticians This is the output, without prejudice that component funding may also cover in-service training for all primary health care workers.
Municipal health teams implement community strategy innovations	0	0	40	60	20	120	

Component 2. Extension of community services in priority municipios in the Dry Corridor	Baseline (2013)	Year 1	Year 2	Year 3	Year 4	Target	Comments
Community network agents in the priority municipios use mobile technology to record community care and referrals	0	200	600	800	800	800	Cumulative target (in addition to this output indicator, financing will cover connectivity, training, and basic equipment for the community network).
ESAFC in the priority municipios provided with devices and basic equipment	0	100	228	228	228	228	Cumulative target. Officials will be asked whether transportation is covered to visit communities most in need, in addition to basic equipment, in particular coolers for transporting biological material, more blood pressure gauges, etc.
Women of childbearing age identified and provided care with contraceptive methods by the ECMAC strategy in the monthly treatment records for priority municipios		12,512	21,459	26,471	36,248	36,248	The indicator is the tracer. In the progress monitoring report, only one output per stakeholder profile may be consolidated, leaving tracers as milestones. Consulting services were contracted to confirm the baseline.
Pregnant or newly-delivered women in the targeted municipios are monitored and receive nutritional counseling in accordance with the PROCOSAN standard		1,961	3,232	3,834	5,054	5,054	
Children under two are provided care with monthly monitoring and nutritional counseling in accordance with the PROCOSAN standard		8,644	14,594	17,723	23,890	23,890	
Children under six treated and/or referred owing to illness in the community in accordance with the PROCOSAN standard		26,070	44,015	53,452	72,053	72,053	

Component 3. Administration, management, evaluation, and other costs	Baseline (2013)	Year 1	Year 2	Year 3	Year 4	Target	Comments
Management Safeguards Plan actions for the period have been implemented	0	6	3	3	3	15	Example of a plan of action measure: "The Ministry of Health has at least five procurement analysts and specialists dedicated to implementing the programs, and their profiles meet the requirements agreed upon by the Bank and MINSA." All program operating costs will be reflected for this output: technical assistance from the support team, supervision operating costs, transport equipment, computers, etc.
Coverage and quality verification reports delivered (external technical audit)		1	2	2	3	8	External technical audit
External evaluation reports delivered	0	1	1	0	1	3	Process and impact evaluations; donor funds will be sought to cover this output.

FIDUCIARY AGREEMENTS AND REQUIREMENTS

Country:	Nicaragua
Project number:	NI-L1081
Name:	Strengthening of Community Health and Extension of Health and Nutrition Services in Communities in the Dry Corridor Region
Executing agency:	Ministry of Health (MINSA)
Prepared by:	Santiago Alejandro Castillo Victoria, Senior Procurement Specialist (FMP/CNI), and Juan Carlos Lazo, Senior Financial Management Specialist (FMP/CNI)

I. EXECUTIVE SUMMARY

1. The fiduciary management evaluation was based on the results of the fiduciary supervision of procurements for operations executed by MINSA.
2. With the results of the evaluation of the National Government Procurement System and applying the OECD/DAC methodology, the government, acting through the Procurement Office, has developed a strategic plan to modernize its procurement system. The Bank is presently working with the Ministry of Finance to achieve this objective. With respect to fiduciary management at MINSA, as the following sections describe, procurement has been strengthened through the adoption of recommendations issued in the framework of other Bank-financed operations (1897/BL-NI, 2527/BL-NI, and 2789/BL-NI).

- In the matter of financial management, the executing agency has gained experience and demonstrated an acceptable level of management in recent Bank-financed operations. Nonetheless, capacity-building efforts will continue in specific areas in order to improve some control-related issues and ensure that disbursement reviews may continue on an ex post basis.

3. The project does not include financing from other multilateral organizations.

II. FIDUCIARY CONTEXT OF THE EXECUTING AGENCY

2.1 The MINSA procurement division handles all the ministry's procurements with the exception of those based on quotes that are financed with national resources, which are decentralized and handled by the SILAIS and hospitals nationwide. The executing agency should be mindful to strike a balance between management capacity and work load. The technical skills and profiles of the staff who will

handle procurements for this operation are appropriate for the complexity of the program. However, close monitoring by the Bank will be required.

2.2 The ministry has gained experience in financial management from the execution of other Bank projects; it uses the SIGFAPRO financial and accounting system, a country system recognized by the Bank, and has performed acceptably. However, the ICAS assessment identified some minor areas in need of strengthening to improve internal control (see Matrix of Fiduciary Agreements and Requirements).

III. Fiduciary Risk Evaluation and Mitigation Measures

3.1 The risk associated with procurement at MINSA has increased considerably because three of its five expert consultants have decided to resign their positions, leaving procurement for all Bank-financed operations in the hands of new MINSA staff who lack the operational experience of procurements carried out in accordance with Bank policies and procedures. Processes are taking significantly longer than usual, resulting in execution delays and a procurement plan that is not current.

3.2 MINSA must ensure quality handling of all procedures. To this end, efforts must be made to promote use of the Bank's procedural guidelines, conduct market surveys, and keep the procurement plan up to date. It is recommended that the MINSA strengthen its procurement department by contracting two more specialists with experience in process management or, alternatively, use Bank resources to contract a procurement specialist to support key MINSA staff.

3.3 Other minor risks to financial matters were identified, such as the failure to disseminate financial management procedural manuals; the lack of a staff replacement plan to fill temporary leaves of absence, leaving the organization vulnerable to situations that affect staff attendance; very tight office space for this department, such that any decision to hire new staff is deferred; and delays in entering accounting records in the financial systems.

3.4 It is recommended that the Bank should consider hiring a junior accountant to temporarily assist the MINSA project accounting team so as to bring records up to date, and that IDB funds should be used to pay this individual directly, thus protecting the person from objections or conditionalities from senior Ministry officials.

3.5 These issues were analyzed in light of the ICAS exercise, with the corresponding actions reflected in the mitigation plan of the strengthening matrix agreed upon by the executing agency and the Bank.

3.6 Finally, the project team contracted a consultant specialized in operational, financial, and procurement management. Based on the ICAS exercise and a review of the organizational arrangements, the consultant is preparing a proposal named Management Safeguards Plan, suggesting a number of medium-term measures. The plan should be monitored regularly and as a matter of routine during program implementation. The plan will be attached as an annex to the Operating Regulations, and as such will apply to all operations in the portfolio with MINSA.

3.7 The project's overall fiduciary risk is considered medium.

IV. Considerations for the Special Conditions of Contracts

4.1 In order to streamline contract negotiations by the project team, primarily the Legal Department (LEG), the specific agreements and requirements to be considered in the special conditions are described below:

a. The financial area agrees with the project team's proposal to include in the terms of the negotiation the agreement on: the Operating Regulations for the program and, in particular, as an annex thereto, the agreed terms of the Management Safeguards Plan, especially the fiduciary considerations.

b. Another recommendation is to include as conditions precedent to the first disbursement: (i) the actions specified in the Management Safeguards Plan have been fulfilled, in particular that the executing agency's fiduciary structure indicated in the program Operating Regulations is functional before the start of the operation; and (ii) the SIGFAPRO has been implemented and is ready for use with the operation;

c. It is recommended that the exchange rate applicable in the borrower's country on the date on which the executing agency converted the loan proceeds to local currency (córdoba) should be used; and

d. Annual financial statements audited by a firm of independent auditors acceptable to the Bank will be presented. The audited financial statements will be presented no later than 120 days after the end of each year and the date of the last disbursement.

V. Agreements and Requirements for Procurement Execution

1. Procurement execution

5.1 Project procurements with IDB resources will be made in accordance with Bank policies specified in documents GN-2349-9 and GN-2350-9 and executed under the responsibility of the central MINSA.

- **Procurement of works, goods, and nonconsulting services.** Contracts for works, goods, and nonconsulting services[1] generated under the project and subject to international competitive bidding (ICB) will be executed using the Bank's standard bidding documents. Contracts subject to national competitive bidding (NCB) or shopping will be executed using national bidding documents agreed upon with the Bank. As sector specialist for the project, the project team leader is responsible for reviewing the technical specifications for procurements when preparing the selection processes.

[1] Policies for the Procurement of Goods and Works Financed by the Inter-American Development Bank (document GN-2349-9) paragraph 1.1: Services other than consulting services are treated like goods.

- **Selection and contracting of consultants.** Contracts for consulting services generated under the project will be executed using the standard request for proposals issued by or agreed upon with the Bank. As sector specialist for the project, the project team leader is responsible for reviewing the terms of reference when contracting consulting services.
- **Selection of individual consultants.** Individual consultants will be selected bearing in mind their qualifications to perform the work, based on a comparison of the qualifications of at least three candidates. As sector specialist for the project, the project team leader is responsible for reviewing the terms of reference when contracting consulting services.

5.2 **Recurring expenses.** As part of the annual budget approved by the Bank, loan proceeds will be used to finance equipment, office supplies, transportation, and operating expenses for the project. These expenditures will be incurred in accordance with the executing agency's administrative procedures, which will be reviewed and agreed upon with the Bank in advance. The cap on these expenditures has been set at US$75,000 for the life of the project.

5.3 **Operating expenses.** The operating expenses modality will be used for the following expenditures:

5.4 Enrollment, internship, and training logistics, per diems, and reproduction of technical material for the development and training events planned under the two program components, for an estimated total of US$2,827,500; payment for data network service and use of mobile telephone or text messaging, and to equip the community network and primary care health workers, under component 2, for an estimated total of US$837,456; per diems, fuel, vehicle maintenance, and reproduction of materials for the supervision activities under the three components, for an estimated total of US$493,100.

2. Table of thresholds (US$ thousands)

Category	Amount US$ 000	Procurement method	Review by the IDB
Works	≥1,500	ICB	Ex ante
	>1,0	DC	Ex ante
	<1,500	Shopping	Ex ante for the first 3 processes or contracts, then ex post
Goods	≥150	ICB	Ex ante
	>1,0	DC	Ex ante
	<150	Shopping	Ex ante for the first 3 processes or contracts, then ex post
Nonconsulting services	≥150	ICB	Ex ante
	>1,0	DC	Ex post
	<150	Shopping	Ex ante for the first 3 processes or contracts, then ex post

Category	Amount US$ 000	Procurement method	Review by the IDB
Consulting firms	>200	International short list	Ex ante
	≤200	National short list	
	>1,0	DC	Ex ante
Individual consultants	See Policy GN-2350-9, Section V		Ex post
	>1,0	DC	Ex ante

Note: The thresholds for ex post review were established based on the executing agency's fiduciary capacity to execute the project and may be modified by the Bank as that capacity changes.

3. Major procurements

5.5 The procurement unit of central MINSA will be responsible for preparing the procurement plan.

Major Procurements

Activity	Procurement type	Estimated date	Estimated amount (US$ 000)
Goods			
Basic medical equipment for priority municipios	Shopping	July 2014	140
Vehicles	ICB	July 2014	300
Communication equipment (GPS)	Shopping	July 2014	50
Information systems equipment (computers, office furniture)	ICB	July 2014	200
Computer equipment for health centers and SILAIS headquarters	Shopping	July 2014	48
Kits for volunteer health workers	Shopping	July 2014	150
Nonconsulting services			
Firms[2]			
Annual program audit	DC		200
External technical audit	QCBS		167
Individuals			
Technical support staff for the optimization plan	NICQ	May 2014	15
Management safeguards plan staff	Service delivery contractors	May 2014	700
Technical staff for external evaluation	NICQ	May 2014	35

5.6 It is expected that the auditing firm retained in 2012 to audit the financial statements of all Bank-financed operations will be directly contracted, for reasons of continuity of service, in accordance with paragraph 3.1 (a) of document GN-2350-9.

[2] For consulting services, this means preparation of a short list of firms of different nationalities. See Policies for the selection and contracting of consultants financed by the Inter-American Development Bank (document GN-2350-9), paragraph 2.6.

5.7 Managers of local SILAIS and priority municipios will be contracted under the service delivery contractors modality. A specific procedure will be agreed upon and included in the Operating Regulations[3] in conformity with the provisions of paragraph 3.21 in document GN-2350-9.

5.8 MINSA will negotiate an amount to cover operating expenses for connectivity and telephony services to use the SICO with the company or companies providing coverage in the targeted areas.

* Click here to view the 18-month procurement plan.

4. Procurement supervision

5.9 The supervision of procurements will conform to the procurement plan.

5. Special provisions

5.10 **Measures to reduce the probability of corruption.** Comply with the provisions in documents GN-2349-9 and GN-2350-9 on prohibited practices and ineligibility of individuals and firms.

6. Records and files

5.11 Custody and management of contract files is the responsibility of each procurement unit, which will appoint a person to be in charge of this activity, designate a specific area for safekeeping documents, and ensure the files contain recorded documentary evidence for payments to suppliers and contractors. The physical files are to be retained for three years. According to the most recent ICAS review, file management is adequate. However, the procurement and financial areas have very limited physical space, an issue deserving investment by MINSA.

Financial management

1. Financial administration system

5.12 The SIGFA and SIGFA-PRO financial and accounting systems will be used for the financial administration of the operation. The presumption is that should any change or enhancement be made to the project administration module of these systems, the operation would migrate automatically to the new or enhanced module.

2. Financial reports

5.13 Annual audited financial statements will be submitted in accordance with Bank guidelines and policies (document OP-273-2 and Guidelines for financial reports and external audits for projects financed by the Inter-American Development Bank). In order to generate efficiencies, the intent is to retain the independent firm of auditors currently working with the executing agency, provided it continues to work with a technical quality acceptable to the Bank. However, the health sector

[3] The functions, minimum qualifications, terms of employment, selection procedures, and type of review of procedures and documents are included in the Operating Regulations; the process will be included in the procurement plan.

adds new operations every year and as new funds enter the execution cycle, the auditing firm will absorb the additional projects to be audited. It is therefore proposed that a new bidding process should be initiated every three years.

3. Disbursements and cash flow

5.14 The funds for the operation will be remitted to an APEX account at the Central Bank. The modality of advances of funds will be used to cover the liquidity needs for the following six months.

4. Internal control and internal audit

5.15 The executing agency has an internal audit unit and defined mechanisms to maintain an acceptable internal control environment. However, in practice, these mechanisms are not fully applied, thus the Bank will not rely on them for supervision.

5. External control and reports

5.16 The reporting requirements are similar to those in effect for other operations with the same executing agency.

1. In order to generate efficiencies, the intent is to retain the independent firm of auditors currently working with the executing agency, provided it continues to work with a technical quality acceptable to the Bank.
2. The terms of reference for the independent auditing firm will include visits for ex post supervision of disbursements.
3. The auditing services will have a total estimated cost of between US$250,000 and US$300,000.

6. Financial supervision plan

5.17 Considering the executing agency has a low financial management fiduciary risk, supervision will be limited to the audited financial statements and an ex post disbursement review visit by the Bank.