Document of
The World Bank

FOR OFFICIAL USE ONLY

Report No: 31740-NI

PROJECT APPRAISAL DOCUMENT

ON A

PROPOSED CREDIT

IN THE AMOUNT OF SDR 7.2 MILLION
(US$ 11 MILLION EQUIVALENT)

TO THE

REPUBLIC OF NICARAGUA

FOR A

HEALTH SERVICES EXTENSION AND MODERNIZATION PROJECT
IN SUPPORT OF THE SECOND PHASE OF THE
HEALTH SERVICES EXTENSION AND MODERNIZATION PROGRAM

March 4, 2005

Human Development Unit
Latin America and the Caribbean Region

CURRENCY EQUIVALENTS

(Exchange Rate Effective February 28, 2005)

Currency Unit = Córdoba
16.18 Córdobas = US$1
US$ 1.52 = SDR 1

FISCAL YEAR
January 1 – December 31

ABBREVIATIONS AND ACRONYMS

APL	Adjustable Programmatic Loan
BSG	Budget Support Group
CAS	Country Assistance Strategy
CC	Code of Conduct
CD	Compact Disk
CFP	Country Financing Parameters
CHFS	Community Health Financing Scheme
CM	Casa Materna (*Maternity Waiting Home*)
CP	Capitation Payment
CUT	Cuenta Unica del Tesoro (*Single Treasury Account*)
DGPD	Dirección General de Planeación y Desarrollo
DHS	Demographic and Health Survey
EA	Environmental Assessment
EHP	Elderly Health Program (of INSS)
EMP	Empresas Médicas Provisionales (*Previsional Medical Firms*)
ENDESA	Encuesta Nicaraguense de Demografía y Salud (*Nicaraguan Demographic and Health Survey*)
FM	Financial Management
FONMAT	Fondo para la Maternidad e Infancia Seguras (*Safe Maternity and Infancy Fund*)

FONSALUD	Nicaraguan Health Sector Support Fund
FYIP	Five Year Implementation Plan
GDP	Gross Domestic Product
GON	Government of Nicaragua
HCW	Health Care Waste
HCWM	Health Care Waste Management
HCWMP	Health Care Waste Management Plan
HIPC	Heavily Indebted Poor Countries
ICB	International Competitive Bidding
IDA	International Development Association
IDB	Inter-American Development Bank
IEC	Information, Education and Communication
INEC	Instituto Nacional de Estadísticas y Censos
INSS	Instituto Nicaraguense de Seguro Social (*Nicaraguan Social Security Institute*)
IPDP	Indigenous Peoples' Development Plan
IPP	Indigenous Peoples' Plan
IRR	Internal Rate of Return
LAC	Latin America and the Caribbean
MAIS	Modelo de Atención Integral de Salud (*Integrated Health Care Model*)
MCH	Maternal-Child Health
MDG	Millennium Development Goals
MINSA	Ministerio de Salud (*Ministry of Health, MOH*)
MTEF	Mid-Term Economic Framework
MOF	Ministry of Finance and Public Credit
MOH	Ministry of Health
MOU	Memorandum of Understanding
MS	Mesa Sectorial de Salud (*Health Sector Council*)
NCB	National Competitive Bidding
NDF	Nordic Development Fund
NGO	Non-Governmental Organization
NHP	National Health Plan
NORAD	Norwegian Development Agency
NPV	Net Present Value
PACC	Plan Anual de Compras (*Annual Procurement Plan*)
PBHS	Paquete Básico de Servicios de Salud (*Basic Package of Health Services*)

PHC	Primary Health Care
PMSS	Proyecto de Modernización del Sector Salud (*Health Sector Modernization Project, World Bank*)
PREM	Poverty Reduction and Economic Management
PROCOSAN	Programa Comunitaria de Salud y Nutrición
PRSC	Poverty Reduction Support Credit
PRSP	Poverty Reduction Support Program
PSAC	Poverty Strategy Assistance Credit
PSTAC	Poverty Support Technical Assistance Credit
QAT	Quality Assurance Team
QBCS	Quality and Cost-Based Selection
RAAN	Región Autónoma Atlántica del Norte
RAAS	Región Autónoma Atlántica del Sur
SIAFI	Sistema Integrado Administrativo Financiera
SIGFA	Sistema de Gerencia Fiscal Administrativo (*Administrative Fiscal Management System*)
SILAIS	Sistema Local de Atención Integral de Salud (*Local Integrated Health Care System*)
SIMINSA	Sistema Informática del Ministerio de Salud (*MOH Information System*)
SIPLA	Sistema de Planificación (*Planning System*)
SWAp	Sector Wide Approach
TOR	Terms of Reference
USAID	United States Agency for International Development

Vice President:	Pamela Cox
Country Manager/Director:	Jane Armitage
Sector Leader:	Laura Rawlings
Sector Manager:	Cristian Baeza, Acting
Task Team Leader:	Jesus Maria Fernandez Diaz

NICARAGUA
Health Services Extension and Modernization (2nd APL)

CONTENTS

Page

NICARAGUA

HEALTH SERVICES EXTENSION AND MODERNIZATION (2ND APL)

PROJECT APPRAISAL DOCUMENT

LATIN AMERICA AND CARIBBEAN

LCSHH

Date: March 8, 2005	Team Leader: Jesus Maria Fernandez Dia
Country Director: Jane Armitage	Sectors: Health (100%)
Sector Manager/Director: Evangeline Javier	Themes: Health system performance (P)
Project ID: P078991	Environmental screening category: Partial Assessment
Lending Instrument: Adaptable Program Loan	Safeguard screening category:

Project Financing Data

[ ] Loan [X] Credit [ ] Grant [ ] Guarantee [ ] Other:

For Loans/Credits/Others:
Total Bank financing (US$m.): 11.00
Proposed terms:

Financing Plan (US$m)

Source	Local	Foreign	Total
BORROWER/RECIPIENT	4.10	0.00	4.10
INTERNATIONAL DEVELOPMENT ASSOCIATION	11.00	0.00	11.00
FINLAND: MINISTRY FOR FOREIGN AFFAIRS	7.10	0.00	7.10
SWEDEN, GOV. OF	20.00	0.00	20.00
INTER-AMERICAN DEVELOPMENT BANK	30.00	0.00	30.00
NETHERLANDS: MIN. OF FOREIGN AFFAIRS / MIN. OF DEV. COOP.	10.00	0.00	10.00
Total:	82.20	0.00	82.20

Borrower:

Republic of Nicaragua
Nicaragua

Responsible Agency:
Ministry of Health
Nicaragua

Estimated disbursements (Bank FY/US$m)									
FY	0	0	0	0	0	0	0	0	0
Annual	2.20	2.20	2.20	2.20	2.20	0.00	0.00	0.00	0.00
Cumulative	2.20	4.40	6.60	8.80	11.00	11.00	11.00	11.00	11.00

Project implementation period: Start July 5, 2005 End: May 31, 2009
Expected effectiveness date: July 5, 2005
Expected closing date: November 30, 2009

Does the project depart from the CAS in content or other significant respects? ***Ref. PAD A.3***	[ ]Yes [X] No
Does the project require any exceptions from Bank policies? ***Ref. PAD D.7***	[ ]Yes [X] No
Have these been approved by Bank management?	[ ]Yes [X] No
Is approval for any policy exception sought from the Board?	[ ]Yes [X] No
Does the project include any critical risks rated "substantial" or "high"? ***Ref. PAD C.5***	[ ]Yes [X] No
Does the project meet the Regional criteria for readiness for implementation? ***Ref. PAD D.7***	[X]Yes [ ] No

Project development objective ***Ref. PAD B.2, Technical Annex 3***

The overall APL program development objective, as approved by the IDA Board in 1998, is to improve health outcomes in Nicaragua, particularly among the poor, by raising the efficiency, effectiveness, equity and sustainability of the Nicaraguan health system. In this second phase of the APL, IDA financing will contribute, alongside funds from the MOH and other SWAp partners, to improve maternal and child health in the poorest municipalities of Nicaragua, concentrating roughly half of the Nicaragua's poor. By improving the health status of this population, health inequities should reduce, as shown by disparities in maternal and infant mortality indicators across geographical areas and income groups. These goals will be achieved through the operationalization of three strategic objectives, as set up in the sector Five-Year Implementation Plan, namely: (i) the extension of coverage of a package of basic health and nutrition services to the poorest areas of the country, via the new integrated model of health care; (ii) the physical and functional strengthening of the health service facilities network, focusing on maternal-infant care, so as to provide a seamless path of essential services in the target areas; and (iii) institutional strengthening and capacity-building, concentrated specifically on developing the purchasing, monitoring and evaluation capacities of the MOH, its leadership role to enhancing donors? alignment and harmonization, and the management capacity of MOH decentralized units and Autonomous Governments of the Atlantic Coast.

Project description *[one-sentence summary of each component]* ***Ref. PAD B.3.a, Technical Annex 4***

Strategic Objective 1: Extension of health care coverage to the poorest population (US$36.5 million. Extension of the Basic Package of Health Services to vulnerable rural populations at the community-level.

Strategic Objective 2: Strengthening the network of services in targeted areas to support the implementation of the BPHS (US$27,8 million). This component of the SWAp is designed to support the extension of coverage, and to complement its MCH-related activities. It includes physical rehabilitation of health centers and hospitals, expansion of the Women Center Network

and strengthening management of public providers.

Strategic Objective 3: Improving Stewardship, Institutional Strengthening and Decentralization (US$ 17,8 million). The MOH recognizes that to fulfil the vision set forth in the NHP and effectively lead the SWAp, it will need to undertake a variety of institutional reforms. These include: (i) strengthening the Ministry?s management capacity necessary for planning, contracting and supervising the expansion of the BPHS (e.g., programming and planning, information and reporting) and the rest of institutional fiduciary systems (financial accounting, procurement, auditing) so the SWAp can progressively adopt these national systems instead of donors? procedures; (ii) strengthening the GON?s capacity to monitor and evaluate health sector performance, efficiency and equity; (iii) supporting the MOH?s coordination role as executor and overseer of the GON?s population policy; and (iv) developing a strong purchasing function at the MOH, including the identification of beneficiaries for the expansion of essential services, adjusting payment mechanisms, overseeing service quality, contract design and monitoring.

Which safeguard policies are triggered, if any? ***Ref. PAD D.6, Technical Annex 10***
Environmental Assessment (OP/BP/GP 4.01)
Indigenous Peoples (OD 4.20, being revised as OP 4.10)

Significant, non-standard conditions, **if any**, for:
Ref. PAD C.7
Board presentation:

Loan/credit effectiveness:
Effectiveness conditions:
? Operational Manual for the extension of the PBHS, including calculation of the capitation transfer, estimation of beneficiary population, operation of the community health financing scheme, contractual arrangements and performance-based mechanisms for public and private providers satisfactory to the Bank and other partners.

Covenants applicable to project implementation:

A. STRATEGIC CONTEXT AND RATIONALE

1. Country and sector issues

Nicaragua's health profile reflects the country's high prevalence of poverty—in particular, its high rate of absolute poverty. Despite progress in reducing poverty over the past decade, with a per capita income of US$710 Nicaragua remains one of the poorest countries in Latin America. Although from 1993 to 2001, poverty declined from 50 to 46 percent, and extreme poverty fell from 19 to 15 percent, the gains were characterized by significant geographic differences. [1] In 2002, 44 percent of the population still lived in rural areas where the prevalence of extreme poverty was 25 percent, more than four times the rate of urban areas. On average, poorer households have higher fertility rates and larger families, as well as higher maternal, infant and child mortality. In addition, tuberculosis, which remains a persistent public health problem, has become largely a disease of the poor.

Nicaragua has made considerable progress in improving the health status of its people over the last decade. Life expectancy has reached 69 years, and since 1990, infant and child maternal mortality rates have fallen by 29 and 32 percent, respectively.[2] A recent study of 165 countries that predicted life expectancy and infant mortality based on gross domestic product (GDP), found that health status of Nicaraguans exceeds what one would anticipate, given the country's per capita income. While Central America as a whole did better than predicted on both of these two key health indicators, among the Central American republics, Nicaragua had the largest positive deviations between its actual and predicted life expectancy and in the case of infant mortality was second only to Costa Rica.

Life Expectancy and Infant Mortality in Central America:

Actual and Predicted Levels Based on Worldwide Analysis

Relationship Between GDP per Capita and These Two Indicators

	Life Expectancy, 2000			Infant Mortality, 2000		
Country	Actual	Predicted	Percent Difference	Actual	Predicted	Percent Difference
Costa Rica	78	72	8%	10	18	-43%
Panamá	75	69	7%	20	25	-21%
Nicaragua	69	61	13%	33	52	-37%
Honduras	66	61	8%	35	51	-32%
El Salvador	70	67	5%	29	32	-10%
Guatemala	65	66	-1%	39	37	6%

Source: Todd & Hicks, 2003

[1] World Bank, *Nicaragua Poverty Assessment – Raising Welfare and Reducing Vulnerability,* December 2003, p. i

[2] The 2002 Joint IDA/IMF Annual Progress Report of the Nicaragua PRSP recorded major gains in 12 of 13 of the intermediate health indicators, and results ranging between 85 and 130 percent of the planned targets. The only health indicator that did not improve was the prevalence of diarrhea incidence among children under 5 years.

These recent advances hide, nevertheless, the fact that the poor have benefited much less than the wealthiest, as the table in Annex 1 shows. Notwithstanding its relatively good recent record of improving health, Nicaragua continues to confront many of its traditional health challenges. The disease profile of Nicaragua is one of a country in the early phases of the epidemiological transition. Infectious diseases remain major health concerns, and perinatal illnesses together with the illnesses of early childhood—malnutrition, acute respiratory diseases and diarrhea in particular—continue to dominate the public health agenda. Moreover, unless current trends are accelerated, it is unlikely that Nicaragua will achieve the Millennium Development Goals (MDG) of reducing maternal mortality and the prevalence of chronic malnutrition. Maternal and child health care, therefore, remain at the top of Nicaragua's human development agenda. In addition, the overall fertility rate—one of the highest in LAC at 3.2—is a particularly pressing social problem, and the adolescent pregnancy rate is second to none in the region.[3]

	Current	*Goal for 2005*		*PRSP 2015*	
Indicator	**Status (2001)**	**Target**	**On track**	**Target**	**Likelihood of Achieving**
Infant Mortality	31	32	Yes	20	Possible
Child mortality	40	37	Partly	24	Possible
Maternal mortality	125	129	Yes	40	Unlikely
Chronic Malnutrition	17.8	16	Yes	7	Unlikely
Global Fertility Rate	3.2				

Source: PRSP, LSMS 2001, PRSP First Progress Report, Poverty Assessment 2003.

With respect to health financing, the level, stability and composition of MOH financing are causes of concern. From 1999 to 2003, Ministry of Health (MOH) expenditures constituted 14 percent of total national budget expenditures (i.e., national funds plus external financing). While the level and sources of MOH financing were erratic over this period, in real, absolute terms, its 2002-2003 total financing was 8 percent less than its 1999-2000 total.

The MOH is heavily dependent upon external financing (both grants and loans). From 1999 to 2003, external financing grew in real terms from US$22.9 million to US$30.8 million. Although the level of external financing has fluctuated annually, it has generally grown —from 18 percent of total MOH expenditures 1999 to 24 percent in 2003— at the same time that the level of real financing provided by national funds has fallen (by an annual average of 7 percent since 1999). In effect, the Government of Nicaragua (GON) has substituted external funds for national funds to finance MOH expenditures. The composition of MOH resources is also a cause of concern as the allocation of public expenditures by department is generally inversely related to the severity and level of poverty (SANIGEST 2004: 90). A critical challenge for Nicaragua and the international community is to modify existing patterns of public health expenditures so that they no longer reinforce, but instead help to address Nicaragua's unequal health and poverty profiles.

Although the coverage of the health program of the Nicaraguan Social Security Institute (INSS) has expanded by one-third over the past five years, it still provides coverage for only 9 percent of the population, the lowest proportion of any Central American country. Moreover, 70 percent of its beneficiaries are from the wealthiest 40 percent of the population. With private health insurance covering a mere 1 percent of Nicaraguans, the poor are forced to rely overwhelmingly

[3] A 2001 national survey found that 25 percent of women aged 15-19 had already been pregnant at least once.

on a combination of Ministry of Health services and self-treatment. Out-of-pocket purchases of medicines have grown steadily in recent years and now constitute 49 percent of all health expenditures.

In summary, high fertility rates, child malnutrition, poor health and a low level of financial protection against illness still prevail for significant groups of the population. Moreover, these same factors are important determinants of poverty and together they constitute a poverty trap from which today's and tomorrow's Nicaraguan poor will find it difficult to escape. . With existing patterns of public expenditure mirroring these inequalities, a critical challenge for public policy will be to reverse these inequities as a principal tool for combating poverty and fostering human development.

The GON is well aware of many of the shortcomings of the health sector, and over the course of the last five years has accelerated the pace of reform. A few years ago it passed the General Health Law (2002) and the Law's companion piece, the Regulation Decree (2003), both important steps in the modernization and institutional capacity-building of the MOH. These legal instruments set up: (i) the organization of a national health system based on two financial regimes, contributory and non-contributory, their respective benefit plans, institutional responsibilities and financing mechanisms; (ii) the principle of separation of functions, reinforcing the MOH stewardship role and the instruments to do so (i.e., national health plan, quality assurance mechanisms and sector planning mechanisms), (iii) a decentralized model of governance and management; (iv) the basis for devolution of power to the Autonomous Governments of the Atlantic Coast; and (iv) the consideration of the special needs and conditions of the indigenous and afro-descendant population. The Ministry is now implementing these reforms and developing its institutional capacity to address the sector challenges, with the financial support of an IDB loan and the IDA's Adjustable Programmatic Loan (APL) first-phase credit (NI-3084).

The other key health care organization in the country, the Nicaraguan Social Security Institute (INSS), has also made notable advances since 2000. In 2002, it separated financing from the management of its health and pension regimes. Between 2000 and 2004, it expanded the number of beneficiaries of its health program by 32 percent, and introduced a new Elderly Health Program (EHP) for its retired affiliates. The INSS, which buys all medical services for its affiliates from private providers (EMPs), has also devised and implemented a provider certification system, and has reviewed and formalized the methodology for fixing the capitation payment paid to the EMPs, with active participation from the EMPs and their trade association.

Looking ahead, the GON has agreed with a group of significant donors, including IDA, to increase their effort to coordinate and harmonize official development aid by sponsoring a series of Sector Wide Approaches (SWAp) in a number of sectors, including health. Nicaragua has done a substantial amount of work in health policy reform that serves as a strong foundation for the proposed SWAp: in October 2004, the GON (Government of Nicaragua) released an Operational National Development Plan to update the 2001 Poverty Reduction Strategy Paper (PRSP); in mid-2004 the MOH released the ten-year National Health Policies and its accompanying 2004-2015 National Health Plan (NHP), outlining how it plans to achieve the health goals set out in its PRSP; in November 2004 the MOH released a draft Five-Year

Implementation Plan (FYIP) detailing how it would operationalize the aforementioned NHP. The fundamental goal set up by the FYIP is increased access of the poor people of Nicaragua to effective maternal and child health care. This would be achieved by expanding access to a package of basic health services (PBHS) in the most deprived and rural municipalities of the country through a combination of performance-based incentives to public providers and purchasing of services from private providers. In December 2004, the MOH convoked an extraordinary session of the Local Health Care System (SILAIS) and local area health networks (*municipios*) to present to them the NHP and national priorities for the FYIP, and to assist each of them in establishing their own annual operating goals for each year in the FYIP, and thereby produce a detailed, bottom-up plan for programming and budgeting the FYIP.

These national plans have also received the backing of the international financial community. All of the cooperating partners in the SWAp have agreed that the FYIP will serve as the operational framework for the SWAp, thereby ensuring that the SWAp will be a single unified policy that will be fully aligned with government policy. By its being based on the product of the still nascent local annual programming system, it is hoped that the SWAp will help to nurture the further development of local level planning and programming capability, and thereby help to institutionalize this new approach and with it, the effective decentralization of the MOH.

2. Rationale for Bank involvement

The primary rationale of the Country Assistance Strategy (CAS) is to support the GON's development goals as outlined in the PRSP. The Adaptable Program Credit (APL) for the health sector modernization project, approved by the Board in 1998, supports three of the four 2001 PRSP pillars: (i) greater and better investment in the human capital of the poor, (ii) better protection for vulnerable populations, and (iii) good governance. The most significant IDA support to Nicaragua consists of the poverty reduction support credits (PSAC and PRSCs). These credits contain health conditionalities that are fully aligned with the PRSP. This proposed new SWAp would build upon the work accomplished under the first phase of the adjustable programmatic loan (APL), concluded in December 2004, and would contribute directly and synergistically to the goals established in the PRSP with the PRSCs.

The Bank's involvement in the SWAp builds upon its previous work in Nicaragua by broadening the policy dialogue on poverty reduction and promoting further reforms in the modernization of the Nicaraguan health sector. Since September 2003, the Bank has been working closely with MOH to develop the NHP and the FYIP. The first phase of the Bank's APL health sector credit achieved its development objectives satisfactorily. The MOH—with the support of the World Bank and the Inter-American Development Bank (IDB) through the health modernization project—has developed sound institutional tools and regulations to improve the Ministry's regulatory and management roles, as described in the previous section. Extensive evaluations of most of the first phase interventions supported by the APL, together with cross-evaluations with other donors' programs and past national health policies, have been carried out over the past two years. The results of these evaluations have been used to inform new sector policies and have assisted the MOH in making strategic decisions about how best to harmonize donor contributions and design the SWAp.[4] The vast majority of the SWAp's planned activities consists of efforts to

[4] A summary table of the evaluation results is presented in Annex 1-A.

scale-up activities that were pilot-tested, evaluated, deemed successful, and (generally with some modifications) worthy of replication and expansion.

While health modernization efforts, have made significant advances, much work still needs to be done to improve the health status of the population and the country's health system. Inequity persists and the health reform and decentralization agenda is not yet completed. In addition, there is a dire need to improve accountability, transparency and governance throughout the sector.

The Bank's expertise in SWAps, as well as its extensive experience with designing effective pro-poor health strategies, complements the contribution of the other stakeholders in the SWAp. Moreover, the Bank has accrued important experience in the Nicaragua's health sector working closely with other donors and financiers. The Bank has played a pivotal role encouraging the MOH to develop a more cohesive sector policy and institutional structure, thereby promoting the Ministry's institutional effectiveness and enhancing its leadership role in coordinating donors' aid. The Bank is also part of the Budget Support Group (BSG) in Nicaragua. The BSG and all of the bilateral donors financing the health SWAp, have agreed to a harmonized set of policy actions and results (including health) that will serve as key inputs to the SWAp.

3. Higher level objectives to which the project contributes

The Government of Nicaragua's 2001 Poverty Reduction Strategy Paper (PRSP), which is the basis of the World Bank's Country Assistance Strategy (CAS) for Nicaragua, emphasizes the need to improve public sector management and the coordination of foreign aid. The health SWAp supports three of the PRSP's four pillars by targeting vulnerable populations, focusing on institutional strengthening and capacity-building and encouraging greater and better human capital investment in the poor. In particular, the SWAp will primarily seek to improve the maternal and child health of a significant proportion of the Nicaraguan poor and, thereby, help to reduce the rural-urban health inequities. More easily accessible and more affordable access to health, nutrition and family planning counseling and services will, in turn, contribute to reducing child malnutrition, protecting household income and facilitate women's empowerment. The SWAp will also improve the Nicaragua health sector effectiveness, efficiency and sustainability by improving the MOH's stewardship role, fostering alliances with private (NGOs and others) and official institutions (INSS), broadening the capacity of decentralized units to manage resources and evaluate performance, and improve the targeted use of external assistance, while reducing the administrative burden that has historically been associated with it. Each of these high level development objectives are fully aligned with the NHP and its FYIP, as well as IDA's APL program development objectives.

B. PROJECT DESCRIPTION

1. Lending instrument

APL program: In 1998 the Bank approved a ten-year Health Modernization Program (APL) consisting of two phases, the first one for an amount of US$32 million to be implemented between 1999 and 2003. This first project was co-financed (joint-financing) by the Norwegian

Agency for Development Cooperation (NORAD), for an amount of US$3 million equivalent, and The Nordic Development Fund (NDF), for an amount equivalent to US$3.5 million of parallel co-financing. The program seeks to improve the efficiency, effectiveness and equity of the Nicaragua health system. The first phase was completed on December 31st, 2004 and the second phase is expected to commence in the second half of 2005.

The first phase focused on: (i) the extension of primary health care (PHC) by strengthening the physical condition and management of public PHC providers, implementing a community nutrition and growth program, developing a network of Women's Centers (*Casas Maternas*) and piloting the contracting of PHC from NGOs; (ii) hospital reform, including physical rehabilitation and equipment and management demonstration projects; (iii) modernization of specific MOH capabilities—most notably reforming the sector regulatory and organizational framework, strategic planning, financial management, information systems, human resources, Information, Education and Communication, and procurement of pharmaceuticals and medical supplies; (iv) modernization of the Social Security Institute and expansion of health insurance.

The borrower met or surpassed the triggers established for moving to phase II. Compliance with specific triggers is as follows:

Trigger indicators	Status of compliance
Policy indicators	
1. New roles and responsibilities defined for MOH, and new organizational and functional structure established.	This goal was accomplished by the 1999 Law on Organization, Competence and Procedures of the Executive. This law established more clear specialization of functions within the MOH. The MOH is devising and implementing a second step re-structuring exercise since early 2004.
2. Adequate legal framework supporting the development of MOH organization, pharmaceuticals, social security, and private provision of health services in place.	The Law on Pharmaceuticals and Pharmacy, in 1998, the General Health Law, in 2002, and their regulations (*Reglamentos*), in 1999 and 2003 respectively, have been passed and enacted.
3. Major changes introduced in resource allocation, with activity and performance-based management agreements signed with SILAIS and hospital directors.	A bottom-up, activity-based budgeting exercise has been implemented by MOH since 2003, breaking up the old historical budget. This system has been formalized in the budget structure and has been approved by the MOF. As a partial consequence of this, budget execution of the MOH has gone up from 77% in 1999 to 99% in 2003. Management agreements have been signed in 2004 with all 17 SILAIS, 152
4. Separation of core business in INSS (including accounts and management), and number of policy holders increased by 20% (compared to 1998)	municipalities and 32 public hospitals for setting performance goals and identifying funding resources INSS has effectively separated the administration and accounting of the three plans. Affiliation has also accomplished the target since INSS beneficiaries have increased from 259,506 in 1998 to 353,035 in 2004 (+36%).
Implementation indicators	
5. Integrated Maternal and Child care Model and nutrition interventions operational in 17 SILAIS.	The Integrated Maternal and Child Care Model (Modelo de Gestión) has been implemented in the 6 pilot SILAIS, under support of the APL. All 17 SILAIS now enter into annual management agreements with MOH to deliver the PHC services. The nutrition program has been implemented in 442 communities, more than doubling the number planned, and has been taken up by other donors in 1,413 additional ones.
6. National program to reduce maternal and perinatal mortality designed (based on results from pilots)	The program was designed in 2002 and implemented in the 11 beneficiary SILAIS of the APL. Maternal deaths went down in 13 pilot municipalities from 21 in 2001 to 7 in 2004, and infant deaths from 213 in 2001 to 115 in 2004.
7. Management strengthened in five hospitals.	Four pilot hospitals have fully implemented the following management tools, under APL support: strategic plans, management agreements, internal management agreements, management table-boards, quality improvement programs, nursing standard practices, and waste management plans. Some of these tools have been also replicated in four other "tutored" hospitals. Two other national hospitals have implemented similar tools under IDB support.
8. At least 30 hospitals rehabilitation projects implemented.	In total, 31 rehabilitation projects have been undertaken in the four pilot hospitals and the other four "tutored" hospitals. Most of them concentrated on upgrading the critical path (emergency, operating rooms, obstetric and neonatology wards), bringing them to compliance with MOH minimum standards (*habilitación*).
9. Management Information System links to center operational from 8 SILAIS.	Management information systems (management table-boards) are operational in MOH hospitals and are being reviewed monthly by the MOH hospital directorate. SILAIS also operate with a reduced management table-board for supervising their PHC local providers.
10. Collective affiliation substitutes individual affiliation in INSS and new financial management system in place.	INSS has fully implemented an integrated FM system. As a result all financial transactions (payroll, accounting, inventory, budget, treasury, human resources) are now interlinked and INSS has access to on time financial statements. Regarding the mode of affiliation, individual affiliation substituted collective affiliation starting in 1996 and was completed by 1998.

The second phase of the APL will continue the same program's objectives, although its implementation will further focus on the achievement of maternal and child health results. It will scale up the first project's activities for expansion of services, learn from lessons accrued and benefit tremendously from the institutional ownership and capacity gained during the first phase. However, the Bank, together with the rest of the development community in Nicaragua, has made a commitment to the GON that it will foster broader coordination of foreign aid. To that end, the Bank has worked with GON and the many donors in the health sector to develop a Sector-Wide Approach (SWAp), both to ensure coordination among the many donors in the health sector and to reduce the transaction costs of managing external assistance for the GON. The APL second phase will be an integral part of the SWAp.

The massive amount of foreign aid Nicaragua received after natural disasters (in particular, Hurricane Mitch in 1998) resulted in a proliferation of projects in the health sector.[5] The lack of adequate coordination of these projects has bred inefficiencies in the health sector while foisting excessive demands on the MOH for project supervision and monitoring. The desire to reduce the administrative burden of external assistance has been a major factor motivating the MOH's efforts to promote a health SWAp. The timing of the SWAp is particularly propitious given that IDA, IDB, Finland and Sweden (two major bilateral donors in the health sector in Nicaragua) are all in similar phases of the traditional project cycle and need to define their activities in the health sector for the next four to five years. This constellation of circumstances provides a compelling need for, and a unique opportunity to develop, a health SWAp under the leadership of the MOH.

IDA will contribute US$11 million to the health SWAp though this proposed second phase APL. This amount has been reduced from the US$15 million allocated in the Nicaragua CAS for this project, due to current restrictions of IDA-13 funds.

2. Project development objective and key indicators

As approved by the IDA Board in 1998, the overall APL program development objective is to improve health outcomes in Nicaragua, particularly among the poor, by raising the efficiency, effectiveness, equity and sustainability of the Nicaraguan health system. In this second phase of the APL, IDA financing will contribute, along with funds from the MOH and other SWAp partners, to improving maternal and child health in the poorest municipalities of Nicaragua, where roughly half of Nicaragua's poor reside. Improving the health status of this population, should reduce health inequities, in particular, the disparities in maternal and infant mortality indicators across geographical areas and income groups. These goals will be achieved through the operationalization of three strategic objectives, as set forth in the sector Five-Year Implementation Plan, namely: (i) the extension of coverage of a package of basic health services to the poorest areas of the country, via the new integrated model of health care; (ii) the physical and functional strengthening of the health service facilities network, focusing on maternal-infant care, so as to provide a seamless path of essential services in the target areas; and (iii) institutional strengthening and capacity-building, concentrated specifically on developing the purchasing, monitoring and evaluation capacities of the MOH, its leadership role to enhance donors' alignment and harmonization, and the management capacity of MOH decentralized units and Autonomous Governments of the Atlantic Coast.

A common set of results indicators accompanies the FYIP and will be closely monitored by the MOH and the SWAp partners. These indicators, along with its corresponding targets, are fully described in Annex 3 and include the following:

Results related to improved access to maternal and child essential services in targeted areas:
1. The number of beneficiaries of the expansion of essential health services
2. Institutional delivery rate
3. Child immunization rates
4. Coverage of early prenatal care

[5] In 2003, there were 36 internationally funded projects in the health sector and 14 distinct primary health care models.

5. Coverage of complete prenatal care 6. Utilization rates of safe family planning methods
Results related to strengthening the health services network in targeted areas:
7. Number of pregnant women admitted to Women's Centers (*Casas Maternas*) 8. Hospital discharge rate 9. Number of hospitals with critical path services certified by MOH 10. Percentage of providers satisfying targets set in their service agreements 11. Percentage of maternal deaths audited
Results related to improved sector stewardship and institutional strengthening
12. Percentage of MOH budget transferred to local systems as purchase of services 13. Percentage of MOH budget directly administered by the MOH executing units of the Autonomous Atlantic Regions 14. Per-capita public health expenditure in the targeted areas

3. Project components

The Five-Year Implementation Plan (2005-2009) provides the strategic framework for all SWAp partners to join efforts to achieve the stated results. While the FYIP has a national scope and incorporates all MOH activities, it has been agreed with the MOH that the FYIP, and its consecutive annual action plans, will clearly identify a subprogram of activities aimed specifically at achieving the targets and strategic initiatives set out hereafter. The two first strategic objectives within this program are targeted to the 79 municipalities with the greatest health needs. If new funds become available or new donor partners join the SWAp, this list of municipalities and/or the identified priority activities may be increased accordingly. The FYIP sets up the strategic actions to achieve the following three strategic objectives:

Strategic Objective 1: Extension of health care coverage to the poorest population (US$36.5 million)

Extension of the Basic Package of Health Services to vulnerable rural populations at the community-level

A package of basic health care services (PBHS), focusing on maternal and child health, will be offered to the most deprived population of Nicaragua. Vulnerable populations and localities for the extension of coverage have been identified based on the following criteria: current access to health services, level of poverty, and health status. A multiple-tiered targeting process has been used. First, the 12 most vulnerable departments have been identified, using the targeting criteria explained in Annex 4. Second, 79 municipalities within the 12 most vulnerable departments have been selected using the same criteria. In total, these localities account for 47 percent of the poorest Nicaraguans. Third, within these 79 municipalities, the rural and indigenous communities (*comaracas*) will be prioritized. The content of the PBHS further focuses this intervention by targeting specific diseases and health problems, maternal and child health along with a few other adult-prevalent diseases that have their greatest impact on the poor. It is estimated that the PBHS will be extended over the next five years to 470,000 inhabitants living in the most deprived municipalities of the North and Atlantic Coast of Nicaragua.

The expansion of the PBHS will be based on the implementation of a new integrated health care model (MAIS), developed by the MOH to integrate the multiple, diverse models of health care delivery and management that have been implemented over the past years. The MAIS has

already been drafted by the MOH and includes all the necessary technical instruments to implement this strategy. It establishes the delivery model (including consideration of different delivery modalities according to social and geographical characteristics of the population to cover), the benefits plan, targeting mechanism, contracting and payment instruments, social participation strategies and supervision and monitoring arrangements). Itinerant health service delivery teams will be organized for reaching the poor living in the most remote areas of the country. The PBHS will be tailored, in content and delivery modalities, to the special conditions of the indigenous and afro-descendant population. These accommodations are currently being worked out between the MOH and the Autonomous Governments of the Atlantic Coast, where most of these groups live.

The delivery of the PBHS will be achieved through a capitation transfer to SILAIS which, in turn, will purchase services from public, local providers (*municipios)* and/or qualified, private providers (mainly NGOs). These capitation transfers constitute a community health financing scheme. The community health financing scheme will provide universal coverage within targeted communities of the 79 prioritized *municipios*. The community health financing scheme will entitle all persons residing in the targeted communities (*comarcas*) to the services included in the PBHS. The amount to be transferred to each SILAIS will be determined by an adjusted capitation payment. The total value of funds transferred to each SILAIS will be calculated as the product of the population of the community and a region-specific, average per capita cost of the PBHS (i.e., the number of residents in the community will be multiplied by the region-specific, average per capita cost). The transfers to the SILAIS will be made monthly and prospectively. The beneficiary population will be estimated prospectively. The initial population estimates of the targeted communities will be based on the official 2005 national census that is currently being conducted by the National Institute of Statistics and Census (INEC). Each year, the capitation transfers made to the SILAIS on behalf of the targeted communities will be adjusted to take into account changes in population. These adjustments will be based on the annual, community-specific, population estimates that INEC routinely prepares during inter-censal years, and that constitute the official GON population estimates Additionally, there will be a review, and (if deemed appropriate) an adjustment of the regionally differentiated capitation rates.

The MOH will enter into management agreements with the SILAIS (*Convenios de Gestión*). These *Convenios* will be the basis for the capitation transfers of the community health financing scheme to the SILAIS. The capitation transfers will finance the delivery of services (mainly maternal and child care) included in the PBHS, including outreach strategies, necessary transportation, essential drugs, nutrition advice, IEC activities, reproductive and sexual health services and limited essential health services for adults. The actual delivery of services and the expected outcomes of such services will be monitored and verified through a two-pronged strategy:

- social audit mechanisms will be devised, by which: (1) the community will certify that the local providers render the services included in the PBHS, and (2) periodic community surveys will be carried out to investigate the quality and timeliness of services and members of community's general level of satisfaction with the arrangement.
- Intermediate results linked to the delivery of the PBHS will be closely monitored by the SILAIS and the MOH. These intermediate results, as described in the results framework

(Annex 3), are: institutional deliveries, child immunization, early prenatal care, full prenatal care and discharges from Women Centers. The achievement and verification of these results will also be subject to an independent assessment, as agreed in the MOU.

In the event that any beneficiary is judged (by the MOH) to have been denied care for services included in the PBHS, the MOH will deduct the capitation payment made for that patient and apply penalties as described in the Operational Manual.

Strengthening planning, accountability and social participation for the delivery of the PBHS

The SWAp's resources will fund technical assistance necessary to develop institutional capacity at the SILAIS and local provider levels (*municipios*) for implementing the expansion of the PBHS. While local providers will progressively take up broader management responsibilities for the delivery of services and management of resources, SILAIS will develop a supporting role to the MOH central purchasing unit, helping out in the planning, formulation, monitoring and supervision of annual health plans, service contracts with private providers and performance agreements with public local providers. This capacity building support activities will entail capacity assessment, training, development and implementation of contractual, management and clinical instruments, and information technology necessary to effectively plan for the expansion of services, improve and control quality, manage resources at local level, and monitor results.

Both public and private health care providers will work closely with the communities, jointly identifying the community's health needs, and programming community and health sector actions to address their health problems. This work will constitute the MOH-community interface portion of the Ministry's ongoing decentralization efforts. To date, MOH's decentralization has been exclusively an intra-institutional process. A key element of the process has been the recent development of local MOH networks' (*municipios*) annual programming and budgeting exercise, whereby they develop annual operating plans, which then aggregate up to the SILAIS level to become the heart of the SILAIS annual plan. The SWAp will help taking this process to the next step, and will incorporate private sector itinerant health teams and local health counciles (as well as the MOH's hospitals) into the planning, monitoring and evaluation/feedback cycle. The civil society will play an active role on auditing the actual delivery and quality of services to the community. A community committee will advise and ultimately endorse the provider annual working plan and periodically (e.g., quarterly) provide monitoring feedback to the provider and the supervisory SILAIS.

Strategic Objective 2: Strengthening the network of services in targeted areas to support the implementation of the PBHS (US$27.8 million)

This component of the SWAp is designed to support the extension of coverage, and to complement its MCH-related activities. Activities in this area are aimed at creating an effectively structured and functioning referral system that will provide a more complete continuum of MCH care to rural communities, while increasing their access to secondary care and improving the overall quality of health care.[6] Bringing such a system to fruition will require improving three

[6] It is expected that the extension of primary care through the PBHS will increase the demand for and referrals to secondary care.

different types of facilities that comprise the MCH delivery system located in the same geographical areas selected for the expansion of essential services:

Women Homes (Casas Maternas)

Casas Maternas (CMs) are low cost, assisted-living arrangements that usually have around 10 beds and are located next to a hospital. The physical facilities are usually contributed by the community. Communities get also involved in co-financing and managing these homes. The CMs are designed to lodge pregnant women living in remote villages in the last few days of their pregnancy, to ensure that the women have ready access to an institutional facility when labor work starts. Women usually stay in these facilities for a few days after delivering. Services provided in these *Casas* also expand to provide family planning and child nutrition counseling, as well as other education activities for empowering women. Selected communities will be trained and supported to manage and maintain their CMs. It is envisaged that 30 additional units will be added to the existing network of CMs. Funding will be provided for the rehabilitation of existing premises or (on an exceptional basis) the construction of new homes, the acquisition of basic equipment and furnishings for the homes, time bound (and declining) recurrent costs, activities aimed at empowering women staying in the homes, and the promotion of family planning.

Primary Health Care Centers

This part of the program is aimed at improving the infrastructure and renovating existing primary health care centers in the targeted geographical areas and ensuring they are sufficiently equipped. The centers will also be stocked with the medical supplies required by the basic package of health and nutrition services (PBHS). A needs assessment of physical rehabilitation and equipment of health centers in the targeted areas will be prepared as part of the pre-investment phase of the SWAp.

Hospitals

The 12 district hospitals in the areas targeted for extension of coverage will be rehabilitated and equipped with medical and industrial equipment necessary to improve the quality and safety of the maternal and child care critical path. Specifically, investments will revamp emergency rooms, operating rooms, obstetric and pediatric wards and related ambulatory facilities, as well as support clinical services (image and lab departments). Other essential general hospital facilities, including laundry, steam and water, catering and waste management, will also be improved. It is expected that although the investment will prioritize the maternal and child care critical path, it will also have a positive spill over impact on hospital services rendered to other patients by upgrading these general and support hospital facilities.

Investments in physical infrastructure (remodeling only) and equipment will be accompanied by investments to improve the management of those facilities. The SWAp will build upon the experiences of the health modernization project (APL first phase) and will extend and replicate the support given to the first phase pilot hospitals in order to improve the management capacity and systems in the 12 targeted hospitals. The management support strategy includes direct

technical support to the hospital directors by itinerant management support teams, under the supervision of the MOH central Hospital Directorate, training, information technology and implementation of institutional management systems (i.e., MOH information, procurement and financial management systems). Special support will be given to the preparation and implementation of hospital waste management plans, complying with applicable national standards and policies acceptable to IDA, control of hospital infectious diseases and implementation of quality improvement strategies.

Strategic Objective 3: Improving Stewardship, Institutional Strengthening and Decentralization (US$17.8 million)

The MOH recognizes that to fulfill the vision set forth in the NHP and effectively lead the SWAp, it will need to undertake a variety of institutional reforms. These include: (i) strengthening the Ministry's management capacity necessary for planning, contracting and supervising the expansion of the PBHS (e.g., programming and planning, information and reporting) and the rest of institutional fiduciary systems (financial accounting, procurement, auditing) so the SWAp can progressively adopt these national systems instead of donors' procedures; (ii) strengthening the GON's capacity to monitor and evaluate health sector performance, efficiency and equity; (iii) supporting the MOH's coordination role as executor and overseer of the GON's population policy; and (iv) developing a strong purchasing function at the MOH, including the identification of beneficiaries for the expansion of essential services, adjusting payment mechanisms, overseeing service quality, contract design and monitoring.

The FYIP also includes under this objective activities to advance the decentralization policy established by the National Health Policies. In particular, the SWAp will support decentralization by: (i) providing advocacy and technical assistance to municipal government to undertake public health responsibilities[7]; (ii) supporting the devolution of responsibilities to the two Autonomous Governments of the Atlantic Coast over the organization and management of their regional health systems; (iii) offering technical support to MOH department offices (SILAIS) to carry out their annual planning and contracting functions; (iii) decentralizing management of the MOH human resources function to the SILAIS and hospitals. The over-riding goal will be to improve the performance of MOH—increasing its effectiveness, efficiency and the degree of equity in access to and expenditures on health care—by improving incentives and accountability.

4. Lessons learned and reflected in the project design

The FYIP supported by the SWAp scales up the successful programs piloted under the APL first phase, based on feedback obtained from evaluations of its components. This is particularly evident in three elements of the strategy. First, the development of a unified, institutionally endorsed delivery and management model for primary health care was prompted by the existence of at least 14 different donor-sponsored primary health care programs. The Integrated Healthcare

[7] A recently passed Law by the National Assembly requires the central Government to transfer an increasing proportion of the GON's budget to municipal governments. It is expected that municipal governments will take up some public health responsibilities nowadays delivered by the MOH. But this assumption of functions requires raising awareness and capacity in these institutions to execute those responsibilities.

Model (MAIS) developed by the MOH integrates already piloted successful programs, like the community nutrition and growth program (PROCOSAN), sexual and reproductive health services programs and the contracting out of essential services from NGOs for remote communities. The MAIS has been designed after the results of an evaluation of the mentioned 14 PHC projects and an evaluation of the health modernization project's components.

Second, in view of the fact that evaluations of the *Casas Maternas* show that these facilities have made a substantial contribution to reducing maternal mortality and improving other reproductive health indicators[8], the FYIP seeks to expand the existing network of CMs. Based on findings from evaluation reports, collaboration between the CMs and local community service organizations and the integration of the CM network with the formal health care system, which were found to be successful elements of the strategy, will be pursued.

Third, lessons from the operation of the Safe Maternity and Infancy Fund (FONMAT) highlight the positive results of using performance-based payments to public providers to increase the production of services. Experience in expanding services in Nicaragua, and elsewhere, show that supply and demand interventions are equally and simultaneously needed. The Nicaragua SWAp will apply specific incentives to public and private providers for increasing performance and at the same time will improve the health services network and community infrastructure, and mobilize health professionals to work in underserved communities. The key results identified regarding the implementation of the Health Sector Modernization Program's first phase, as well as lessons drawn from other relevant evaluation studies undertaken recently are presented in Annex 1-A.

Furthermore, the SWAp collects the knowledge and expertise of several key bilateral and multilateral donors with substantial historical experience in the Nicaraguan health sector and different comparative advantage and expertise. It also builds upon the relationships established during IDA's previous collaboration with the IDB, NORAD and NDF in the supervision and evaluation of the Health Sector Modernization Project.

5. Alternatives considered and reasons for rejection

Possible alternatives to the SWAp would have been first, carrying out a second phase of the APL credit as a standalone project, outside the SWAp context. However, as noted above, this would have been inefficient as it would have promulgated the disjointed nature of project-based funding in the health sector, without allowing for a coordinated multi-donor approach supporting sectoral priorities. In addition, another reason for selecting the SWAp modality is that with limited resources the Bank is able to influence a much larger set of policy issues.

A second possibility would have been providing additional IDA funding to the second PRSC, attached to additional health and nutrition priority actions. While the SWAp complements and supports the PRSC's current health and nutritional policies and goals, an investment sector loan forges stronger MOH ownership, provides earmarked funds to carry out the sector plans, and offers an excellent avenue to convey the Bank's technical expertise to the MOH.

[8] The Nicaragua *Casas Maternas* initiative has been showcased and recognized as best practice by the World Bank Gender Network in 2004.

C. IMPLEMENTATION

1. Partnership arrangements

Partners in the SWAp are Sweden, The Netherlands, Finland, and the IDB. Some bilateral donors (Finland, Sweden and The Netherlands) will provide unrestricted budget support to the MOH. Sweden will be contributing US$20 million over the next five years. Netherlands will contribute US$2 million in 2005 and continue inputting at least similar amounts on an annual basis. Finland estimates its contribution will be US$6.5 million between 2005 and 2009. The IDB has approved in December 2004 a $30 million performance-based credit to be disbursed over five years. The IDB credit, although using IDB procurement procedures, resources the same five-year action plan, disburses against a subgroup of the SWAp's result targets, relies on the MOH institutional structure to execute the project, and will be jointly supervised with the rest of the SWAp partners. USAID, another big player in Nicaragua's health sector, has been participating in all the SWAp preparation missions and although unable to pool funds with the rest of the donors, has committed to also support the FYIP, and particularly those activities aimed at institutional strengthening and sector governance. The total SWAp envelope for the five-year timeframe amounts to US$ 82.2 million, including (1) IDB and IDA credit proceeds, (2) funds from Finland, Sweden and The Netherlands and (3) MOH counterpart funds for the IDB and IDA credits.

2. Institutional and implementation arrangements

The principles of the SWAp planning, executing, monitoring and coordination mechanisms are contained in a Code of Conduct that has been agreed between the MOH and the SWAp partners. Those principles will be further detailed in a Memorandum of Understanding that the MOH will agree with the SWAp partners before credit effectiveness. As outlined in that Code of Conduct (already signed by all SWAp partners), and the drafted MOU, the MOH will lead the implementation and execution of the SWAp. The *Mesa Sectorial de Salud* (MS), comprised of all cooperating agencies in the health sector and all the health-related government agencies, will be the principal forum for cooperation, information exchange and dialogue for the overall health sector development. The MOH and all the SWAp partners will constitute a *Coordinating Committee* in charge of overseeing the planning and execution of the FYIP and its annual action plans, and reviewing periodically (at least biannually) the attainment of its targets. Technical support and internal coordination within the MOH will be provided by a SWAp Technical Secretariat directly reporting to the Minister of Health. The director of the Technical Secretariat will be appointed by the Health Minister, under TORs, employment conditions and appointment subject to approval by all the SWAp partners.

Initially—until the MOH sets up a dedicated purchasing unit within its formal structure—the Health Planning and Development General Directorate (DGPD) will be the purchasing entity for the SWAp-funded expansion of services. This office will purchase the PBHS through the management agreements with SILAIS on a per capita basis. It is also the MOH's intent that the purchasing unit to be created will gradually take over the purchasing of health services throughout the country using MOH resources through the annual management agreement signed

with all SILAIS. The DGPD will also be responsible for the annual planning and budgeting of the FYIP. The Financial Administration General Directorate will be responsible for budgeting, accounting and reconciliation matters and providing support to the DGPD on mid- and short-term financial planning of the SWAp. The DGPD will in turn provide technical support to the SWAp Technical Secretariat on other SWAp execution matters.

Flow of Funds

All donors of the Nicaragua health SWAp will contribute their funds to a Health Sector Support Fund, FONSALUD. Based on MOF's preference, each donor funding FONSALUD will have its own special deposit account. The MOF (through the Treasurer General) will open and maintain in the Nicaragua Central Bank (BCN) a special deposit account for IDA's contribution to FONSALUD, which will be co-managed by MOH and MOF, to be used exclusively for deposits and withdrawals of credit proceeds for eligible expenditures. After the conditions of effectiveness have been met, and the special deposit account has been opened, MOH will submit the first disbursement request to IDA, together with the credit expenditure forecast for the next six months. Subsequent to the first disbursement, credit proceeds will be withdrawn on a quarterly basis under the report-based disbursement method (described in Annex 7).

Program disbursements will be made utilizing MOH's general disbursement procedures. For major expenditures, upon receipt of a request from MOH, MOF will execute payments out of the national Single Treasury Account (CUT). For minor expenditures, MOH will execute payments using the revolving fund mechanism.

Payments under Component 1 will be made in accordance with the provisions of the management agreements with the targeted SILAIS (such provisions to be consistent with the Operational Manual that has to be reviewed and approved by the SWAp partners). Every month the MOH will transfer to each SILAIS a portion of the amount calculated by multiplying the estimated beneficiary population in the SILAIS by the adjusted capitation payment for that SILAIS (as explained in section B.3). Advance payments could be made to provide working capital at the beginning of each year, as defined in the Operational Manual, and then proportionally deducted from the monthly capitation transfers throughout the remainder of the one-year contract. At the end of the program, or in the interim in the event of significant underperformance, SILAIS will refund any unused balance. The costing mechanism will be documented in the Operational Manual and reviewed on an annual basis.

Certain minor expenditures under Component 2 will be paid for by the SILAIS under short-term advances from MOH subject to reconciliation. Other payments will be managed centrally by the MOH's Finance Department.

3. Monitoring and evaluation of outcomes/results

A common set of results and indicators, as mentioned in section B.2 and detailed in Annex 3, has been set up by the MOH and agreed by the SWAp partners. Results will be monitored on a regular basis by MOH at the central, SILAIS and local levels. The SWAp specific results are consistent with those nationwide results established between the GON and the Budget Support

Group of donors, and both sets of indicators will be jointly monitored at the SWAp supervision missions. The SWAp Coordinating Committee will meet at least twice a year as specified in the Code of Conduct, to monitor progress made on the implementation of the Five-Year Implementation Plan and the consecutive Annual Operational Plans. During the preparatory stages of the SWAp, the MOH has demonstrated sufficient capacity for information collection as well as the flexibility to be able to devise innovative and technically sound approaches that will contribute to the long term development of institutional capacity to not only monitor the SWAp, but to better fulfill its role as the rector of the health sector. This capacity will be further enhanced in the process of implementing and monitoring the SWAp, including the strengthening of the MOH Information System (SIMINSA), which is the main instrument for planning, managing, reporting and supervising the FYIP.

The Memorandum of Understanding, to be signed by the MOH and the SWAp partners, also calls for an annual, independent audit of the SWAp's targets fulfillment, that will be carried out under TOR's acceptable to all the partners. A mid-term evaluation will be carried out after two years of implementation. This mid-term evaluation will seek to take stock of the accumulated experience for refining the SWAp targets, strategies and operational instruments.

4. Sustainability

The MOH has demonstrated its commitment to health sector reform and modernization through its performance in the first phase of the APL credit and throughout the preparatory phase of the SWAp. During these stages, the MOH has adopted a new regulatory framework, organizational and functional structure through an incremental process of institutional modernization.

The layout of the health sector strategy for the next ten years has been released and endorsed by the GON and the SWAp partners, after thorough consultation. Most of the FYIP strategies have proven successful, though will be continuously adjusted and improved according to experience accrued with the implementation of the SWAp. In summary, the essential groundwork for the implementation of the SWAp has already been completed.

The sustainability of the SWAP relies mainly on the financial capacity of the MOH to keep up with the running cost of delivering extended services once the FYIP is over. This seems feasible, though, because: first, no major new infrastructure will be undertaken in the five-year implementation plan; second, it is expected that the GON's fiscal situation will improve through HIPC debt relief, forecasted economic growth, and increased external budget support, making more likely the GON's injecting of new funds into the MOH budget. To that end, one of the SWAp target results requires from the GON at least maintaining the per capita MOH expenditure, in real terms, over the SWAp life cycle. Third, through improved MOH purchasing and stewardship capacity over the health sector, it is expected that allocative efficiency of GON and external funds for health will improve, therefore making the sustainability of increased access to essential services more affordable for the GON. Finally, there is an implicit agreement among external donors that support to the Nicaraguan health sector will continue as long as its poverty rates remain high and the health sector performance improves over time.

5. Critical risks and possible controversial aspects

There are no controversial aspects in the SWAp and no major opposition is envisaged to its broad goals and objectives. The NHP 2004-2015 has been extensively consulted. However, the political situation in Nicaragua is currently very polarized, and consequently the approval of the SWAp by the National Assembly, and the execution of the SWAp could be affected.

Risks	RISK MITIGATION MEASURES	Risk Rating with Mitigation
Lack of continuity of GON commitment with the project's policies and strategies	• National Health Policies 2004-2015 and National Health Plan 2005-2009 are fully endorsed by GON and not only by MOH. They are extensively consulted with society and principal stakeholders. • Moreover, the National Health Plan goals and strategies are fully aligned with PRSP-II.	L
Lack of capacity of the MOH to manage the complexity of a SWAp	• Institutional strengthening has been extensively done in first phase (particularly for financial administration systems) both at central and local (SILAIS) levels. It will continue under the SWAp, particularly for procurement capacity. • Continue support to decentralization and strengthening of management to hospitals and SILAIS under new regulations. • Increased role of SILAIS for managing the SWAp. • Synergies with PSTAC strengthening GON public management capacities. • Fiduciary capacity assessment (both at local and central levels) prepared before project implementation and action plans implemented.	M
Mismanagement and corruption issues	• Harmonization of procedures • Close joint supervision of achievements and administrative procedures. • Availability of a tested financial administration system (SIGFA and SIAF) standardized for the entire Government. • Increased social control, particularly for the extension of services component. • Full involvement of independent official control bodies (Contraloría, Oficina de Ética Pública)	M
Lack of understanding and agreement among donor agencies and GON in planning, monitoring and evaluating the SWAp	• Memorandum of Understanding previously agreed among MOH and donors setting decision making mechanisms, M&E systems and dispute settlement arrangements. • National Health Policies and 5-year health action plans elaborated under MOH leadership. • Accrued experience of IDA working under a co-financing operation with NDF and Norway and a parallel financing with IDB in first phase of the APL	L
Insufficient funds	• Elaboration of a mid-term sectoral economic and financial framework consistent with the overall Nicaragua's MTEF.	L

	• Fiscal spending ceilings are fully assessed before project implementation.	

6. Loan/credit conditions and covenants

There are no non-standard conditions for Board presentation. Readiness for Board presentation is demonstrated by Nicaragua's satisfactory portfolio performance.

Loan conditions and Covenants

Effectiveness conditions:

- Operational Manual for the extension of the PBHS, including calculation of the capitation transfer, estimation of beneficiary population, operation of the community health financing scheme, contractual arrangements and performance-based mechanisms for public and private providers satisfactory to the Bank and other partners.

Disbursement condition (beginning in January 2006 and applying only to the project's first component):

- Formal re-structuring of MOH central offices, establishing a purchasing branch within the MOH with clearly defined responsibilities on formulation and evaluation of management agreements by January 2006.

Legal Covenants:

- Annual Working plan prepared by the MOH and agreed with SWAp donors before each calendar year
- Audit and expenditure reconciliation reports furnished to IDA.
- Progress reports submitted by MOH to the SWAp Coordinating Committee prior to each annual review meeting, including an independent assessment of targets accomplishment.
- Annual review of the per capita cost of the PBHS and payment mechanism to providers with a methodology satisfactory to IDA.

D. APPRAISAL SUMMARY

1. Economic and financial analyses

NPV of Net Benefits = US$66.7 million; IRR = 54 percent

The economic evaluation considers the SWAp's costs and the direct and indirect economic benefits expected from the successful implementation of the SWAp. The benefits from the SWAp are expected to be reaped for many years beyond the 5-year life of the SWAp. A 10-year planning horizon is employed in this analysis, together with a 12 percent discount rate.

The SWAp would produce four distinct types of direct benefits: (1) reductions in hospital discharges for malnutrition, perinatal complications, intestinal infections and acute respiratory

infections; (2) a reduction in hospital bed-days owing to an increase in the number of ambulatory surgeries; (3) a reduction in hospital bed-days due to reduction in the nosocomial infection rate; and (4) improvements in the efficiency of the MOH owing to advances in the process of decentralization. The net present value of these direct benefits over the 10-year planning horizon is estimated to be US$17.6 million.

The SWAp would also produce indirect benefits, in the form of potential years of life that would be saved as a result of the SWAp's nutrition interventions, together with the lives saved from reducing child and maternal mortality rates. The valuation of the potential years of life saved is calculated as the product of the number of additional years of economically active life per individual saved, weighted by the real average per capita Nicaraguan GDP. The net present value of these indirect benefits over the 10-year planning horizon is US$118.4 million.

The total cost of the SWAp is US$82.2 million. Over the 10-year planning horizon, the net present value of the net benefits of the SWAp is US$66.7 million. The internal rate of return of the SWAp is 54 percent. A substantially more than proportionate share of the benefits of the SWAp would accrue to the poorest and most vulnerable groups in Nicaraguan society.

Fiscal Analysis

Most SWAp activities are investments designed to improve the effectiveness of the functioning of the health network and to strengthen the management and stewardship of the Ministry. These activities will generate increased recurrent costs for the MOH in the form of increased annual maintenance costs. The SWAp will also increase the MOH's recurrent costs because the Ministry will eventually need to pay the annual costs of maintaining the purchasing of NGO services related to extending the coverage of the Basic Package of Health Services. It is estimated that these two sources of additional recurrent costs will be roughly equal in size and that upon completion of the SWAp they will together total US$5.6 million, 3 percent of the projected total expenditures of the MOH and roughly 4.5 percent of the Ministry's total recurrent costs.[9] The total cost of the SWAp over the entire 10-year planning horizon averages 8 percent of total MOH expenditures and about 15 percent of its total recurrent costs. As a percent of GDP, the total cost of the SWAp represent a relatively small number, never reaching even 0.5 percent over the 10-year period. In summary, based on the analysis of the costs, benefits, and return on investment, the SWAp is a viable economic undertaking.

2. Technical

MOH has developed the Integrated Health Care Model (MAIS) which will be the framework for delivering the PBHS. This model is based on a variety of institutional experiences and joint projects, and draws lessons from a 2004 evaluation of these experiences implemented in Nicaragua over the past five years. The PBHS used to extend coverage of health services under the SWAp contains those health prevention, promotion and treatment practices that the international experience and research support as the more efficient health care interventions. The

[9] As part of preparation for the SWAp, annual projections of anticipated MOH allocations for the 2005-2009 period were prepared working with officials from the Ministry of the Treasury, the Central Bank and the Ministry of the Presidency's Strategic Planning Unit.

criteria used to identify and target departments are sound and reliable measures of where poverty and health needs tend to concentrate in Nicaragua. Component II will ensure that the existing health facilities in the targeted departments are upgraded in order to provide the appropriate quality and safety services necessary to fulfill the health care path of the maternal and child illnesses included in the PBHS. The project includes the necessary provisions to secure community and user involvement in the planning and monitoring of the delivery of health services. It also provides for the tailoring of the delivery model to the special needs and wants of the indigenous people, significant recipients of the SWAp interventions. Finally, Component III will support and build up the MOH institutional strengthening necessary for continuously evaluating the results of the SWAp and the Nicaragua health system as a whole, as well as the fiduciary systems required to jointly operate MOH and external funds.

3. Fiduciary

The basic premise of the Nicaragua Health financial management (FM) arrangements is that they will be based on the Government's public financial management systems and procedures, with additional safeguards when needed. The FM assessment reviewed MOH's financial management structure, its experience in managing donor-funded projects and its internal operating performance and procedures (budgeting, accounting, internal control, auditing and reporting). The assessment concluded that MOH's financial management system meets the Bank's minimum financial management requirements. The FM action plan, supervision plan and scope of the audit are designed to manage the risks identified. These provisions are detailed in Annex 7.

The three main components of the program will require procurement of small civil works, consulting services and goods. The issues/risks concerning the procurement component for implementation of the project have been identified and include:

- Inconsistencies between Law 323 and World Bank Guidelines on (i) registration requirements; (ii) evaluation systems; and (iii) consulting services;
- Inconsistencies between IDB and World Bank Guidelines on: (i) eligibility; (ii) thresholds for prior review; and (iii) consulting services;
- Weaknesses in the internal and external auditing system;
- Weaknesses in technical specifications, terms of reference, and contract management; and
- Need for additional qualified staff to manage project procurement.

The corrective measures agreed upon will be included in a fiduciary memorandum of understanding and include:

- Review by Pool Fund Partners of the annual procurement plan and quarterly updates;
- Outline for the use of ICB and NCP systems;
- A capacity plan funded by the Pool Fund to strengthen procurement procedures, reporting and audit, and staff skills; and
- Addition of qualified staff.

With these measures in place, the overall project risk for procurement is average.

4. Social

A social assessment that includes consultations, focus groups and interviews with local communities, NGOs, health services users, traditional authorities, etc. was carried out (October 2004-January 2005) by a local independent firm. The assessment includes indigenous, non-indigenous and Afro-Nicaraguan population living in highly vulnerable areas with limited access (geographic, linguistic or cultural) to health services. The assessed areas include the Northern and Southern Autonomous Atlantic Regions (RAAN, RAAS), Jinotega, Río San Juan, and selected municipalities of Nueva Segovia, Matagalpa and Madriz. The objectives of the assessment were: (a) to assess the social feasibility of creation of new Women's Centers in 15 remote communities, and to evaluate the utilization of 4 existing Centers (El Rama, Bilwi, Bluefields, Matagalpa); (b) to assess utilization of public health services (including 4 hospitals: Bluefields, Bilwi, Juicalpa and Matagalpa) in 15 municipalities; (c) to assess the relationship among the primary, secondary and tertiary levels of health care; and (d) to identify and systematize the mechanisms of social control and health care surveillance presently in operation by Councils, Committees, Associations and organized groups or civil society.

Given that 11 percent of the population is indigenous peoples, an Indigenous Peoples Plan (IPP) has been incorporated in the project design to ensure the indigenous and Afro-Nicaraguan peoples benefit from the project in a culturally adequate manner. The IPP derives from consultations with the Central and Regional Autonomous Government of RAAN and RAAS, and is consistent with the National and Regional Health Plans. Some of the activities included by the IPP under Component 1 are: (a) A consultancy to determine the PBHS for RAAN and RAAS; (b) Contracting of private health care providers serving remote areas; (c) training and equipment of itinerant health care units serving remote areas; (d) Installation of at least 15 new community-managed Women's Centers in RAAN, RAAS, Rio San Juan, Jinotega, Madriz, Nueva Segovia and Chontales; (e) Strengthening the services of 10 existing *Subsedes* and creation of 8 new ones in selected municipalities; (f) The creation of Municipal Health Delegation in Prinzapolka. Under Component 2: (a) Training of 900 midwives and 500 traditional healers; (b) Equipping midwives and health promoters; (c) Workshops with traditional health providers at the Institute of Traditional Medicine of URACCAN to share experiences, and disseminate best practices in intercultural medicine. Under Component 3: (a) Strengthening technical skills of Regional Health Councils and Regional Government to administrate health; (b) Strengthening the capacity of the Coordinating Commission to manage the decentralization process; (c) Strengthening the social auditing mechanisms by financing workshops, training, with the Regional, Municipal and Communal Health Commissions.

5. Environment

This operation aims at improving the conditions of the Health Sector in Nicaragua, throughout its expansion and modernization. This operation will lead to an increase of the production of Health Care Waste (HCW), and a reversible and moderate environmental impact in the areas where remodeling activities will take place. This operation is category B. In order to meet the requirements of the Bank and, enhance the quality of the operation, the Government of

Nicaragua (GON) has prepared a stand alone Environmental Assessment which at least includes: a summary of the report, a Health Care Waste Management Plan (HCWMP), its implementation strategy, and a set of rules for constructors.

The Health Care Waste Management Plan (HCWMP)

The EA presented by the GON contains a general objective, a methodology, a legal framework and the HCWMP. This plan includes an institutional framework for its implementation, an overview of the current practices on handling HCW, a strategy and an action plan to improve the management of HCW on selected facilities, indicators, training materials, environmental mitigation measures, lessons learned, conclusions, schedule, budget and bibliography.

As reported by the GON, HCW production in Nicaragua was estimated in 1,43 kilograms/bed/day and an aggregate of National Daily Production Level 9.6 tons of which 2.4 tons are biological/hazardous waste. The legal framework comprehends a series of laws and decrees, of which the most relevant are: Ley de Municipios No 40 , 1988, Law 217, Ley General del Medio ambiente y los recursos naturales, and the Ley General de Salud, on its articles 55, 56, 64, 65, 66, 67, 68, and 69, all addresses the framework for HCWM. Based on the assessment above the GON, expects to support through this operation on the following institutions: Hospital Victoria Motta, Jinotega; Hospital Asunción, Juigalpa; Hospital España, Chinandega; Hospital Dr. Juan A. Brenes, Somoto; Hospital Luis Alfonso Moncada Guillén, Ocotal; Hospital Nuevo Amanecer, RAAN; Hospital Gaspar Garcia Laviana, Rivas; Hospital Regional Ernesto Sequeira, RAAS; Hospital Luis Felipe Moncada, de San Carlos, Río San Juan, Hospital Cesar Amador Molina, Matagalpa; Hospital Escuela Oscar Danilo Gonzalez, León; Hospital San Juan de Dios, Estelí; and Hospital José Nebrowski, Boaco.

The Ministry of Health (MOH) will implement the guidelines developed in the course of a Technical Cooperation with the European Union. These guidelines include the following materials: guidelines for training and management of Health Care Waste (7 modules); a training video on best practices on HCWM; a manual for technicians and supervisors; manual for doctors and nurses; manual for General Services Personnel; and a CD which includes all of the above. A HCWM committee will be established on every health institution. The strategy to be implemented by MOH focuses on the inclusion in each fiscal year's budget of the required resources to support the implementation of HCWM plans, specifically allocate particular funds to handle HCW; implement a recycling strategy for non-biomedical waste; sign technical cooperation agreements with the major's offices to manipulate and dispose treated HCW in specific sites, agreed in advance and under safety conditions, at the sanitary landfills; include standards for accomplishments of HCWM plans within the accreditation and certification plans; all these activities supported by a series of indicators in order to measure the effectiveness of the plan. The main indicators are as follows: Health Care Waste Management Committee implemented, Health Care Waste Management Plan in Place, Implementation of the HCWMP, Efficiency on the Segregation Process, Treatment for Biomedical Waste, Training of Hospital Personnel, Coordination with Municipal Authorities, Consejos Consultivos support the Implementation of the Plan, Inclusion of Budget for HCWM every Fiscal Year.

Environmental rules for contractors :

The GON has presented a report which addresses the needs of the minor construction works supported by this operation. The guidelines include the following: site selection criteria, heating needs, ventilation, natural and artificial light energy efficiency, historical and cultural considerations, and security and handicapped access. Also, floor space (ft2) per bed/ward, requirements for x-ray rooms, and adequacy of corridors for wheel chair/bed access. Also, waste management, maintenance, stockpiles and borrow pits; site cleanup; safety during construction; nuisance and dust control; community relations; chance find procedures for culturally significant artifacts; and Environmental Supervision During Construction.

6. Safeguard policies

Safeguard Policies Triggered by the Project	Yes	No
Environmental Assessment (OP/BP/GP 4.01)	[X]	[ ]
Natural Habitats (OP/BP 4.04)	[ ]	[ ]
Pest Management (OP 4.09)	[ ]	[ ]
Cultural Property (OPN 11.03, being revised as OP 4.11)	[ ]	[ ]
Involuntary Resettlement (OP/BP 4.12)	[ ]	[ ]
Indigenous Peoples (OD 4.20, being revised as OP 4.10)	[X]	[ ]
Forests (OP/BP 4.36)	[ ]	[ ]
Safety of Dams (OP/BP 4.37)	[ ]	[ ]
Projects in Disputed Areas (OP/BP/GP 7.60)*	[ ]	[ ]
Projects on International Waterways (OP/BP/GP 7.50)	[ ]	[ ]

7. Policy Exceptions and Readiness

No policy exceptions are implied by the program.

* *By supporting the proposed project, the Bank does not intend to prejudice the final determination of the parties' claims on the disputed areas.*

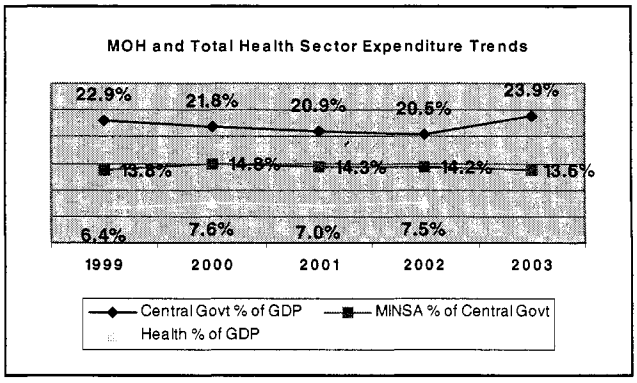
Annex 1: Country and Sector or Program Background

NICARAGUA: Health Services Extension and Modernization (2nd APL)

Health is a major priority in Nicaragua. From 1999 to 2002, Nicaragua spent an annual average of 7.1% of its GDP on health, and the percent of Central Government expenditures devoted to the Ministry of Health (MOH) exceeded 14%. These are relatively high proportions compared to neighboring Honduras, Guatemala and El Salvador. Still, due primarily to its poverty, the absolute level of health expenditures is relatively low. In 2003, the per capita expenditure level of the MOH--the primary provider of health care in Nicaragua--was US$24.

MOH Expenditiure Trends
(Millions of US$ of December 2003)

Year	MOH	Total Central Government	GDP
1999	127.1	923.6	4,031.1
2000	132.6	894.2	4,098.0
2001	116.9	815.1	3,890.9
2002	115.1	812.8	3,965.5
2003	130.6	960.9	4,016.2

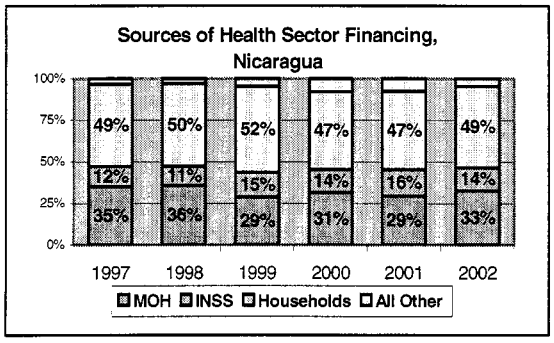


In 2003, the Ministry of Health provided 7.2 million outpatient consultations (an average of 1.3 per capita), 280,000 hospital discharges (52 per 1,000) and accounted for 34% of total health expenditures. The MOH provides care through its network of more than 1,000 facilities—including 32 hospitals, 177 health centers and 872 health posts. It administers this system through 18 departmental offices (SILAIS).

The Nicaraguan Social Security Institute (INSS) is the second most important actor in the health sector. It purchases a defined package of services from 48 health maintenance organization-like entities (EMPs), and provides coverage for 19 percent of the labor force and 9 percent of the national population. In 2003, it provided 2.4 million ambulatory visits (an average of 4.9 per beneficiary) and 43,000 hospitalizations (90 per 1,000 beneficiaries), and accounted for 14 percent of total health expenditures.[10]

Over the last decade, Nicaragua's health system has been undergoing a transition from a socialist system that was implemented in the 1980s, to one that is more pluralistic. The private sector has grown steadily from the early 1990s, when it accounted for less than 5 percent of outpatient care and an even smaller share of hospitalizations. According to the 2001 DHS, the private sector now accounts for 32 percent outpatient visits and 15 percent of hospitalizations. This growth has been spawned by the INSS system of purchasing care, but also manifests the process of economic development; namely, increasing household incomes and changing consumer preferences.

[10] Most of the organizations from which INSS purchases care are private agents, but they also include 10 MOH facilities acting as either prime contractors providing the full package of services or as sub-contractors providing hospital services exclusively.



Nicaragua's health system provides a relatively low level of financial protection from the direct costs of health. From 1997 through 2002, nearly half of the annual average of 7.0 percent of GDP that Nicaragua spent on health was paid out-of-pocket by households. The high proportion of out-of-pocket financing reflects a combination of factors, including: the common perception among Nicaraguans that the quality of care provided by the major care provider—MOH—is unacceptably low, a long tradition of self-treatment, the relatively high price of medicines in Nicaragua, and the lack of access to care of a substantial proportion of the population. Nearly one-fifth (18 percent) of Nicaraguans devote at least 10 percent of their total household expenditures to health. This is the highest proportion of the population spending at least this amount on health expenditures in all of Central America, and is more than double the combined average of Honduras, Guatemala and El Salvador.

Key Challenges

MOH's Weak Institutional Capacity

The weak institutional capacity of the Nicaraguan Health Ministry (MOH) is most conspicuously manifested by: (1) the widely held belief that the quality of care provided is relatively poor, (2) MOH weak managerial capacity, and (3) its dependence on external assistance.

MOH's efforts to improve its managerial capacity—which began in earnest more than a decade ago—are just starting to reach fruition and need to be deepened and institutionalized. One of the MOH's pivotal institutional weaknesses has been the way in which MOH has traditionally allocated its resources. Budgetary allocations have been made on a historical basis, based on past allocation patterns without taking into account variations or changes in health needs, health priorities of local populations, the recurrent costs of providing care, or the performance of system administrators and managers.[11]

The MOH initiated a process of devolving managerial responsibility to the SILAIS in the early 1990s. The decentralization initiative, however, remains only partially implemented because the SILAIS have never been granted adequate autonomy. Most importantly, their financial autonomy is limited to about 30 percent of their operating expenditures, as control over the selection, placement and pay of personnel has remained centralized.

Another impediment to MOH's effective management of its financial resources is the Ministry of Finance (MOF) requirement that the revenues that MOH facilities generate from user fees or from providing services to social security beneficiaries be transferred to the MOF. The MOF then determines how much of these funds will be returned to the facilities generating them, taking into account the consolidated fiscal position of MOH and the central government. This

[11] Jack, p196.

process usually involves a time-lag of one to two months, creating a trade-off of local autonomy for macro-economic control.

MOH has traditionally focused on service provision and the management of the hospital and primary care network. It has yet to develop adequate institutional capacity to effectively manage areas for which it has more recently assumed responsibility (as part of the GON's efforts to reform the sector), including regulatory, quality control, supervisory and monitoring functions.

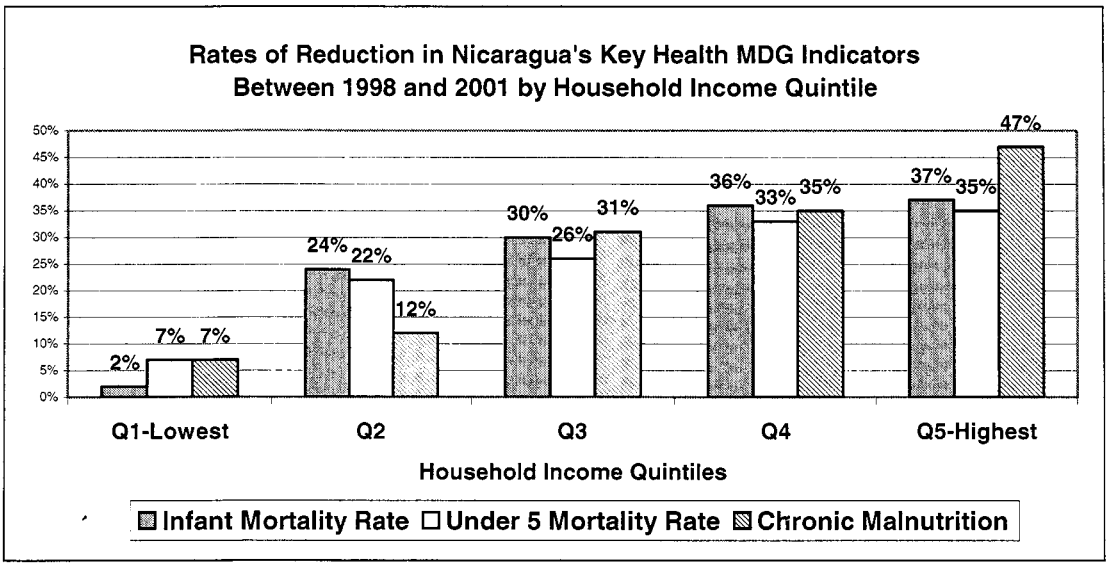
Substantial Inequities by Residence and Region

Nicaragua's national statistics mask substantial inequities in health status and the utilization of health care. Both poverty and health indicators vary significantly by place of residence (rural versus urban) and by department. Whereas in rural areas, more than two-thirds of the population is poor, in urban areas the proportion is less than one-third. Similarly, more than 25 percent of those in rural areas are extremely poor versus 6 percent among urban dwellers. These differences are reflected in a variety of health indicators, in part because they condition access to and use of health services.

The prevalence of poverty and the absolute number of poor are found disproportionately in the rural areas of the North and Atlantic Coast. As health problems have become increasingly concentrated among the poor, they have become increasingly concentrated in these geographic areas of the country. As a result, the 5 (of 17) departments that have the highest maternal mortality rates (Jinotega, Chontales, Rio San Juan, RAAN and RAAS), are the same 5 departments with the highest fertility rates, the same 5 with the lowest percentage of births attended in a medical facility, and they include the 3 departments with the lowest contraceptive prevalence rates, the 4 departments with the lowest coverage of prenatal care, the 4 with lowest proportion of prenatal care initiated during the first trimester of pregnancy, and the 3 departments with the highest levels of unmet need for family planning services (DHS 2001). Among these populations access to services is hampered by geographical, financial and cultural barriers.

Inequity and inefficient allocation of health expenditures

A critical challenge for Nicaragua and the international community is to modify existing patterns of public health expenditures so that they no longer reinforce, but help address Nicaragua's unequal health and poverty profiles. When recent advances in health are disaggregated by household income quintiles, it reveals that the poor have benefited less than proportionately from the progress. As may be seen in the graph below, there is a direct relationship between the amount of improvement that was made between 1998 and 2001 in household income quintile and the rate of reduction in the (a) infant mortality rate, (b) the under-5 mortality rate, and (c) the prevalence of chronic malnutrition among children 12-59 months old. The poorest benefited the least from the improvement of health indicators, the wealthiest benefited the most. As a result, these health problems have become increasingly concentrated among the poor and the geographic areas where the poor are concentrated, mainly rural areas of the North and the Atlantic Coast.



Another facet of the inequities in existing public expenditures is the high proportion of higher income households that obtain their care (largely free-of-charge) from the MOH. In 2001, an estimated 52 percent of the ambulatory care and 77 percent of the inpatient care consumed by the two highest household income quintiles was provided by MOH (Rathe & Lora, 2003). MOH should improve targeting of its resources to the poor.

Imbalances in Doctor-Nurse ratio

Lack of trained health personnel, specifically the scarcity of nurses relative to doctors (although doctors are also in short supply) is another significant area of concern. This imbalance became worse after MOH divested nurses' education to universities. Latest estimates show the ratio of physicians was 6.2 per 10,000 inhabitants whereas the corresponding estimate of nurses was 3.3. Developing country studies have shown that the density of nursing staff is positively correlated to reduced infant mortality rates. Conversely, since under-5 mortality rates in Nicaragua (though declining) are still the second-highest in Central America, it is possible that lack of sufficient nursing personnel might be a factor accounting for the relatively slow rate of progress.

Lack of affordable pharmaceuticals

Whereas the list of drugs available in Nicaragua has expanded from 2,061 to 10,585 between 1993 and 2000, prices of non-generic drugs are prohibitively high making them unaffordable for the poor. A recent study found the average price of a list of 35 generic medicines in Nicaragua was 10 times higher than the price paid by a World Bank project in Argentina (Meerhoff, 2004). According to MOH estimates, only 45 percent of the population in need has access to subsidized or free drugs provided by CIPS, the public drug and medical supply agency. The average per capita expenditure on pharmaceuticals amounts to $2 annually, which is equivalent to roughly half the total per capita annual expenditure on health.

Government Response

Over the past four years, the GON has accelerated the pace at which it has been reforming the health sector. Passage of the General Health Law and its Regulation Decree marked important steps in the modernization and institutional capacity-building of MOH, and both are now being implemented. MOH is also making progress on developing institutional capacity and further decentralizing health planning and management to the local health systems (SILAIS). It is implementing a new financial information system (SIAFI), which will provide the MOH with a system that is compatible with the MOF's system (SIGFA) but provides the Ministry with a more institution-specific and powerful management tool that will support effective decentralization. This system has enabled a budget management reform that has decentralized control of all inputs with the exception of personnel, down to the health department level (SILAIS). That system, in turn, interfaces with a local programming and budgeting tool (SIPLA) which the Ministry has developed to structure a bottom-up approach to the development of annual operating plans by local level public health networks (*municipios*) and SILAIS. The MOH has used this tool (in combination with its new initiatives and health priorities, and estimates of available financing) to begin helping the *municipios* to identify the specific types and levels services that they will produce in each of the next five years. The sum of these plans will constitute the MOH's Five-Year Implementation Plan 2005-2009 for the Ministry's primary health care system, and will concurrently provide the wherewithal of management agreements with the SILAIS directors, and thereby enhance accountability.

At the same time, new procurement mechanisms have been first piloted and then institutionalized, new management models have been introduced in a group of public hospitals and service agreements are now entered into with all SILAIS, local primary care providers (municipalities) and hospitals. New outreach strategies, like Women's Centers (*Casas Maternas*), contracting of NGOs for the delivery of essential health services in remote areas and the community nutrition and growth program, have been successfully implemented, bringing effective accessible health care to poor communities.

The other key health care organization in the country, the Nicaraguan Social Security Institute (INSS), has also made notable advances since 2000. In 2002, it separated financing from the management of its health and pension regimes. Between 2000 and 2004, it expanded the number of its health program's beneficiaries by 32 percent from 389,100 to 515,400, and reduced its administrative expenditures from 18 to 9 percent of total expenditures. In 2003 it introduced a new Elderly Health Program (EHP) which has already been extended to 32,077 elderly people (86 percent of the EHP target population), and in 2004 it added new services to the EHP's defined benefit package. In 2002, it implemented a new provider certification system for the 51 private companies (EMPs) that INSS pays to provide health care to its affiliates. In 2004 it evaluated this system with the active participation of the EMPs. Forty-eight of the EMPs have now been certified and the three that were unable to meet the new standards have had their contracts cancelled. Finally, in 2004, INSS, with the participation of the EMPs, developed a methodology for fixing and periodically updating the capitation payment paid to the EMPs.

The GON's National Development Plan 2005-2009 which supplements MOH's Five-Year Plan, sets the following areas as priorities for health and nutrition: (i) increasing coverage and quality of services to vulnerable populations; (ii) intensifying the institutional reforms already

commenced by MOH; (iii) preventing chronic malnutrition in children under 2 years, improving nutrition and hygiene practices at the household and community level and; (iv) enhancing inter-institutional coordination to improve nutritional programs. The table below illustrates the GON's targets for the reduction of maternal and infant mortality rates and chronic malnutrition.

Health and Nutrition Goals - 2005-2009

Indicator	2003 (Base-Year)	2005	2006	2009	2015
Maternal mortality rate per 100 000 births	96*	93	86	60	22
Infant mortality rate per 1000 live births	31 DHS (2001)	...	30	27	20
Under-5 mortality rate per 1000 live births.	40 DHS (2001)	...	39	33	24
Percentage of the population with chronic malnutrition.	17.8 LSMS (2001)	15.5	...	12.8	7

* Preliminary estimates.
Source: MOH

ANNEX 1-A

SUMMARY OF EVALUATIONS AND LESSONS LEARNED FROM THE HEALTH SECTOR MODERNIZATION PROJECT

Program/Component Evaluated	Key Conclusions
• Primary Health Care Programs	- There is a vast array of sponsor-driven programs with different strategies and kinds of support. In many cases they coincide and compete in the same centers. Integration, mainstreaming and better focalization of all these programs on the most vulnerable population is urgent. - All PHC programs show that availability of essential drugs in one of the principal bottlenecks for providing effective care (only an average of 51% of the population had access to the required drugs in the 14 PHC programs evaluated). - Most programs have increased coverage but measures of technical and perceived quality have not (63% of intervention centers comply with quality standards against 65% of control centers). - Availability of reliable and easy-to-access clinical and management information is one of the most critical instruments to improve results (as perceived by health professionals and managers). - Most programs take at least 2 to 3 years before showing any improvement of results. The institutional delivery rate shows particularly difficult to improve, suggesting most likely the influence of other social, cultural and economic factors. - Unreliable and outdated population data (for constructing denominators) and small number rates have made difficult to evaluate the results of these interventions. Also disease incidence and service production reporting are still not reliable. - Per capita-based payments combined with some kind of performance and very specific activity-based incentives have shown the most powerful mechanism for purchasing PHC services and allocating fiscal resources.
• FONMAT	- This program has achieved significant increases in coverage rates of institutional delivery, prenatal care and child care. - FONMAT has developed an innovative model for contracting out services. Contracting processes within FONMAT and the extension of coverage are well developed with goals and objectives clearly linked to the flow of economic resources. - Providing incentives to the demand (performance-based payments) together with incentives to the supply of services (strengthening infrastructure, equipment, basic supplies) has demonstrated most effective in order to achieve results (all the coverage indicators have improved and data also suggest that early neonatal mortality has reduced where FONMAT has been implemented). - Local autonomy to use the performance-based payments have been considered instrumental to achieve better results. - The direct purchasing of certain hospital services (i.e. deliveries) by PHC providers has shown positive results in terms of hospital responsiveness and continuity of care. - The FONMAT information and reporting system is considered simple and very useful. - Also, the differential payments according to zone characteristics implemented by FONMAT have been effective.

	- The program was captured by the public providers, and the planned private provision was never implemented.
• PHC Management Model Project	- Together with FONMAT, the new model has assisted MOH in its reforms, chiefly by enabling the separation of its financing and providing functions, and developing its capacity to contract by introducing new contractual arrangements, payment systems and negotiation processes. - Key clinical and management instruments (protocols, patient records, patient satisfaction surveys, management table boards and information systems, etc.) have been successfully implemented and are worth-valued by local health professionals. - A more direct intervention is needed at the local health centers and posts in terms of organization , quality assurance, etc. rather than assistance at the central and SILAIS level. - The role of SILAIS in supporting the contracting, M&E processes needs to be further clarified and strengthened. Contracts are not sufficiently followed-up and evaluated. - The lack of sufficient progress in the MOH decentralization and the reform of MOH resource allocation has hampered the impact of this model. - Unexpected budget cuts, lack of MOH compliance with the financial and supplies commitments established in management agreements, and lack of direct incentives to health staff have also been identified as problematic.
• NGOs contracting	- Excellent results for increasing coverage in remote areas. All the target coverage rates were surpassed. - Discontinuation of the experience and financial sustainability are its main weaknesses.
• Women's Centers (*Casas Maternas* - CM)	- 3,000 mothers gave birth between 2001 and 2003 using CMs, 80% of them were poor or extreme poor, and 30% younger than 19 years. Average travel time from their homes to the CM was between 3 and 8 hours on foot or by boat. - Preliminary data suggests sharply reduced maternal mortality since CMs became operational. - Coordinated action by CMs and community health networks has increased family planning (in two CMs located in very poor localities, utilization of family planning more than doubled). - Areas for improvement identified are: (i) harmonizing reproductive health training programs ran by different government agencies, donors and NGOs; (ii) setting service standards and crating a Federation of CMs; (iii) building capacity to operate CMs properly in more communities, particularly where no solid social base exists.
• PROCOSAN	- PROCOSAN and other community-based programs have demonstrated important positive impact, but its relationship and coordination with the mainstream health services network requires further effort. - The nine services provided by PROCOSAN are generally of superior quality to similar services provided in more institutional clinics. As a result however, PROCOSAN appears to be diverting demand for these services from these clinics, thereby entrenching inefficiencies in mainstream facilities. - PROCOSAN has been institutionalized and generally adopted by most NGOs and donors in Nicaragua as the best nutrition and growth development program. - A more in-depth evaluation of PROCOSAN is currently underway.
• Hospital Modernization	- The methodology used to establish the management capacity baseline was to complicate and could not be replicated at completion. Simpler but more rigorous capacity assessment instruments are needed to follow-up hospital modernization. - The same caveat mentioned for PHC regarding the effect of small numbers and unreliability of information has been detected when trying to evaluate

	hospital performance improvement. - Hospitals have, in general, successfully implemented key management instruments, like management agreements with MOH, internal service agreements, quality programs, information systems, strategic and business plans, consultative councils, etc. Its impact is more difficult to ascertain. In fact, hospital performance ratios are quite unstable and do not show significant improvements. However, hospital maternal and perinatal mortality rates have decreased in most intervention hospitals. Patient satisfaction rates have also improved in all hospitals. - Low hospital occupation rates are pervasive and suggest problems on the demand as well as on the supply side, including lack of operational funds. - Physical strengthening projects on hospitals are considered positive and necessary, but they have also been evaluated as somehow patchy and non-responding to a coordinated plan. - The hiring of the change agents by the program has been considered instrumental for supporting the implementation of the new management model. However, a more sustainable strategy would require strengthening the MOH Hospital Directorate with qualified staff. On the same realm, hospital directors discontinuity is perceived as excessive and negative for the hospital improvement process. - Sustainability of improvements is a major issue given the scarcity of non-personnel operational budgets. Supply of drugs, maintenance of equipment, and running waste management programs are all examples of programs that cannot be continued with the current level of expenditures. - "Differentiated services" to private patients in public hospitals and cross-subsidies across patients have remained untouched by the program. - Historical budget allocation pervades and requires urgent reform. Similarly, the decentralization process of management power to hospitals is considered slow by most hospital managers. - In summary, the reform of hospital management is still incipient and requires further institutionalization.
• Institutional Strengthening	- The goals and objectives set for this component have been fully complied with (91% of the key performance targets have been fulfilled). Specifically, the new regulatory framework has been set out, management agreements have been concluded with the 17 existing SILAIS, 32 hospitals and 152 municipal health centers. The new policy framework has also been set out after extensive consultation. - MOH has successfully developed and institutionalized a new bottom-up budgeting and planning cycle based on local needs and performance. This has been a major capacity-building exercise for the MOH and a critical tool for planning and implementing the FYIP. - Budget execution and intra-unit resource allocation have both improved, but sector-wide resource allocation and territorial financial equity still need to be addressed. - MOH has also restructured its financial management system which allows for managing the budget more transparently and effectively, with greater decentralization. However the MOH financial system (SIAFI) and the GON's (SIGFA) do not communicate yet. - Whereas financial administration functions have been decentralized to a certain extent, there still needs to be greater decentralization of other functions to the executing units (i.e. human resources). There is also a need for risk-transfer mechanisms to be strengthened so that local management assumes greater responsibility for the results of their actions. - The new MOH information system (SIMINSA) has been devised and partially implemented. However the evaluations show that it needs to be further adjusted, quality of information needs to be assessed, its modules need

	to be better integrated (SIPLA, SIAFI, production) and accessibility to the system locally needs to be extended. It is particularly hospital managers who complain the most about the usefulness of this tool. - Similarly, the new planning and management mechanisms set out by the MOH (annual plans and budgets, management agreements, management table boards) need to be articulated and integrated. - Although the legal framework, the contracting instruments and the institutional culture have been established, the institutionalization of a purchasing unit within the MOH is still required to consolidate and take full responsibility over the development and strengthening of this function. - Ownership of the Health Sector Modernization Program and Coordination between the program and the MOH line Directorates has increased progressively over the years and it is considered essential for the program's success. - Institutional modernization activities were dispersed in too many areas and coordination with the other components was not always evident.

Evaluation Studies from which these conclusions are drawn:

- Evaluation of 14 Programs Supporting Primary Health Care in Nicaragua (Bitran y Asociados, 2004)
- Evaluation of the Institutional Strengthening Component of the Health Sector Modernization Program (Fernando Marin, 2004)
- Evaluation of the Hospital Modernization Component of the Health Sector Modernization Program (Carlos Martín, 2004)
- Evaluation of the Primary Health Care Strategies supported by the Health Sector Modernization Program (Roser Vicente, 2004)
- Evaluation of the Women's Centers in the Health Sector Modernization Program (Maria Elena Ruiz Abril, Gender and Civil Society Group, World Bank-PREM, 2003)
- Evaluation of the Nicaragua 1997-2002 Health Policy (Sanigest, 2003)

Annex 2: Major Related Projects Financed by the Bank and/or other Agencies

NICARAGUA: Health Services Extension and Modernization (2nd APL)

Sector and description	*Project*	*PSR Rating*	
WB Projects		*IP*	*DO*
Public Sector Modernization including financial and public investment management, institutional development, civil service reform and strategic planning.	Economic Management Technical Assistance Project (EMTAC) (IDA US$20.9M)	S	S
Support for the GON's efforts to reduce poverty, increase economic growth and promote better coordination across GON , including a series of reforms in basic education, health, population, social protection and water and sanitation.	Poverty Reduction Support Credit (PRSC) (IDA US$70M)		
Implementation of poverty reduction strategy, and improve access to small-scale social and economic infrastructure to the poor.	Poverty reduction and local development project (IDA US$60 million)	S	S
Health Sector Modernization Project	Adaptable Program Loan (first phase) (IDA/NORAD/NDF US$24 M)	S	S
Non-WB Projects			
This project has been financing in parallel the Health Modernization Project, including hospital modernization, extension of PHC through the FONMAT, severance payments for MOH retired staff and institutional modernization.	Hospital Modernization Program (IDB)		
This loan, approved in December 2004, will resource the MOH five-year action plan. Although using IDB procurement procedures, it will be part of the SWAp technical and administration framework.	Maternal and child care improvement performance-based loan (IDB US$30 million)		
This jointly financed program resources partially the MOH sexual and reproductive health strategy. It is currently administered by UNFPA but the MOH is willing to integrate this program under the SWAp framework in the near future.	Sexual and Reproductive health program (Canada, Finland, UK)		

USAID has a new five-year strategy to support Nicaragua health sector that still needs detailed programming. Main areas of support are: family planning, sector governance and civil society involvement. USAID has agreed to program its sector governance component taking on many of the institutional modernization activities under the five-year action plan.	USAID		
Sweden will define its financing strategy in early 2005 but has committed to pool its funds for the SWAp. It will also execute an obstetric nurses training project.	Sweden (US$20 million over the next 5 years)		
The Netherlands will devote most of its financiál aid to the SWAp pool. It will however continue some of its current projects on a declining basis.	The Netherlands (Euros 1 million per year, at least, over the next 5 years)		
Finland is also currently defining its support strategy to the Nicaragua health sector but has committed to finance the SWAp pool, besides continuing its support to the SRH program.	Finland (US$7.5 million for the next 5 years)		
This project has three components focusing on reducing HIV/AIDS, malaria and tuberculosis transmission among vulnerable populations.	Commitment and Action Against HIV/AIDS, Malaria and Tuberculosis (Global Fund against HIV/AIDS, Tuberculosis and Malaria) (US$18,865,903 over 5 years)		
This project aims to improve the health status of the people in the Department of Granada by building capacity in the SILAIS servicing this area.	Project for Strengthening of the Local System of Integrated Healthcare (SILAIS) in Granada (2000-2004) (JICA) (465 million yen)		

Annex 3: Results Framework and Monitoring

NICARAGUA: Health Services Extension and Modernization (2nd APL)

Results Framework

Project Development Objective *(Higher level development objectives)*	***Results Indicators***	***Use of Results Information***
1. To improve the efficiency, effectiveness and equity of the Nicaraguan health system	• Maternal Mortality rate • Infant mortality rate • Under-5 mortality rate • Childhood malnutrition rate • Neonatal mortality rate in targeted populations	They gauge the long-term program impact on the MDGs, though no direct attribution to project activities can be established. They will be measured as part of the PRSP and National Development Plan monitoring.
Intermediate Results	***Results Indicators***[12]	***Use of results information***
Strategic Objective 1: Improved coverage and access to priority health services for targeted population.	• Number of beneficiaries to whom the PBHS has been extended. • Percentage of institutional births	In 2005-09: To monitor progress in the implementation of the extension of health services coverage. In 2005-08: To monitor program results and make any necessary adjustments in the event the target is not being met. In 2009: To evaluate the program and decide whether to maintain and expand it in successive years.
	• Percentage of immunization coverage (pentavalent vaccine) in infants under 1	In 2005-08: To monitor program results and refine the program design. In 2009: To evaluate the program and decide whether to maintain and expand it in successive years.
	• Percentage of pregnancies to whom pre-natal control starts in the first trimester	In 2005-08: To monitor program results and refine the program design. In 2009: To evaluate the program and decide whether to maintain and expand it in successive years.

[12] All these indicators have precise methodological definitions in a technical paper provided by the MOH to the SWAp partners.

	• Percentage of pregnancies with full (four controls) pre-natal control. • Number of pregnant women attended in Women Centers • Utilization rate of safe family planning methods among fertile women (as measured by DHS).	In 2005-08: To monitor program results and refine the program design. In 2005-09: To gauge the expansion and utilization of these facilities. In 2006: To evaluate the program and decide whether to maintain and expand it in successive years.
Strategic Objective 2: Strengthening the network of services Improved access to priority hospital services.	• Hospital discharge rate in the targeted regions.	In 2005-09: To monitor improvement in accessibility across geographic, cultural and socioeconomic groups. Low rates could indicate demand-side problems.
More effective healthcare networks with enhanced capacity to deliver critical services.	• Percentage of hospitals offering certified critical path services included in the PBHS	In 2005-09: To measure progress in SWAp implementation.
Healthcare networks with the capacity to measure their results and improve their performance.	• Percentage of health providers which comply satisfactorily with targets set in their management agreements.	In 2005-08: To monitor the capacity of the MOH to evaluate the sector and make decisions in the medium term about the objectives that have not been achieved. In 2009: To evaluate program results related to health sector performance in priority areas.
Healthcare networks provide better quality programs.	• Percentage of maternal deaths audited.	In 2005-09: To measure the progress in implementing quality enhancing measures in the delivery of critical maternal and child care services.
Strategic Objective 3: Institutional Strengthening and Leadership MOH progressively transfers funds to local providers based on actual	• Percentage of MOH's expenditures transferred to health care service providers through purchase of services, instead of historical budget allocations.	In 2005-09: To measure the extent to which resources are allocated based on results obtained. To measure the extent of decentralization of resources.

demand and provider performance. Managerial autonomy of local providers increased.		
The MOH budget executing units in the Autonomous North and South Atlantic Regions manage their own health services.	• Percentage of GON funds for health care services in these regions administered by the MOH budget executing units of the RAAN and RAAS.	In 2005-08: To measure the extent of decentralization of resources. In 2009: To assess whether the decentralization policy in these regions has been fully implemented.
Equitable reallocation of health expenditures towards vulnerable populations.	• Per capita MOH expenditure allocated to the targeted areas.	In 2005-08: To monitor the implementation of the FYIP. In 2009: To evaluate if resources are being distributed more equitably than before.

PROGRAM BASELINE AND ANNUAL TARGETS							
Indicator	**Measure units[13]**	**Baseline**	**Annual target**				
			2005	**2006**	**2007**	**2008**	**2009**
Strategic Objective 1: Extension of basic health care services							
Beneficiaries to whom the PBHS has been extended by any modality	Number of beneficiaries		129,698	221,022	470,000	470,000	470,000
Institutional deliveries in the 12 targeted SILAIS	Number of institutional deliveries	27,978	28,538	29,394	30,628	32,190	32,833
Institutional delivery rate in the 12 SILAIS	Rate	36.2	36.1	36.3	37.0	38.0	37.9
Immunization coverage (pentavalent vaccine) in infants under 1	Third dosages	49,003	51,165	53,969	56,151	58,308	60,627
	Immunization rate	78	91.5	92.6	94.3	95.8	97.5
Early prenatal control (first trimester) in targeted municipalities	First controls in the first trimester	26,578	27,110	27,923	29,598	31,670	32,303

[13] In some cases both absolute numbers and rates are used because currently there is not reliable population data for these municipalities. Therefore rates may vary unexpectedly in the future, as has been the case in the past. IDB uses only absolute numbers for its performance-based loan.

PROGRAM BASELINE AND ANNUAL TARGETS							
Indicator	**Measure units[13]**	**Baseline**	**Annual target**				
			2005	**2006**	**2007**	**2008**	**2009**
	Rate	34.4	34.3	34.5	35.7	37.4	37.3
Pregnancies with full (four controls) prenatal care in targeted municipalities	Number of pregnancies with four controls	28,656	28,943	29,521	30,259	31,228	31,852
	Rate	49.5	50.0	51.0	52.0	54.0	55.0
Utilization of Women Centers by pregnant women	Women Center discharges	2400	3000	3750	4500	5250	6000
Family planning methods utilization rates in fertile age women	Rate	64.1 (DHS 2001)		66.0 (DHS)			
Strategic Objective 2: Strengthening of health services network							
Hospital discharge rates in the 12 targeted hospitals	Hospital discharges per 100 pop. per year	4.02	4.12	4.38	4.65	4.95	5.25

PROGRAM BASELINE AND ANNUAL TARGETS							
Indicator	**Measure units[13]**	**Baseline**	**Annual target**				
			2005	**2006**	**2007**	**2008**	**2009**
Hospitals with critical path complying with MOH certification standards	Cumulative number of hospitals with critical path certified	0	0	2	4	2	1
% of public health providers complying satisfactorily with management agreement targets	% of facilities with satisfactory evaluation of management agreements		20	50	75	85	100
Percentage of maternal deaths audited	% of maternal deaths audited		60.0	80.0	100.0	100.0	100.0
Strategic Objective 3: Stewardship, Institutional Strengthening and Decentralization							
% of total budget transferred to the targeted SILAIS as purchasing of services ("provision of health services" budget item)	% of the MOH allocated budget	0	3	5	8	11	17

PROGRAM BASELINE AND ANNUAL TARGETS							
Indicator	**Measure units[13]**	**Baseline**	**Annual target**				
			2005	**2006**	**2007**	**2008**	**2009**
Percentage of MOH budget in these regions administered by MOH budget executing units in the RAAN and RAAS.	% of MOH budget allocated to these regions administered by the MOH budget executing units in these regions	0	10	10	50	80	100
Per capita expenditure allocated to targeted SILAIS.	Per capita expenditure	6.73	6.82	6.91	7.00	7.09	7.18

Monitoring arrangements

Results will be monitored on a regular basis by the MOH at the central and SILAIS levels. The SWAp Coordinating Committee will meet at least twice a year to monitor progress made on the implementation of the Five-Year Implementation Plan and the Annual Operational Plan for the health sector. The Directorate General of Health Planning and Development (DGPD) will have overall responsibility for monitoring and evaluation at the central level. The DGPD will collaborate with the SILAIS to develop a standardized monthly report that will track M&E actual versus planned performance indicators.

At the local level, municipalities will collate information on program outputs generated by health clinics and health centers. At the SILAIS level, it will be necessary to develop M&E teams. These M&E teams will be headed by the deputy manager of the SILAIS, and will be trained and supported to carry out the routine oversight of the public and private providers' performance on an on-going basis. These teams will be responsible for coordinating and compiling information, including information generated by hospitals, using the Health Management Information System (SIMINSA).[14] The SIMINSA, through its different modules, will be the main instrument for formulating the annual action plans and budgets, and for monitoring the SWAp's final and intermediate targets.

The SILAIS M&E teams will submit monthly reports to the DGPD that will use them as input to produce quarterly monitoring reports of the SWAp, as well as SILAIS-specific quarterly management reports. These quarterly reports will provide timely input for improving MOH results-based management decision-making by focusing attention and requiring explanations about variations in actual versus planned levels of a specific set of performance indicators. The review and discussion of these reports will serve as the agenda for quarterly, national M&E meetings of all of the SILAIS. At these quarterly meetings, the DGPD will present a report of the overall performance of the MOH, and each SILAIS director will present and explain his/her SILAIS's performance. These presentations will be based on a standardized format (based on the annual operating plan) which the DGPD will develop and which each SILAIS will use in reporting its performance. These meetings will provide the basis for fine-tuning individual SILAIS and MOH's annual action plans, as well as the FYP.

The first quarter M&E meeting of each year will incorporate a review of the previous year's performance, that will assess that performance within both the framework of the annual action plan and the framework of the Five-Year Plan—and, as deemed appropriate, will modify the subsequent national, annual action plan and/or the Five-Year Plan. The goal is to construct the M&E system as an action-based tool for fostering the development of a more on-going, proactive and strategic system of MOH management at both the national, SILAIS and local levels.[15] This

---

[14] The SIMINSA has been assessed as part of the SWAp preparation. An enhancement plan will be devised and implemented in the first two years of the SWAp. As mentioned above, the SWAp will also finance the expansion, integration and implementation of the key institutional information management systems, including the SIGFA, Financial Administration Information System (SIAFI), SIPLA together with the SIMINSA. The development of this M&E system will require ongoing coordination with the National Statistics Institute (INE).

[15] The public forum nature of the quarterly performance review meetings is intended to provide: (1) a learning forum for SILAIS directors in which they will share experiences and strategies, and (2) non-material, management

system will also be used as input into monitoring the fulfillment of contracts of those private service providers with whom the MOH enters into agreement.

In addition to on-going M&E, an annual, independent audit of the SWAp's targets fulfillment will be carried out under TORs acceptable to all the partners. A mid-term evaluation will be carried out after two years of implementation. This mid-term evaluation will take stock of the accumulated experience and provide a feedback mechanism for refining the SWAp targets, strategies and operations.

performance incentives (in the form of (a) personal pride in being a knowledgeable, hands-on manager, together with (b) the knowledge that they are an active, on-going participant in the development and implementation of Nicaragua's national health policy).

Annex 4: Detailed Project Description

NICARAGUA: Health Services Extension and Modernization (2nd APL)

Program Outreach

The second phase of the Health Sector Modernization APL will support, along with the MOH and four other donors, a sector-wide approach supporting the Nicaragua National Health Plan 2004-2015 (NHP), with priority given to the achievement of the health-related MDG targets. The NHP has been operationalized into a five-year implementation plan 2005-2009 (FYIP) that sets up the planning framework for the SWAp. The APL programmatic objectives are fully compatible with those of the FYIP, therefore making the participation of IDA in the SWAp fully viable and recommendable. In accordance with the NHP, the FYIP prioritizes the extension of coverage to the poorest segments of the population, particularly the Afro-Nicaraguan, indigenous and rural populations in the most socio-economically deprived regions of the country. The FYIP has a national and overall scope, and contains a well-defined subprogram centered in three specific objectives. The first two are, in turn, focalized for the 12 most deprived departments (SILAIS) of Nicaragua. These specific strategic objectives within the FYIP are as follows:

(i) extension of coverage of a basic health and nutrition services package to the poorest areas of the country, via the new integrated model of health care;
(ii) physical and functional strengthening of the health service facilities network, focusing on maternal-infant care, so as to provide a seamless path of essential services in the target areas;
(iii) institutional strengthening and capacity-building, concentrated specifically on developing the purchasing, monitoring and evaluation capacities of the MOH, its leadership role to enhancing donors' alignment and harmonization, and the management capacity of MOH decentralized units and Autonomous Governments of the Atlantic Coast.

The financial resources allocated to the SWAp will supplement the portion of the national budget dedicated to health, and its annual work plans will be programmed and budgeted simultaneously and in coordination with those of the health budget as a whole. The FYIP will include activities under the MOH responsibility mainly.

Program Focus

The FYIP targets 12 departments and their 12 corresponding health care systems (SILAIS) out of the 17 systems that currently exist. Seventy -nine municipalities included in those 12 SILAIS have been prioritized. Since there are 115 municipalities nationwide, this implies the SWAp will cover 75 percent of all the municipalities or 36 percent of the total population. However, a much larger proportion, 47 percent, of the poor and extreme poor live in these municipalities.

Priority SILAIS and the respective municipalities were selected on the basis of the following criteria defined by the MOH in the preparatory phases of the SWAp: (i) level of poverty, as measured by the percentage of people in the lowest household income quintile as measured by the DHS (2001); (ii) access to health services, as measured by the percentage of people that live

more than an hour away from a health care center and the percentage of institutional births in that municipality; (iii) health status, as measured by infant mortality and maternal mortality rates, and morbidity rates for acute diarrhea and respiratory infections; and (iv) the need for continuing projects aimed at extending coverage of health services already initiated in some areas. The following table lists the departments (SILAIS) and municipalities selected on the basis of the above criteria:

SWAp Targeted Departments (SILAIS) and Municipalities

SILAIS	Municipalities	SILAIS	Municipalities
BOACO	San José de los Remates Santa Lucía Teustepe	**MADRIZ**	Palacagüina Las Sabanas San José de Cusmapa San Juan de Río Coco San Lucas Somoto Totogalpa Telpaneca Yalagüina
CHINANDEGA	Cinco Pinos San Francisco del Norte Somotillo San Pedro del Norte Santo Tomás del Norte El Viejo Villanueva	**MATAGALPA**	San Ramón Waslala Esquipulas Matiguás Bocana de Paiwas Rancho Grande Río Blanco San Dionisio
CHONTALES	Acoyapa Comalapa El Ayote La Libertad Muelle de los Bueyes Nueva Guinea El Rama Santo Domingo San Pedro de Lóvago	**NUEVA SEGOVIA**	Jalapa El Jícaro Macuelizo Murra Quilalí Wiwilí (Nueva Segovia)
ESTELÍ	Condega Estelí Pueblo Nuevo San Juan de Limay San Nicolás La Trinidad	**RAAN**	Bonanza Rosita Puerto Cabezas Siuna Waspán Mulukuku Prinzapolka
JINOTEGA	La Concordia El Cua-Bocay Santa María de Pantasma San Rafael del Norte San Sebastián de Yalí Wiwilí (Jinotega)	**RAAS**	Bluefields Corn Island La cruz de Río Grande El Tortuguero Kukra Hill Karawala Laguna de Perlas
LEÓN	Achuapa El Jicaral Quezalguaque El Sauce Santa. Rosa del Peñón	**RÍO SAN JUAN**	El Almendro El Castillo Morrito San Carlos San Juan del Norte San Miguelito

Furthermore, within these selected regions, additional criteria will be used for selecting priority populations:

a) Women of childbearing age between 15 and 49 years and children under 5 will gain access to maternal and infant care services under the essential basic health services package (PBHS), including non-medical interventions aimed at reducing morbidity and mortality in these target groups;
b) Rural communities classified as poor or extremely poor within these targeted municipalities;
c) Dispersed extremely poor populations without access to health services will receive services included in the PBHS through mobile units, supported by health centers;
d) Indigenous and Afro-descendant populations, especially those living in the RAAN and RAAS regions will receive priority attention.

In each year of the SWAp, the MOH together with INEC will conduct a beneficiary assessment in the 12 selected departments (3.3 million inhabitants live in those 12 Departments, of which 2 million live in the 79 targeted municipalities). This assessment will constitute a census of the participating communities. In 2005, this assessment will be one and the same as the national census which is being conducted this year. It is estimated that this survey will classify approximately 470,000 people as potential beneficiaries for the extension of coverage of health care services, applying the abovementioned criteria. Of this population, 235,000 will be women of childbearing age, 188,000 will be children under 5 years and 47,000 will be young people and adults with diseases targeted by the PBHS.

Project Components

Strategic objective 1: Extension of access to the Basic Package of Health Services (PBHS) for the poorest and most vulnerable populations - US$ 36.5 million (IDA - US$ 7.5 million)

The primary objective of this component is to extend access to the PBHS to populations in the 12 targeted departments (SILAIS), which have the worst health and poverty indicators. This objective will be achieved through the financing of a community health financing scheme. The MOH will allocate the capitation transfers that will finance the community health financing scheme to these select SILAIS. The capitation transfers will be calculated on a per capita basis, based on the estimated cost of providing the PBHS to the eligible population. The amount of funds to be transferred to each SILAIS each year will be calculated by multiplying the adjusted average capitation payment by the number of persons residing in the eligible communities. The total annual capitation payments will be transferred on a prorated monthly basis to the SILAIS. At the beginning of each annual contract, an advance equal to one quarter of the annual total transfer will be distributed to the SILAIS. Subsequent monthly payments of the capitation transfers will be adjusted downward to ensure that this advance is offset during the course of the year. Every year the number of beneficiaries in each community and the adjusted average capitation payment will be reviewed and updated. The SILAIS would in turn contract services for the PBHS with local public providers and/or private providers.

The Integrated Health Care Model (MAIS)

The MOH has developed the Integrated Health Care Model (MAIS) based on previous experiences and projects implemented in the country. The MAIS delivery model is based on a recent cross-cutting evaluation of the 14 primary health care projects implemented nationwide. This model will serve as the technical framework for the delivery and management of the PBHS and contains key instruments for the organization and delivery of quality health services (health team's organization and functions, clinical protocols and service standards, contracting mechanisms and performance-based payments). The MAIS will evolve as the PBHS is extended and new experience is gained by the MOH on the implementation of these instruments.

Services of the PBHS would be contracted by SILAIS in three different modalities, according to the social and geographical characteristics of the population:

(i) Zones B (rural concentrated): Mostly public providers, if existing in that area, will mobilize itinerant teams of health practitioners to provide the PBHS in close co-ordination with their corresponding institutional settings.

(ii) Zones A (urban): The local health center and its catchment network of health posts (*municipios*) will provide the PBHS to people working in those urban areas.

(iii) Zones C (rural dispersed): Most likely NGOs or other private health service providers will be contracted to provide outreach services comprising the PBHS to the communities. These itinerant teams will coordinate their service delivery with the nearest health center. A working referral system will be implemented to ensure that patients who require higher level care have access to it, particularly institutional deliveries and perinatal care.

Mobile public and private units will be comprised of health personnel (namely doctors and nurses) and community health workers. They will provide ambulatory health services defined in the PBHS to remote areas (zones B and C). Mobile teams will be complemented by the role of paid health practitioners (*promotores de salud*) who, although being part of the delivery team, will reside in the community, identify at-risk population, promote healthy practices and environments, provide basic health care and contribute to close follow-up of patients, pregnant women and children. The role of community midwives will also be enhanced by offering appropriate training, basic equipment, implementing a sort of certification process, and improving coordination and integration of these community workers' function with the local health centers, NGOs and mobile teams operating in the area. The role of health volunteers (*brigadistas*) will also be promoted and integrated in the model, particularly to provide nutrition advice, as the current community nutrition and growth program does (PROCOSAN). This successful program will be expanded to the targeted communities without it yet, and developed with new modules (i.e. morbidity module) adding to the existing ones. PROCOSAN services have been included as part of the PBHS. Where it does not exist, the contracted providers of the PBHS will provide it. Where it already exists, its current providers will progressively get incorporated into the delivery of the PBHS model.

In the case of the indigenous and afro-descendant communities, the delivery model will be adjusted in accordance with their specific needs, expectations and traditional customs and values.

The MOH, along with the Autonomous Governments of the Atlantic Coast (RAAN and RAAS), is currently working out a specific delivery model for these two regions that will be used for the extension of the PBHS in those areas.

The Package of Basic Health Services (PBHS)

The PBHS has been formulated, in accordance with the corresponding specifications set up in the 2002 General Health Law. This law stipulates an ample list of health care services that should be offered by the MOH to the entire population without means or without any health insurance coverage (the non-contributory regime). However, the MOH cannot offer the entitled package to all the eligible population under the law due to financial restriction. It has therefore decided to adopt an incremental approach, commencing by offering an affordable package of health services, based on the cost-effectiveness of interventions and health and population priorities established in the NHP, to the population groups that cluster the highest poverty and disease burden in the country. Consequently, the PBHS prioritizes the following areas for intervention: (i) maternal care; (ii) sexual and reproductive health, including family planning and the prevention and control of sexually-transmitted diseases; (iii) infant health (for children under 5 years), child nutrition and development; and (iv) health education, detection and treatment for the control of the most prevalent communicable and non-communicable diseases in adults.

The PBHS consists of the services outlined in the following table:

1. Monitoring and Promotion of Growth and Development, for children under 5 years.

a) Promotional and Preventive Actions

- Promotion of healthy diet, personal hygiene, oral health, breastfeeding, distribution of information and education material.
- Monitoring of infant and perinatal mortality.
- Training, early evaluation and classification of newborn infants based on their level of risk.
- Parental education about basic care of newborn infants, and infant and adolescent growth and development.
- Periodic care and monitoring of infant growth and development, including evaluation of vision and hearing, monitoring of height and weight and development of psychometric and motor skills.
- Promotion of a complete immunization plan during the first year of the infant's life.
- Implementation of the compulsory immunization program.
- Supply of vitamin A, iron, iodine, fluoride, folic acid and ferrous sulphate.

b) Early detection and care

- Health Care of newborns and treatment of complications.
- Outpatient care for infant health and children under 5 years
- Referrals and cross-referrals for complicated patients.
- Treatment of communicable diseases.
- Detection of high-risk cases (such as victims of childhood abuse, mistreatment and violence).

c) Development of community health and nutrition interventions

- Education and development of healthy diet for children, personal, family and household hygiene.
- Distribution of IEC material.
- Prevention, early diagnosis and treatment of malnutrition.
- Supply of vitamin A, iron, iodine, fluoride, folic acid and ferrous sulphate.
- Implementation of the Community Program of Health and Nutrition.
- Treatment of nutritional problems and associated diseases.
- Case referral.

2. Integrated care for women of reproductive age

a) Pre, post natal and obstetric care

- Promotion of healthy diet, oral health, newborn hygiene and care, breastfeeding, institutional births, family planning, distribution of IEC material.
- Care of normal low-risk pregnancies and deliveries.
- Referral and follow-up of high-risk cases.
- Early detection and care of pregnancies.
- Prenatal care.
- Evaluation of nutritional status of pregnant women.
- Provision of nutritional supplements to pregnant and post-natal women.
- Anti-tetanus immunization of pregnant women.
- Family planning education.
- Diagnosis, treatment and counseling for sexual and reproductive diseases.
- Emergency care for pre and post natal complications and complications during delivery.
- Diagnosis and treatment of diseases in pre and post natal women.
- Incentives for referral to Casas Maternas.

b)Early detection of cervical and breast cancer

- Promotion of self-examination and PAP smears.
- Distribution of IEC material.
- PAP smears.
- Breast examination and self-examination
- Case diagnosis and referral.

c) Sexual education and family planning

- Sexual health and education with emphasis on abstinence in adolescence.
- Training and care of adolescents with risk factors.
- Detection, care and referral of cases of violence.
- Promotion of spacing between births.
- Promotion of correct usage of traditional and modern methods.
- Distribution of IEC material.
- Training and delivery of family planning methods.
- Distribution of contraceptives in the community.

3. Care of prevalent diseases

- Treatment of sexually transmitted infections (including HIV/AIDS).
- Early detection, control and treatment of malaria, dengue and tuberculosis.
- Early detection and treatment of hypertension and diabetes mellitus.

Two complementary activities necessary to ensure appropriate utilization of the PBHS by the targeted population will be supported within this strategic objective of the FYIP, namely:

a) The incorporation of traditional medicine, community structures and practitioners into the health services delivery and management model for the indigenous and Afro-Nicaraguan populations.
b) Information and communication activities aimed at: (i) generating community awareness and marketing the extension of health services; (ii) raising social and individual responsibility over healthy practices and better nutritional habits in the target populations.

The actual delivery of services and the expected outcomes of such services will be monitored and verified through a two-pronged strategy:

- A social audit mechanism will be devised, by which the community will certify quarterly that the local providers render the services included in the PBHS. Annual community surveys will also be carried out to investigate the quality and timeliness of services.

- Intermediate results linked to the delivery of the PBHS will be closely monitored by the SILAIS and the MOH. These intermediate results, as described in the results framework (Annex 3), are: institutional deliveries, child immunization, early prenatal care, full prenatal care and discharges from Women Centers. The achievement and verification of these results will also be subject to an independent annual assessment, as agreed in the MOU.

Financing and paying for the PBHS

The cost of the per capita premium of delivering the PBHS has been calculated for the 79 municipalities by geographical region, taking into consideration the differential cost of providing services by the three different delivery models (rural-dispersed; rural-concentrated; urban) and the amount of potential beneficiaries in each municipality living in those areas. According to that calculation, the average cost per capita in the most expensive region, RAAN, is US$12.2, in contrast to the more densely populated Pacific region where the average per capita cost is US$16.3. These costs have been developed through analysis of actual costs of each component parts, accounting for actual prices that prevail in the markets for medical goods and services, technology improvements, efficiency standards and expected economies of scale. The cost has been brought to per capita average basis, taking into account the size of the beneficiary pool. These costs are considered to be reliable, proxies, on average, for actual costs of delivering the PBHS.

To ensure that SILAIS will enforce the delivery of services by contracted public and private providers, the management agreements between SILAIS and MOH will include the obligation of SILAIS to spell out in their contracts with providers: (i) the rights and obligations of the parties; (ii) the content of the PBHS; (iii) the annual objectives, follow-up indicators, and verification mechanisms; (iv) budgetary allocation (in the case of public providers), and the mechanisms for payment and incentives; (v) information to be provided for supervision and evaluation purposes. The following annexes to the contract will also be added: (a) the operational annual plan; (b) training and development activities for strengthening clinical and management capacities; (c) investment plan to strengthen the services network and the management plan for the corresponding catchment network.

The management agreements (*Convenios)* will also define the result targets for each SILAIS, using the FYIP result indicators framework, establish the responsibilities of SILAIS and MOH for following-up providers' performance, and specific mutual commitments for that area.

The Operational Manual for the extension of services that the MOH will furnish to IDA, and the rest of the SWAp partners, before effectiveness of the IDA credit, will describe in more detail the benefit plans, delivery modalities, focalization criteria and identification of beneficiary mechanisms, payment mechanisms, contract instruments, management responsibilities of public local providers, supervision arrangements, and procurement procedures.

Strengthening planning, accountability and social participation for the delivery of the PBHS

The FYIP calls for the development of a strong health services purchasing function at the MOH (the capacity of the MOH to prepare, negotiate, monitor and enforce the management agreements). This function becomes crucial for the successful implementation of the expansion

of the PBHS strategy and the accomplishment of the FYIP targets. The MOH will produce by January 2006 a restructuring of MOH central offices so as to define and implement an operational purchasing body sufficiently staffed, with clearly separated responsibilities from the direct management of units, and utilizing an integrated information system providing timely and reliable data necessary for the formulation and evaluation of management agreements used for the implementation of the SWAp. This capacity building will entail: (i) capacity assessment and training activities in the 12 SILAIS; (ii) technical assistance and limited logistics (vehicles, workshops) necessary to support the implementation and improvement of the planning and supervising roles; (iii) technical assistance and information technology required for the implementation of the SIMINSA modules (SIPLA, SIAFI and others) in these 12 SILAIS; (iv) identification of beneficiaries of the PBHS; (v) studies, workshops and development of instruments aimed at involving local communities in the governance and supervision of the expansion of health care.

Strategic Objective 2: Strengthening the network of services with emphasis on maternal and infant health care - US$27.8 million (IDA - US$ 2.8 million)

Its central objective is aimed at increasing and improving the capacity of public providers to deliver the services included in the PBHS, especially in the area of maternal and infant care, by reinforcing physically and functionally the primary and secondary care facilities. The reason for this component is that successful infant and maternal care can only be achieved if adequate institutional, both ambulatory and hospital, care is available and accessible to the population. In fact, the lesser maternal and infant mortality rates get anywhere, the more complicated the causes of those deaths become. Perinatal diseases are currently responsible for some more than one third of total infant deaths in Nicaragua. This illustrates the need for relying on good quality and accessible institutional care for appropriately tackling maternal and infant mortality in Nicaragua. Reducing maternal and perinatal mortality requires also an operational referral system, transportation, and good coordination of the entire health care process.

The MOH will support the expansion of the *Casas Maternas* network with 30 more of these facilities, since the existing ones have proven instrumental in increasing the rates of institutional deliveries for pregnant women living in remote areas. Although not a health center, CMs are frequently cross-supported by staff from the community's affiliated hospital. Services provided in these *Casas* will expand over simply lodging pregnant women, to provide family planning and child nutrition counseling, as well as other education activities (i.e., simple vocational training) for empowering resident women. A feasibility study will be conducted to identify communities with difficult access to institutional delivery and expressed community support to maintaining these centers. Funding will be provided for the rehabilitation of existing premises or (on an exceptional basis) the construction of new homes, the acquisition of basic equipment and furnishings for the homes, time bound (and declining) recurrent costs, activities aimed at empowering women staying in the homes, and the promotion of family planning.

Activities funded under this strategic objective of the SWAp will include:

(i) Physical rehabilitation, medical equipment and basic furnishing of health centers and health posts in the targeted areas necessary to provide the PBHS;

(ii) Physical rehabilitation, medical and industrial equipment necessary to upgrade the maternal and infant critical care path of the twelve existing hospitals in the 12 targeted SILAIS. At least the obstetric, neonatal and pediatric services of these 12 hospitals will improve as to comply with the quality standards set forth by the MOH certification process (*habilitación).* The critical path consists of emergency rooms, operating theaters, obstetric and pediatric wards and the necessary diagnostic (image, laboratory) and supporting services (water, steam and sanitation, catering, laundry, maintenance and waste management);

iii) Expansion of the *Casas Maternas* (CMs) network including: (a) rehabilitation of available homes in the communities for that purpose; (b) basic furniture and supplies, (c) operational costs on a declining basis, (d) outreach activities for the target population, and (e) technical assistance and training of the communities for the management and financial sustainability of these homes;

iv) Strengthening management capacities of hospitals and local public primary care providers (*municipios*), including: (a) general management (strategic and business planning, monitoring and internal control, performance management); (b) financial and administrative management (financial accounting and control, human resources, procurement of supplies, general support services – catering, maintenance, cleaning, hospital waste management and disposal); (c) clinical and patient management (user identification and billing, clinical records, control of hospital infections, clinical protocols). These interventions will entail technical assistance for systems development and implementation, training and information technology. Direct technical assistance to local and hospital management teams will be provided by itinerant teams of long term consultants working under direct supervision of the MOH Hospital and Primary Care Directorates. Investment in hospital infrastructure and equipment will be necessarily tied and simultaneous to investment in management and quality improvement of those facilities.

Strategic Objective 3: Improving Stewardship, Strengthening Institutions and Decentralization of the health sector - US$17.8 million (IDA - US$ 0.7 million)

This strategic objective is aimed at strengthening MOH's leadership capacity and accountability in order to better enable achieving the goals of the National Health Plan (2004-15) and its operational five-year plan (2005-2009). The FYIP goals related to this strategic objective are: (i) improving the efficiency and equity of health expenditures; (ii) advancing the decentralization of the health sector and developing capacity of the Autonomous Governments of the Atlantic Coast to take over management of their regional health systems; (iii) alignment and harmonization of foreign cooperation with MOH policies and systems; and (iv) developing the MOH capacity for purchasing services.

3.1 *Stewardship*

The objective of this component is to further develop the MOH institutional leadership of the sector, particularly by: (a) monitoring and adjusting, if needed, the sectoral policy and strategy; (b) developing the institutional capacity to evaluate the performance of the national health system; (c) conducting and coordinating the implementation of the GON's population policy; (d) promoting and facilitating the assumption of public health responsibilities (health protection,

promotion and environmental health) by municipal governments. These objectives will be achieved through the following means:

i) Enhancing the MOH capacity to evaluate the performance of the national health system. Resources will be allocated to support preparation of the national health accounts, perform a mid-term evaluation of the five-year implementation health plan, as well as financial assistance to carry out the 2006 demographic and health survey (DHS).

ii) Technical assistance provided to the MOH, as the GON delegated agency for coordinating the Nicaragua multi-sectoral population policy, to help it manage, coordinate and monitor the implementation of the population policy and its associated action plan.

iii) Capacity-building and awareness-raising activities will be conducted with municipal governments to take on municipal responsibilities on public health. This activity will support the GON effort to scale up municipal government responsibilities attached to the municipal fiscal transfer law recently approved by the National Assembly.

iv) Coordination and progressive harmonization of foreign aid in the sector. Technical assistance, study tours and workshops will be supported in order to facilitate progress in the harmonization of external support. The SWAp fund will also contribute to the operational costs, including salaries of consultants, of a reduced SWAp Technical Secretariat.

3.2 *Institutional strengthening to improve health service delivery and equity.*

This will involve the following:

i) Development of MOH's purchasing function by the following means:

> a) establishing the MOH purchasing body. It will start as a branch of the General Directorate of Health Planning and Development, managing the day to day relationship with SILAIS for the implementation of the community health financing scheme, including the use of funds provided by the external agencies and MOH for the SWAp. SWAp funds may be used for the contracting of time-limited consultant services that bring know-how and support the operational functions of the purchasing unit;
>
> b) supporting the MOH annual planning and budgeting process, facilitating its operation and implementing new instruments for rendering the planning and budgeting process more needs-based and performance driven (namely, implementation of the new resource allocation formula, development of planning guidelines, identification of unit costs, development of hospital payment mechanisms).

ii) Strengthening MOH fiduciary capacity by providing training and technical assistance for: a) deploying the institutional financial management system (SIGFA) in local units; b) implementation of costing and invoicing systems; c) strengthening the MOH procurement function. These activities will implement the strengthening plans prepared by the fiduciary assessments carried out by the SWAp partners in the preparation stage and all other necessary

measures that may be identified during the SWAp execution. The MOH will enlarge the staff of its procurement unit as defined in the fiduciary strengthening plan. Consultants may be also needed to enlarge its technical capability.

iii) Adjusting the MOH information system (SIMINSA) to make it responsive to the needs of its different end users (central MOH, SILAIS, hospitals and municipalities). This will involve software development and the information technology and communication equipment required at central and decentralized levels.

iv) Establishing a system of identifying social security beneficiaries at selected national hospitals, aimed at reducing cross-subsidies between MOH and INSS. Also, funds will be provided to develop the identification system of the non-contributory regime system, starting by the targeted municipalities for the expansion of coverage.

v) Supporting the technical development of the community health and nutrition program (PROCOSAN) in order to formulate and fine-tune the new components and support their implementation.

3.3 *Decentralization*

The FYIP seeks to advance the technical and administrative decentralization of the MOH and facilitate the transfer of human and financial resources to the SILAIS and local providers. The MOH decentralization agenda that will be specifically supported by the SWAp include the following:

i) Implementation of a decentralized human resource management system, involving the decentralization of payroll management, personnel planning and budgeting at local level, and piloting of a performance payment mechanism.

ii) Build capacity in the Governments of the Autonomous Regions of the Atlantic Coast (RAAN and RAAS) so that they become prepared to take on their legal responsibility to design, organize and manage their regional health services. The FYIP will support the working plans that are being prepared between the MOH and the Autonomous Secretariats of Health.

Annex 5: Project Costs

NICARAGUA: Health Services Extension and Modernization (2nd APL)

COST TABLE BY STRATEGIC OBJECTIVE (US$)	
1. STRATEGIC OBJECTIVE	**Five Year Total**
1. Extension of Health Services	**36,564,306**
Extension of the PBHS with institutional providers	22,200,238
Extension of the PBHS with private providers	9,514,388
Strengthening of health planning, evaluation and social participation for the extension of health services.	4,849,680
Strengthening of the Health Network	**27,817,446**
Women Centers (Casas Maternas)	1,476,198
Health Centers and Posts	9,103,780
Equipment	8,593,338
Hospitals	8,644,130
Stewardship, Institutional Development and Decentralization	**17,820,390**
Stewardship and Coordination	147,843
Institutional Strengthening	11,775,646
Decentralization	5,882,502
Support to INSS for expansion of coverage and improvement of health service quality	16,000
TOTAL	**82,202,143**

SOURCES OF FUNDS. FIVE YEAR PLAN. US$			
Partner	External Funds	Counterpart Funds	Total
IDB	30	3	33
Sweden	20		20
IDA	11	1.1	12.1
The Netherlands	10.6		10.6
Finland	6.5		6.5
TOTAL	**78.1**	**4.1**	**82.2**

Annex 6: Implementation Arrangements

NICARAGUA: Health Services Extension and Modernization (2nd APL)

The Code of Conduct, which has been signed by all SWAp partners on January 28, 2004, sets out the basic principles guiding the implementation of the SWAp. These include the following:

Coordination: The MOH and other SWAp partners will cooperate with each other in establishing mechanisms of collaboration necessary to prevent duplication and facilitate complementarities in policies, agendas and activities.
Alignment: The MOH and other SWAp partners will align their actions in accordance with the National Health Policy and Plan (2004-2015) and the Five-Year Implementation Plan (2005-2009). They will also make sure these actions are coherent with the Reinforced Strategy for Growth and Poverty Reduction (ERCERP), the National Development Plan and other GON policies.
Harmonization: The GON and all SWAp partners will simplify and integrate their policies, procedures and operational practices in accordance with the GON legal, regulatory and institutional structures, procedures and fiduciary systems.

A Memorandum of Understanding (MOU), which has been drafted and furnished to the SWAp partners by the MOH, sets out the institutional arrangements for the implementation of the SWAp in much more detail. The MOU stipulates the FYIP as the operative instrument for the SWAp in the medium-term and the consolidation of all the common initiatives in the SWAp. The FYIP contains a subprogram along the priorities and geographical focalization set out in this credit proposal. This subprogram, for a total amount of US$82.2 million, focalizes the first two objectives aimed at expanding the coverage of the PBHS and the strengthening of the health service network on 79 municipalities with the worst poverty and ill-health levels. The FYIP is accompanied by a mid-term financial plan for the health sector, setting out the expected total funding of the health sector each year, by source of funds (fiscal, external and others), as well as the allocation of those funds across functions, territories and expenditure category. The MOH and the SWAp partners will create a special fund, FONSALUD, which will resource the abovementioned subprogram within the FYIP. Initially this fund will collect funds committed by IDA, IDB, Sweden, Finland and the Netherlands. However, the fund may enlarge as new financing from current SWAp donors is available or new donors join in. FONSALUD will pool funds from those donors, allowing for specific tracking of expenditures by donor source if necessary.

The FYIP will be, in turn, operationalized every year in annual action plans, compiling annual plans and budgets prepared by SILAIS under MOH guidelines. The SWAp annual programming will be performed within the same context and process of the MOH regular budgeting and planning cycle. All SWAP participating agencies will meet with the MOH at least twice a year in spring and autumn. The spring meeting will evaluate the progress of the sectoral strategy in the past year and will establish common guidelines for the next year's plans. In autumn, the SWAP parties will review and agree with the MOH the next year action plan.

Other implementation and institutional arrangements for the management of the SWAp will consist of the following:

(i) The MOH Board of Directors, composed of the Minister, Vice-Minister and Directors Generals will have overall responsibility over the planning and direction of the SWAp, as part of the overall overseeing of the MOH responsibilities. The MOH will constitute a Technical Secretariat for the SWAp. The Technical Secretariat will report directly to the Minister or Viceminister of Health and will be managed by an official appointed by him/her. The appointed official's TORs and conditions of employment will require approval by all SWAp participating agencies.

(ii) The General Directorate of Health Planning and Development will assist, technically and administratively, the SWAp Technical Secretariat. The Technical Secretariat will be staffed with a small number of officials for coordination and liaison with the MOH central divisions and SILAIS purposes. All SWAp partners will agree upon the number of officials, their TORs and the selection process.

(iii) The MOH Purchasing unit: This virtual entity will initially reside under the responsibility of the General Directorate of Health Planning and Development and will be supported by the General Directorate of Financial Administration. It will have the responsibility on the operation and supervision of the community health financing scheme. It will progressively take on the purchasing function of the MOH in the rest of the country (non-targeted SILAIS). Its operating cost will be partially financed by the SWAp funds in a phased-out manner.

(iv) SILAIS in the targeted departments will have the responsibility to formulate and monitor service contracts and performance agreements with private and public providers for the delivery of the PBHS.

(v) Corporate management agreements (*convenios de gestión*): These are the purchasing instruments between the MOH and SILAIS in the targeted areas, by which the capitation transfers of the community health financing scheme are allocated. They will also include the investment and capacity-building plans necessary to implement the SWAp at local level.

(vi) Performance agreements: These are administrative tools, already implemented by the MOH nation-wide, signed by SILAIS and the institutional providers (*municipios* and hospitals). They will contain provisions related to the implementation of the PBHS in those localities, as indicated in Annex 4.

(vii) Service contracts: These contracts will be similar in content to the management agreements but will be entered into with private providers and be legally binding. The tendering procedures will be in accordance with the administrative requirements for third-party purchases of services under the GON laws.

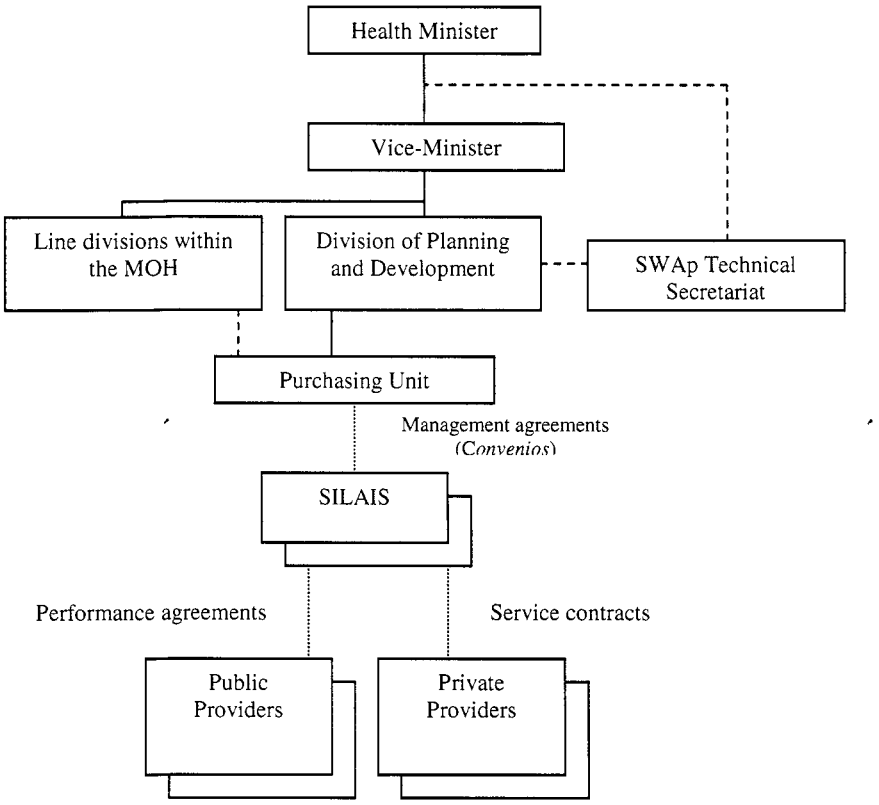
The following table summarizes the different mechanisms and institutional arrangements described above:

Level of Management	Functions	Instruments
Central Level: (Planning and Purchasing)	• Planning the overall strategy • Determining needs • Formulating national health plans • Defining the procurement strategy and overseeing the negotiation and management of management agreements • Follow-up and evaluation	• Five-year health plan • Information systems • National Health Plan • Management agreements • Decentralized budget • Quality Certification Instrument (*habilitación*)
SILAIS (Monitoring and Evaluation)	• Qualifying providers (*habilitación*) • (Modulator) Contracting of services and the negotiation and management of contracts • Supervising contracts • Providing assistance to the central level in monitoring and evaluating contracts	• SILAIS Health Plan and purchasing plans • Quality certification Instrument (*habilitación*) • Information systems / Providers Registry • Corporate management agreements, service contracts and performance agreements • Monitoring and evaluation instruments
Providers (Local provision)	• Complying with the management commitments and contracts • Health promotion and prevention • Providing health services • Local health needs analysis • Formulating local health plans • Compiling, processing and supplying information for planning and purchasing purposes	• Performance agreements and service contracts • Local health analyses and plans • Local health information systems • Local financial management and administration systems

Capacity Constraints

The main capacity issues concern: (i) the MOH's financial management capacity to oversee the disbursement of SWAp funds; and (ii) the capacity of the SILAIS and governments of the Autonomous Atlantic Regions to efficiently absorb, administer and monitor SWAp funds. The MOH has made substantial progress in enhancing its capacity in this regard through the development of the Financial Administration Information System (SIGFA). A financial management and procurement capacity assessment of the MOH central offices and the involved SILAIS has been done as part of the preparation stage. Strengthening plans have been outlined and will be devised in more detail and implemented accordingly.

Organizational structure and Implementation arrangements for the SWAp

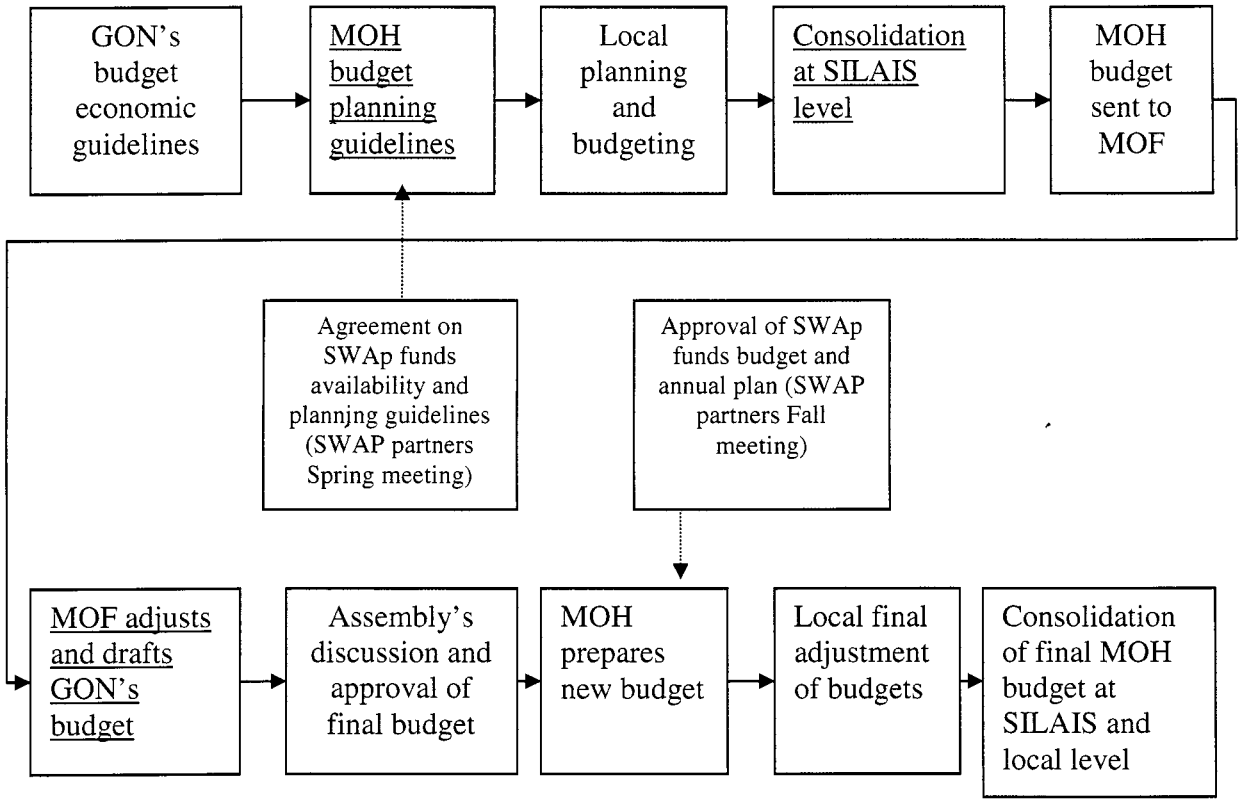


——— Administrative links

- - - - - - - Technical collaboration and administrative coordination links

..... Provision links

MOH Annual Budget and planning cycle



Annex 7: Financial Management and Disbursement Arrangements

NICARAGUA: Health Services Extension and Modernization (2nd APL)

Introduction

The financial management (FM) arrangements and action plan contained here take into account the findings of the Country Financial Accountability Assessment (CFAA), the results of a preparation mission to the Ministry of Health (MOH), the results of the financial management assessment, and discussions with Government officials from MOH, the Ministry of Finance and Public Credit (MOF), the Secretariat of Strategy and Coordination of the Presidency (SECEP), and representatives of various donor agencies.

The basic premise of the Nicaragua Health FM arrangements is that these will be based on the GON's public financial management systems and procedures, with additional safeguards where needed. Accordingly, the sectorial arrangements presented here fall under the umbrella of the overarching GON's public financial management modernization plans (i.e., the *Plan de Acción Gubernamental "PAG")* and the correlated policy dialogue with the donor community (e.g., the Performance Assessment Matrix under discussion with the Budget Support Group).

From January 20 to 28, 2004, a mission visited Nicaragua to perform the assessment of the financial management capacity of the executing agency in relation to the proposed Health Services Extension and Modernization SWAP. The proposed project is to be implemented by the Ministry of Health (Ministerio de Salud – MOH) in Nicaragua. The financial management assessment was designed to ensure that the executing agency has in place an adequate financial management structure, keeps adequate automated accounting records, has the required capacity and strong internal controls in place in order to ensure that they will manage the funds appropriately and efficiently.

On the basis of the assessment performed, the following broad conclusions were reached:

(i) Overall, MOH has considerably improved its financial management with a reorganization of the administration and finance unit and the implementation of the Government's integrated financial management system.

(ii) Therefore, assuming that MOH carries out the proposed action plan presented in this assessment, especially with regards to staffing, it would have in place adequate financial management arrangements that meet the Bank's minimum fiduciary requirements to manage the specific financial activities of the proposed SWAP.

Common fiduciary framework

The MOH has agreed with a group of Donors on a health sector-wide approach where external assistance would be provided through a virtual Health Sector Support Fund (FONSALUD). In connection with the FONSALUD, a common fiduciary framework (CFF) is being developed.

A CFF may significantly reduce transaction costs of meeting the diverse requirements of donors; however, CFF procedures can impose transaction costs of their own, which raises the need for a simple and gradual approach. In a first stage, it is likely (and recommended) that the CFF will be adopted by a limited number of Donors. With their focus on country systems, the FM arrangements for the use of IDA proceeds have been designed as a basis for a CFF.

Implementing Entity

As outlined in the Code of Conduct, and the already drafted MOU, the executing entity for the proposed health SWAP will be MOH (*Ministerio de Salud*) with oversight by the Office of the Minister of Health. The *Mesa Sectorial de Salud* (MS) comprised of all cooperating agencies in the health sector and all the health-related government agencies will be the principal forum for cooperation, information exchange and dialogue for the overall health sector development. MOH and all the SWAp partners will constitute a *Coordinating Committee* in charge of overseeing the planning and execution of the FYIP and its annual action plans, and reviewing periodically (at least biannually) the attainment of its targets. Technical support and internal coordination within MOH will be provided by a SWAp Technical Secretariat attached to the MOH's Department of Planning and Development. The director of the technical secretariat will be appointed by the Health Minister, under TORs, employment conditions and appointment subject to approval by all the SWAP partners.

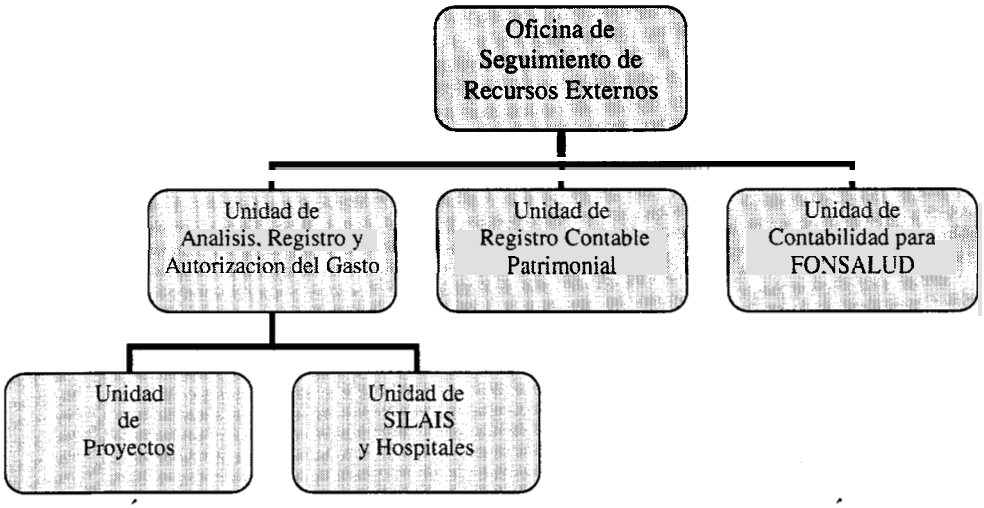
MOH is responsible for formulating policies relating to the health sector in Nicaragua, and coordinating, executing and evaluating programs related to the protection, prevention and improvement of the health status of the Nicaraguan population. MOH is divided into 53 executing units, including 17 SILAIS (*Sistemas Locales de Atención Integral en Salud*) and 33 hospitals. In addition, MOH is divided into 9 divisions, including the General Administration and Finance Division (*Dirección General Administrativa Financiera* or DGAF) and the Planning Division (*Dirección General de Panificación y Desarrollo*). The Planning Division will be responsible for overall technical execution of the program, and the Administration and Finance Division will be responsible for the financial and administrative management.

Therefore, MOH, through the DGAF, will have overall financial and accounting responsibility for the proposed SWAp, including (i) maintenance of accounting records, (ii) preparation of project financial statements in accordance with national and World Bank guidelines, (iii) management of bank accounts, (iv) preparation and submission of quarterly Financial Monitoring Reports (FMRs) produced by the SIGFA, and (v) preparation and submission of withdrawal applications.

Staffing

As described above, the proposed program will be implemented by MOH, and responsibilities for financial management will be assigned to DGAF. Therefore, existing staff members within DGAF will play a role in the financial management of the proposed program. The credit will finance qualified incremental technical assistance as required by the DGAF, such technical assistance to be absorbed gradually by MOH.

The Ministry has proposed to create a unit, within the DGAF, to manage expenditures and budget execution of the SWAp (FONSALUD). This unit would include a Coordinator two Analysts and a team of financial officers who will supervise financial management at the SILAI level and report directly to the Manager of the Accounting Office. This unit would be responsible for reviewing expenditures of FONSALUD, coordinating with MOF for disbursement purposes from FONSALUD, providing follow-up on budget execution, preparing periodic financial reports and withdrawal applications for donors.



Accounting Policies and Procedures

The main FM normative framework for the FONSALUD will consist of: (i) the Budget Regime Law, which establishes procedures for the formulation, approval, and execution of the budget; (ii) the Annual Law of the General Budget of the Republic, which specifies the Revenue and Expenditure Budgets and expands on the general rules laid down in the Budget Regime Law; (iii) the annual Norms and Procedures for Budget Execution and Control issued by the MOF; and (iv) the manuals and rules developed under the Integrated Financial Management System (SIGFA) program.

FM arrangements specific to FONSALUD that are not contemplated in the regulations cited above will be documented in a concise FM section of the Operational Manual.

Budgeting
During the second quarter of each year MOH, under the overall budget policy framework provided by the MOF, will prepare FONSALUD's Investment Program for the next year. At the overall MOH's level of investments, IDA funds should add to, rather than substitute for, domestic resources.

The Investment Program will be presented to the SECEP for its incorporation in the National Public Investment Plan (PIP). The latter is subject to two levels of approval: (i) the inter-ministerial Investments Technical Committee (CTI); and (ii) the GON's Economic Cabinet.

The approved Investment Program will be incorporated into MOH's annual budget proposal. FONSALUD expenditure items will be tagged.[16] The health budget will be incorporated by the MOF into the national budget for the President's submittal to the National Assembly in October. The Assembly would approve the budget by December.

On the basis of the approved budget, MOH will adjust its annual work plan (POA/MOH), which includes the annual work and procurement plan financed under FONSALUD (POA/FONSALUD). The latter will be reviewed by IDA.

[16] The GON's integrated financial management system (SIGFA) allows tagging of expenditures ("marcaje de seguimiento de proyecto específico") at different levels of expenditure classification.

Management agreements with Public Providers and Contracts with Private Providers (NGOs)
FONSALUD will support the transfer of community health financing scheme to SILAIS for the expansion of coverage of the PBHS. A management agreement will be established between MOH and the SILAIS, with a specified list of activities and payment amounts. A monitoring system will be established to ensure contract compliance by program participants.

Information Technology (IT) Systems
Project funds will be captured in the Government's integrated financial management system (SIGFA), utilized by MOH. There will, however, be a need for further cooperation with MOF for the purposes of aggregating information from SIGFA on a component and category basis (for financial monitoring to the Bank) and preparing withdrawal applications.

Safeguard over assets
Assets acquired using project funds will be in the custody of the respective organizations. The accounting system allows for tracking of assets purchased. Therefore, the asset register will be kept within MOH's accounting system (SIMINSA). The amounts in the register will be reconciled monthly against the respective account balances. And, at least one annual physical inspection of the assets will be undertaken by MOH staff, preferable with the participation of external auditors.

Reporting and Monitoring

On a quarterly basis, MOH will prepare and submit to IDA a Financial Monitoring Report (FMR) for FONSALUD containing: (i) Statement of Sources and Uses of Funds (with expenditures classified by subcomponent) and Cash Balances; (ii) Statement of Budget Execution per subcomponent (with expenditures classified by the Government's budgetary economic lines); (iii) Physical Progress Report; and (iv) Procurement Monitoring Report. The format for the FMR will be flexible enough to satisfy needs of the Government, IDA and other Donors. An annex to the FMR would contain data specific to IDA disbursements: (i) Special Account Activity Statement (including a copy of the bank statement); (ii) Summary Statement of Special Account Expenditures for Contracts subject to Prior Review; and (iii) Summary Statement of Special Account Expenditures for Contracts Not subject to Prior Review. The FMRs will be submitted to IDA no later than 45 days after the end of each quarter.

On an annual basis, MOH will prepare Financial Statements for FONSALUD that will include cumulative figures, for the year and as of the end of that year, of the financial statements cited in the previous paragraph, with the corresponding explanatory notes in accordance with the Cash Basis International Public Sector Accounting Standard (IPSAS), and MOH's assertion that credit funds were used in accordance with the intended purposes as specified in the Credit Agreement. These financial statements, once audited, will be submitted to IDA no later than six months after the end of the Government's fiscal year (which coincides with the calendar year).

The supporting documentation of the quarterly and annual financial statements will be maintained in MOH's premises and made easily accessible to IDA supervision missions and external auditors.

Funds Flow

IDA Disbursement method
Credit proceeds will be withdrawn on a quarterly basis under the report-based disbursement method. During implementation, MOH will (a) sustain satisfactory FM arrangements to be verified through supervision missions, (b) submit FMRs consistent with the agreed form, content and due date, and (c) submit acceptable audited financial statements by their due date. If MOH does not continue to meet these criteria, the method will be changed to transaction-based disbursements only (provided the World Bank

does not suspend disbursements because of non-compliance with the obligation to maintain an adequate FM system). Under the transaction-based disbursement method, the SOE thresholds would be consistent with the procurement prior review thresholds.

IDA Special Account
Based on MOF's preference, each donor funding FONSALUD will have its own special deposit account. Therefore, the MOF (through the Treasurer General) will open and maintain in the Central Bank (BCN) a special deposit account for IDA's contribution to FONSALUD, which will be co-managed by MOH and MOF, to be used exclusively for deposits and withdrawals of credit proceeds for eligible expenditures. After the conditions of effectiveness have been met, and the special deposit account has been opened, MOH will submit the first disbursement request (form 1903B) to IDA, together with the credit expenditure forecast for the next six months. For subsequent withdrawals, MOH will submit form 1903B to IDA, along with the FMR for the quarter just ended and the expenditure forecast for the subsequent six months.

Flow of Funds (program disbursements)
Program disbursements will be made utilizing MOH's general disbursement procedures. Therefore, program disbursements will be made either through direct payment from MOF, or through MOH's revolving fund. For major expenditures, upon receipt of a request from MOH, MOF will execute payments out of the national Treasury Single Account (CUT). For minor expenditures, MOH will execute payments out of its revolving fund mechanism.

On a weekly basis, MOF will verify the amounts spent under the FONSALUD budget lines, which is possible as SIGFA produces real-time data on budget execution. On the basis of expenditures incurred during the period and the percentage applicable to IDA financing of FONSALUD, MOF will reimburse the CUT from the Special Account. In other words, withdrawals from the Special Account will be to cover expenditures pre-financed out of the CUT.

Payments under Component 1 will be made in accordance with the provisions of the management agreements between MOH and SILAIS (such provisions to be consistent with the Operational Manual that has to be reviewed and approved by the Bank). Montly pro-rated payments to SILAIS will be made in accordance with the agreed number of beneficiaries times the average adjusted per capita premium in that SILAIS. In the event of significant underperformance, any unused balance will be deducted from the subsequent payment, or, if it occurs at the end of a contract period, it will be refunded. The costing mechanism will be documented in the Operational Manual and reviewed on an annual basis.

Certain minor expenditures under Component 2 will be paid for by the SILAIS under short-term advances from MOH subject to reconciliation. Other payments will be managed centrally by MOH's Finance Department.

Payments to foreign providers in foreign currency can be made directly out of the Special Account.

Disbursement Schedule (USD)

Expenditure Category	US$ Equivalent	SDR
(1) Works, Goods, Consulting Services and Training for Component A2 and B	4.25	2.78
(2) Works, Goods, Consulting Services and Training for Component C	1.80	1.18
(3) Capitation Transfers	4.20	2.74

(4) Operating Costs and Audits	.65	.42
(5) Unallocated	.10	.08
Total	**11.0**	**7.2**

A new disbursement category ("*convenios* for SILAIS") has been created above as it does not fit any traditional disbursement categories of the Bank (i.e. civil works, consultants, goods, training).

Retroactive Financing

The Bank would finance up to a maximum of US$ 1.0 million for eligible expenditures incurred after March 1, 2005, but no more than one year from signing.

Audit

Internal Audit

In the course of its regular internal audit activities vis-à-vis the institutional budget, MOH's Internal Auditor may include FONSALUD activities in its annual work plan. MOH will provide IDA with copies of internal audit reports covering FONSALUD activities and financial transactions. However, since MOH's internal audit department's work plan is limited, for this program, the use of external independent operational audits (as described below) will contribute to ensure that the resources are used for the purpose intended.

External Audit

The annual FONSALUD Financial Statements will be audited in accordance with International Standards on Auditing (ISA), by an independent firm and in accordance with terms of reference (TORs) both acceptable to IDA and the participating Donors. New audit policy of the World Bank, documented in "Guidelines: Annual financial reporting and auditing for World bank-financed projects" will be applicable to the project, as it is appraised after July 1, 2003. This means that in terms of audit opinion on project accounting records maintained by the project, a single audit opinion covering: (i) program financial statements, (ii) special account statement, and (iii) adequacy of supporting documentation maintained by MOH in respect of expenditures claimed for reimbursement via report-based procedures and eligibility of such expenditures for financing under the respective Credit Agreement will be required.

In addition to the audit opinion, the auditors will have to present the management letter, covering: (i) weaknesses noted by the auditors in the internal control systems of the project, (ii) cases of application of inappropriate accounting policies and practices, (iii) issues regarding general compliance with broad covenants, and (iv) any other matters that the auditors consider should be brought to the attention of the borrower.

In addition, operational audit reports (under ISRS 4400 "Engagements to perform agreed-upon procedures regarding financial information") on the procedures followed in execution of FONSALUD expenditures would be produced annually during implementation.

While the audit reports are to be issued annually, the external auditors are expected to perform at least one review visit per quarter during the first two years of implementation, producing memoranda on internal controls ("management letters") accordingly.

The audit work will be co-financed with credit proceeds. MOH will appoint the external auditors within three months after credit effectiveness. Each audit contract is expected to cover at least two reporting periods.

ANNUAL REPORTING SUMMARY

Document	Due Date
Annual FONSALUD Investment Program	June 30, previous year
Annual Budget Proposal	Nov. 1, previous year
Approved budget, annual work and procurement plan (POA/FONSALUD)	Jan. 15
Annual review of the costing mechanism for Component 1	Jan. 15
Quarterly Financial Monitoring Reports (FMRs)	45 days after the end of each quarter
Annual financial audit report	6 months after the end of the year
Annual operational audit report	6 months after the end of the year

FM Action Plan

No.	Action	Responsible	Deadline
1	Finalize the Financial Monitoring Report (FMR) format	MOH/IDA	Before negotiations
2	Finalize and sign agreement on common fiduciary framework (CFF) for the FONSALUD	MOH/IDA/Donors	Before effectiveness
3	Coordinate with MOF to enable the production of necessary financial reports from SIGFA or the implementation of a system to generate necessary reports	MOH	Before effectiveness
4	Identify and incorporate new staff and technical assistance required in DGAF (FONSALUD unit)	MOH	Before effectiveness
5	Finalize audit terms of reference and short list	MOH/IDA/Donors	Before effectiveness
6	Finalize FM section of the operational manual	MOH	Before effectiveness
7	Contract external auditors	MOH	3 months after effectiveness
8	Provide applicable reports	MOH	Throughout implementation

IDA FM Supervision Plan. An IDA FM Specialist should perform a supervision mission prior to effectiveness. After effectiveness, the FM Specialist must review the annual audit reports, should review the financial sections of the quarterly FMRs, and should perform at least one supervision mission per year.

Guidelines

The financial management and disbursement provisions of the Credit Agreement, the Operational Manual, and the arrangements described above would be complemented where needed by the following World Bank documents:

- Financial Monitoring Reports: Guidelines to Borrowers
- Guidelines: Annual Financial Reporting and Auditing for World Bank-Financed Activities
- Disbursements Handbook

Annex 8: Procurement Arrangements

NICARAGUA: Health Services Extension and Modernization (2nd APL)

1. SUMMARY

An assessment of the capacity of the Ministry of Health (MOH) to implement procurement actions for the proposed second phase of the Nicaragua Health Modernization Project (APL) was carried out between January 24-28, 2005. The assessment reviewed the organizational structure for implementing the project and the interaction between the project's staff responsible for procurement and MOH's Department for Administration and Finance. The assessment reviewed the four main components of the program, plus operational costs. These components will require procurement of small civil works, consulting services and goods.

Most of the issues/risks concerning the procurement component for implementation of the project have been identified and include:

- Inconsistencies between Law 323 and World Bank policies on (i) registration requirements; (ii) evaluation systems; and (iii) consulting services;
- Inconsistencies between IDB and World Bank policies on: (i) eligibility; (ii) thresholds for prior review; and (iii) consulting services;
- Weaknesses in the internal and external auditing system;
- Weaknesses in technical specifications, terms of reference, and contract management; and
- Need for additional qualified staff to manage project procurement.

The corrective measures agreed upon will be included in a fiduciary memorandum of understanding, and include:

- Review by SWAp Partners of the annual procurement plan and quarterly updates;
- Outline for the use of ICB and NCP systems;
- A capacity plan funded by the Pool Fund to strengthen procurement procedures, reporting and audit, and staff skills; and
- Addition of qualified staff.

With these measures in place, the overall project risk for procurement is average.

2. PROCUREMENT CAPACITY

The Health Planning and Development General Directorate (DGPD) will be the starting purchasing entity for the SWAp funded expansion of services, until the MOH sets up a devoted purchasing unit within its formal structure. This office will purchase services from public and private providers to achieve the expansion of services objectives with the SWAp defined funds. It is also the MOH's intent that the purchasing unit to be created will gradually take over the purchasing of heath services throughout the country using MOH resources through the annual management agreement signed with all SILAIS, local providers and national hospitals.

Within MOH's General Directorate for Management and Finance, the Procurement Unit (División de Adquisiciones de Bienes y Servicios, PU) is responsible for the acquisition of goods, services and works for the Ministry and its depending administrative entities. The PU is responsible for managing, using national procedures, all procurement of goods, services and works. Of the total purchases, approximately

50 percent is financed from the national budget. Until recently, procurement for World Bank and IDB-funded projects was managed by Project Implementation Units (PIUs) under each MDB's Guidelines, procedures and SBDs. Thereafter, a recently approved IDB Loan NI-L1001 (Improving Maternal and Child Health) charged the PU with the responsibility to manage procurement albeit using IDB's procurement guidelines. These transactions are also captured in the annual procurement plan.

The PU currently has a staff group of 1 Director and 5 procurement officers. The current PU staffing level is insufficient to manage the workload identified in the program. To meet the demands of the proposed SWAp, it is estimated the PU will need a complement of 5 to 9 additional procurement officers. The PU is in a process of restructuring its organization. Organization, functions and accountabilities of the PU's staff need to be defined in an organizational/operational manual with individual job profiles and description for each of the required positions.

3. RISK ASSESSMENT AND MEASURES

A number of efficiencies can be achieved through the proposed pooled fund mechanism. The pooled fund will reduce the number of differing procurement procedures demanded by donors and, in so doing, will enable the PU to better plan and consolidate procurement to achieve economies of scale. The review of the annual Procurement Plan and quarterly updates, coupled with provisions for prior review of proposed high risk/value transactions, a capacity plan procurement to strengthen procedures, and reporting and audit, to be included in the Fiduciary MOU, will reduce the risk for the Pooled Fund Partners to support the proposed SWAp.

The SWAp Partners and GON authorities agreed on the following to organize procurement processes and transactions under the SWAp:

1. All the purchases and procurement processes, except those expressly delegated to the SILAIS, will be centralized and conducted by the MOH's PU.
2. Purchases of goods, works and consulting services financed with resources provided by donor agencies will be procured either following IDB-WB Guidelines or Law 323, depending upon the economies of scale and the threshold levels of the specific transactions.
3. Law 323 permits exceptions when procurement is subject to an agreement with a foreign government or international organization. The Fiduciary MOU would constitute such an agreement.
4. Weaknesses in the application of the regulatory and operational framework, including human resources, management systems, and audits, will be addressed in the Fiduciary MOU between the SWAp Partners as follows:

Weakness Identified	Mitigation Measures
Legal and Regulatory Framework.	MOU will require that procurement be conducted by the PU as follows: For ICB • For goods and works, the procurement processes will be conducted using the recently approved and harmonized WB-IDB procurement guidelines, and the corresponding harmonized SBDs, to allow for inter alia eligibility of foreign suppliers/providers as per Bank policies. This will require to iron out a few differences in the current master SBDs, and to review

Weakness Identified	Mitigation Measures
	and agree with the partners the thresholds outlined in IDB Loan NI-L1001 (Improving Maternal and Child Health) as follows: (i) lower the threshold for goods from 350K (too high for Nicaragua) to a level to be defined after a quick review of the market and recent bids (the current WB threshold is presently set for all projects at 150K), (ii) set a threshold for shopping procedures (the current threshold for Nicaragua is set in the Bank at 25K. IDB's project does not mention it). • For consulting services, the selection processes will be conducted using WB Consultants Guidelines for all contracts. Prior review of procedures will take place for all contracts above 200K. Below a 200K threshold, the use of short-lists made up of local consultants only may be authorized, and prior review will only take place for the first three contracts. Prior review of individual consultant procedures will take place for contracts above 50K. NCB, quotations and shopping: • For goods and works, the procurement processes will be conducted using national procedures, and the corresponding SBDs issued by the Ministry of Finance, which have been reviewed and assessed to be consistent with Bank guidelines. • Deletion of references to NCB for consultants, but agreement that national procedures could be used under a 200K threshold. This should be agreed in the MOU and the procedures well defined --they have still to be consistent with the guidelines if not exactly those contemplated in the guidelines. • Exclusion of consulting services contracts, irrespective of source of funding (agreed with Nicaraguan authorities during mission). • Post review of a sample of contracts following WB guidelines. • MOU will provide for SWAp Partner review of any future legislative and procedural change which may have the effect of weakening the openness, transparency and efficiency of procurement.
Internal Policy and Procedures	• MOH will require the issuance of a comprehensive operational manual, which includes both organizational and operational functions.
Planning	• MOU will require MOH to prepare, in a form satisfactory to the SWAp Partners, an Annual Procurement Plan (PACC) covering goods, services and works. • Progress against the PACC, including amendments to the plan, will be tracked in quarterly reports following the Procurement Information and Follow-Up System

Weakness Identified	Mitigation Measures
	(SIPROSEC) developed by the Louis Berger Group. • PFP's will approve annual funds on the basis of the PACC.
Standard Bidding Documents	• MOU will require MOH to amend SBDs to address specifically: • The mandatory requirement that all bidders, including foreign bidders, be registered in the *Registro de Proveedores* prior to bid opening and replacing it with a requirement that the successful bidder be registered at the time of contract signature; • The exclusion of price adjustments for inflation in consultant contracts; • The exclusion of bidders with pending litigation with a procurement entity; • Subjecting all procurement for goods, works and consulting services above the value threshold set for Public Bid, to international advertisement (e.g., development business); • Publishing all bids subject to Bid by Registry and Public Bid procedures on the website of the Ministry of Finance in addition to the notification requirements of current legislation; • Consolidating the procurement, to the extent possible, of like requirements to achieve economies in transaction costs and bulk purchasing; and • The use of a point system in bid evaluation for standard goods and works, instead of the discretion to set aside the lowest compliant bid in favor of the most convenient or favorable bid in the general interest.
Audit and Review	• MOU will require that an annual review of PU procurement operations be carried out by an independent agent appointed by MOH and satisfactory to the SWAp Partners. In addition, when a particular risk has been identified, any PFP may undertake a special procurement audit. • MOU will require MOH to prepare quarterly reports which include performance information relating to selection method, processing times, transaction costs and the resolution of bid and contractual disputes. • MOU will allow the SWAp Partners to carry out semi-annual supervision missions to conduct post review of procurement actions.
Human Resources and Training	MOU will address: • The need for additional staff to increasingly use the PU to manage project procurement. • Inclusion of the costs of PU support in program budgeting. • The current gap between MOH/PU and PIU salary scales. • Infrastructure needs such as equipment, enlarging office space and facilities such as the archives. • Expertise and training in areas such as preparation of

Weakness Identified	Mitigation Measures
	technical specifications and terms of reference, design and application of more sophisticated bid evaluation methodologies, and contract management. • Monitoring and evaluation of procurement performance.

4. PROCUREMENT ARRANGEMENTS

Expenditure Category	Contract Value Threshold (US$ thousands)	Procurement Method	Contracts subject to Prior Review
1. Works	>= 1,000 <1,000 <50,000	ICB NCB Price Quotations	All contracts None None
2. Goods	>= 150 150<50 <50	ICB NCB Shopping	All contracts None None
3.Consulting Services	>=200 firms >100 <200 firms All values individual	QCBS QCBS (use of short list of local consultants only) Individual	All contracts All contracts All contracts >50

Community health financing scheme funds transferred to SILAIS for the expansion of the PBHS will not be subject to procurement rules.

Annex 9: Economic and Financial Analysis

NICARAGUA: Health Services Extension and Modernization (2nd APL)

A. Introduction

In order to improve health results in Nicaragua, particularly among the poorest, The World Bank and the Government of Nicaragua are in the process of preparing the second phase of the Health Reform Program. The strategy for attaining better health results for the target population will be based on the achievement of higher levels of efficiency, effectiveness, equity and sustainability by the Nicaraguan institutions that provide health services.

Financing for this new phase has also undergone changes, evidenced by the set up of a common fund and the adoption of a common strategic approach–known as a SWAp, or SWAp–with six different donors from the international cóoperation partners. During the period 2005-2009, this fund will provide the necessary resources, along with those provided by the Ministry of Health, to pursue the above mentioned objectives.

The intervention strategies for this second phase are divided in three main themes: (i) the extension of coverage of basic health and nutrition services in the poorest areas of the country, through the establishment and strengthening of the new service provision model, (ii) integration and strengthening of the health services network, with special emphasis on maternal-child health, through the provision of a basic health services package in selected geographic areas of the country and, (iii) strengthening the Ministry of Health's institutional capacity in the following areas: purchasing of services, monitoring and evaluation, governing and administration capacity of the ministry's decentralized units and supporting the growing independence of the autonomous governments of the Atlantic coast.

The intervention strategies set forth in the SWAp, are consistent with the goals established in the 2004-2015 National Health Policy and the Five-Year Health Plan established by the Ministry of Health (MOH). As such, the starting point at the health reform program has been identified as the need to establish coordinating mechanisms within institutions as well as across the different international cooperation funds in order to effectively confront structural health problems in the most vulnerable population.

This document contains the economic and fiscal analysis results for the second phase of the Health Reform Project. The analysis examines the investment return and fiscal impact that such disbursements will have over the public finances of the Government of Nicaragua.

B. Assumptions of the Analysis

The economic analysis starts with the adoption of a series of assumptions, about the strategies, interventions and goals established in the SWAp. The analysis' most important assumptions are described below:

1. Population covered: The proposed interventions will focus on the high risk SILAIS and municipalities that were identified in a socio-demographic analysis conducted by MOH, in combination with analysis that was carried out as part of the evaluation of the 1997-2002 National Health Policy. The targeting was based on vulnerability criteria using several indicators: three health status measures, average per capita household income and geographical access. Combining this analysis with estimates of the resources expected to be available to MOH from both national and international sources, resulted in the identification of 12 SILAIS and 79 municipalities, presented in the table below, that will be prioritized in the interventions.

Table 1. SILAIS and Priority Municipalities in the Health Sector Strategy

SILAIS	Municipalities	SILAIS	Municipalities
1. BOACO	San José de los Remates Santa Lucía Teustepe	7. MADRIZ	Palacagüina Las Sabanas San José de Cusmapa San Juan de Río Coco San Lucas Somoto Totogalpa Telpaneca Yalagüina
2. CHINANDEGA	Cinco Pinos San Francisco del Norte Somotillo San Pedro del Norte Santo Tomás del Norte El Viejo Villanueva	8. MATAGALPA	San Ramón Waslala Esquipulas Matiguás Bocana de Paiwas Rancho Grande Río Blanco San Dionisio
3. CHONTALES	Acoyapa Comalapa El Ayote La Libertad Muelle de los Bueyes Nueva Guinea El Rama Santo Domingo San Pedro de Lóvago	9. NUEVA SEGOVIA	Jalapa El Jícaro Macuelizo Murra Quilalí Wiwilí (Nueva Segovia)
4. ESTELÍ	Condega Estelí Pueblo Nuevo San Juan de Limay San Nicolás La Trinidad	10. RAAN	Bonanza Rosita Puerto Cabezas Siuna Waspán Muculucu Prinzapolka
5. JINOTEGA	La Concordia El Cua-Bocay Santa María de Pantasma San Rafael del Norte San Sebastián de Yalí Wiwilí (Jinotega)	11. RAAS	Bluefields Corn Island La cruz de Río Grande El Tortuguero Kukra Hill Karawala Laguna de Perlas
6. LEÓN	Achuapa El Jicaral Quezalguaque El Sauce Santa. Rosa del Peñón	122. RÍO SAN JUAN	El Almendro El Castillo Morrito San Carlos San Juan del Norte San Miguelito

According to official 2005 statistics, there are 3.3 million inhabitants in the 12 target departments, 2 million of whom live in the 79 prioritized municipalities. It is estimated that the SWAp will extend coverage to 470,000 beneficiaries, including 235,000 women of reproductive age, 188,000 children under 5 years of age and 47,000 youth and adults who are regarded as particularly vulnerable to the area's prevailing diseases which are included in the Basic Health Services Package (PBS).

2. Temporal horizon: While SWAP interventions cover a total of 5 years, the impact of project interventions will be for considerably longer. So as to be consistent with the economic analysis of similar health projects the time horizon of the analysis will be 10 years.

3. Discount rate: A discount rate of 12 percent is used for discount of total benefits generated by the project. Two alternative scenarios are considered with 10 and 8 percent rates. A 10 percent rate is normally used in World Bank-evaluated projects, which represents the investment opportunity cost of project resources. Lower discount rates of course mean that the income flows from future earnings will be greater. For example, a 3 percent rate has been proposed by the World Health Organization to discount future income flows received by people whose lives have been saved, (Murray and López, 1994).

4. Direct benefits: The analysis considers four types of direct benefits associated with project interventions: (i) a reduction in patient-days as a result of primary health levels' effective functioning, (ii) an increase in outpatient surgery for certain causes that can be treated under these procedures, (iii) a reduction in intra-hospital infections and, (iv) the savings generated as a result of improved efficiency of the MOH resulting from decentralization.

(i) Reduction in patient-days. One of the major expected benefits of establishing the Integral Health Treatment Model (MAIS) is the reduction of certain diseases currently treated in hospitals because of the ineffectiveness of reference and counter-reference systems. Treatment of diseases in hospitals causes an unnecessary increase in cost, which can be averted by strengthening and improving the efficiency of primary health care. The most important diseases that can be treated at the primary level and that will produce the majority of such savings are: intestinal infections, acute respiratory infections, malnutrition and perinatal causes.

(ii) Increase in outpatient surgery. Some of the surgical procedures that are currently performed on an inpatient basis can be safely and more efficiently conducted on an ambulatory basis. This will generate cost savings in the health system. The most important conditions that will be targeted for being transformed into ambulatory care cases are: tonsillitis, surgical contraceptive treatment, detached retina, palm fibrosis, renal arteriovenous fistula, hallux valgus, hemorrhoids, hernia, slipped disk, knee instability, meniscus, joint stiffness, vocal chords tumor, bladder tumor and peripheral venous bypass.

(iii) Reduction in hospital infections. Promoting better hospital health care management—in particular, improving hygienic conditions and the quality of hospital services–will allow a reduction of intra-hospital (nosocomial) infections in Nicaraguan hospitals.

(iv) Savings due to improvements in the decentralization process. Efficiency in the use of resources will allow the Ministry of Health to save costs. Development of contracting capacity, improvement of supplies system, improvement in equity of resources, etc. are just a few of the proposed actions.

5. Indirect benefits: Two types of indirect benefits are considered: (i) those produced by the proposed nutrition interventions and, (ii) the estimated number of lives saved by the Project.

Persons who are undernourished earn lower incomes throughout their economically active life. When fewer persons suffer from global and severe malnutrition, their income earning capacity is increased. This increased income-earning capacity of the persons whose nutrition status is improved by the project can be estimated as the of future income flow, valued on the basis of gross domestic product (GDP) per capita projected throughout the individual's work life and translated in present value.

The reduction in maternal and children under 5 mortality rates will reduce the number of deaths in these population groups. Saved lives will create an economic benefit that may be quantified using the human capital method; an economic assessment of future income flow received by these individuals, who will join or will continue to be part of the economically active population, is carried out.

6. Percentage of goal completion: In the case of benefits generated through the reduction in the rate of malnutrition and through direct benefits, it is expected that benefits will accumulate progressively according to the schedule presented in the table below.

Table 2. Expected Values of Project Benefits

Year	Nutrition	Direct Benefits
1	10%	0%
2	10%	30%
3	25%	60%
4	25%	90%
5	30%	100%
6	30%	100%
7	30%	100%
8	30%	100%
9	30%	100%
10	30%	100%

7. Project investments and recurrent costs: The total financing of the SWAp is US$82.2 million, which will be disbursed over a period of 5 years in the pattern shown in Table 3.

It is estimate that recurrent costs equal to roughly 20 percent of the investment in (only) the infrastructure and equipment component and that these will be absorbed by the MOH once project investments are completed in 2009.

Table 3. External Financing for the 2005-2009 Five-Year Health Plan

Componente	Fuentes externas					Total quinquenio
	2005	2006	2007	2008	2009	
Extensión de Servicios de Salud	**3,132,026**	**5,035,938**	**9,240,803**	**9,567,391**	**9,588,148**	**36,564,306**
Entensión del PBSS con proveedores institucionales	59,634	73,866	89,931	103,040	115,891	442,361
Entensión del CBEC a través de terceros	2,334,581	3,978,398	8,135,586	8,318,392	8,505,307	31,272,265
Fortalecimiento de la planificación, evaluación y participación social para la extensión de cobertura.	737,811	983,674	1,015,286	1,145,959	966,950	4,849,680
Fortalecimiento de la Red de Servicios	**7,058,901**	**5,767,468**	**4,478,903**	**6,530,297**	**3,981,878**	**27,817,447**
Casas Maternas	328,320	293,166	301,266	295,920	257,526	1,476,198
Centros y Puestos de Salud	2,653,780	1,950,000	1,500,000	1,500,000	1,500,000	9,103,780
Equipamiento	1,747,338	1,579,200	1,737,750	1,755,600	1,773,450	8,593,338
Hospitales	2,329,462	1,945,102	939,887	2,978,777	450,902	8,644,130
Rectoría, Desarrollo Fortalecimiento Institucional y Descentralización	**1,378,489**	**3,754,207**	**5,253,284**	**5,365,390**	**2,069,020**	**17,820,390**
Rectoría y Coordinación	43,635	31,167	21,680	25,680	25,680	147,843
Divulgación, capacitación y coord. intersectorial	31,355	17,607	0	0	0	48,963
Promover un enfoque intersectorial en los ss	12,280	13,560	21,680	25,680	25,680	98,880
Fortalecimiento Institucional para mejorar la entrega de servicios	1,030,823	3,172,105	3,495,379	3,032,111	1,045,228	11,775,646
Rediseño, reorganización y otros	32,542	2,116,165	2,721,402	2,140,960	103,644	7,114,712
Implementar la reorganización institucional	115,689	94,230	16,605	0	0	226,524
Calidad, promoción y prevención en salud	397,536	154,428	112,186	110,212	109,210	883,572
Desarrollar el talento humano	215,287	363,074	431,954	497,034	561,720	2,069,069
Mejorar el sistema de suministros	269,770	444,209	213,232	283,904	270,654	1,481,770
Descentralización	295,030	545,535	1,736,226	2,307,599	998,112	5,882,502
Desarrollar función de contratación de serv salud	209,860	113,739	128,911	104,952	116,655	674,108
Profundizar la desconcentración	82,550	129,803	129,803	0	0	322,155
Mejorar la equidad en la asignación de recursos	22,630	301,994	1,477,512	2,202,647	881,456	4,886,238
Apoyo al INSS para la extensión de Cobertura y mejora de la calidad en salud	9,000	5,400	0	0	0	16,000
TOTAL	**11,569,416**	**14,557,613**	**18,972,990**	**21,463,078**	**15,639,046**	**82,202,144**

8. Use of real (as opposed to nominal) figures: All figures are in real currency units (US$ dollars of 2004); therefore, the results presented here will not be effected by inflation.

9. Establishment of "without project" and "with project" scenarios: Two scenarios are analyzed in estimating direct and indirect benefits: without project and with project. In the "without project" scenario the performance variables of interest are analyzed assuming rates of improved experienced during the five-year period 1997-2002. In the "with project" scenario estimates of changes are based on rates of change that will be needed to achieve the goals presented in the MOH's Five-Year Plan. The difference between these rates may be interpreted as the savings generated by the project.

10. Conservative estimate of benefits: Due to the difficulties in quantifying some of the expected benefits, this analysis produces what should be regarded as minimum benefit estimates does not take into account all possible benefits (in particular, it excludes any benefit attributable to positive externalities the SWAp may produce). The economic analyses of project's feasibility should, therefore, be regarded as conservative, low-end estimates.

C. Methodology for estimating indicators

C.1 DIRECT BENEFITS

(i) Reduction in number of hospital discharges for four select causes. The introduction of the new health care model, MAIS, will improve the effectiveness and efficiency of the referral and counter-referral systems, thereby better ensuring that ony cases requiring hospital care will be

treated at the hospital level. At the same time, the preventive character of many PBSS-proposed interventions will allow a reduction in the number of patients who need to be treated at more complex health levels.

The number of discharges and average length of stay for intestinal infections, acute respiratory disease, malnutrition and certain perinatal causes was estimated based on MOH's hospital discharge databases.

Savings generated are estimated based on the reduction percentage of each cause, which generates a reduction in hospital patient's length of stay, valued in monetary terms by the cost of an inpatient day. Estimates indicate that the cost of one patient day is US$35. It is estimated that the rates of reduction are: 40 percent for intestinal infections and acute respiratory and 30 percent for malnutrition and perinatal causes. It is expected that benefits will be generated gradually throughout the life of the project.

(ii) Increase in outpatient surgery. Based on the number of discharges for each each of these procedures, it is estimated number of procedures that are currently conducted in hospitals but that could be and that are expected to be performed after implementation of the MAIS on an outpatient basis was identified. These include treatment of: tonsillitis, surgical contraceptive treatment, detached retina, palm fibrosis, renal arteriovenous fistula, hallux valgus, hemorrhoids, hernia, slipped disk, knee instability, meniscus, joint stiffness, vocal chords tumor, bladder tumor and peripheral venous bypass.

The savings that are expected to be generated by providing these procedures on an ambulatory basis is calculated as the difference between total patient-days currently generated versus the final number of patient-days as a result of the project's actions, and assuming that conducting these surgeries on an ambulatory basis would require exactly a one day stay.

(iii) Reduction in hospital infections. Infections acquired during hospitalization result in a significant increase in patients' length of stay. Reducing the intra-hospital infection rate results in averting the costs of unnecessary additional days of inpatient care. In estimating the SWAp's economic benefits, these averted additional inpatient days are valued at their average actual cost per day.

(iv) Savings due to improvements in the decentralization process. Many local facility level problems can be resolved by investing in strengthening decentralization. Presently, many resources are lost or are inefficiently used due to a lack of local capacity to administer them properly. Proposed intervention through the project includes areas such as: improvements in the management and coordination processes, institutional strengthening to improve service delivery and support of local level planning and budgeting processes thar are at the heart of the decentralization process. Savings equivalent to 1 percent of MOH's current budget are expected as a result of these reforms.

C.2 INDIRECT BENEFITS

The project's indirect benefits are related to the potential life years saved by the project and the economic and financial value of highest productivity reached. The economic assessment of additional lives is calculated as the potential number of life years for each child and mother saved, multiplied by the real Nicaraguan GDP and accumulated over the expected duration of the economically active life of those individuals.

After defining the key elements of the methodology employed, the primary quantitative results obtained in the economic analysis are presented.

D. Main results

The health project's proposed interventions generate a net economic benefit of US$67 million, in present value terms, throughout the project's 10-year temporal horizon. Out of total generated benefits, 87 percent represent indirect benefits in terms of maternal and child lives saved and 13 percent direct benefits. Main results attributable to the project are presented in the following table.

Table 4. Cost Benefit of the Nicaragua Health Project

	Year	Total cost	Direct benefits	Indirect benefits	Total benefits	Net benefits (Benefit-cost)
1	2005	11,569,416	0	3,258,228	3,258,228	-8,311,188
2	2006	14,557,613	1,372,513	7,881,721	9,254,234	-5,303,379
3	2007	18,972,990	2,745,026	14,923,007	17,668,033	-1,304,958
4	2008	21,463,078	4,117,538	19,231,636	23,349,174	1,886,096
5	2009	15,639,046	4,575,043	24,206,352	28,781,395	13,142,349
6	2010	5,563,489	4,575,043	28,338,889	32,913,931	27,350,442
7	2011	5,563,489	4,575,043	32,427,575	37,002,618	31,439,128
8	2012	5,563,489	4,575,043	36,476,110	41,051,153	35,487,663
9	2013	5,563,489	4,575,043	40,488,108	45,063,151	39,499,661
10	2014	5,563,489	4,575,043	44,467,102	49,042,144	43,478,655
Total		**110,019,590**	**35,685,332**	**251,698,728**	**287,384,060**	**177,364,469**
Net Present Value						
(12%)		**$69,333,686.07**	**$17,618,791.90**	**$118,447,354.73**	**$136,066,146.62**	**$66,732,460.55**
(10%)		**$74,268,844.77**	**$19,618,406.97**	**$132,821,741.68**	**$152,440,148.65**	**$78,171,303.88**
(8%)		**$79,792,342.30**	**$21,928,098.35**	**$149,568,209.52**	**$171,496,307.87**	**$91,703,965.57**
					IRR	**54%**

The internal rate of return of the SWAp is 54 percent, which exceeds the 12 percent discount rate. In other words, other possible alternative uses of the project's investments would obtain 12 percent versus 54 percent generated by investing in the proposed health interventions.

When alternative discount rates are employed, the project generates even higher net benefits, reaching a maximum of US$92 million when using an 8 percent discount rate. This project's

cost benefit ratio is approximately 2, which implies US$2 in benefits per dollar invested in the project.

Previous results provide ample evidence to declare the project economically feasible, by virtue of its high return. However, the following section presents an analysis of alternative scenarios, in order to evaluate the sensitivity of the rate of return to changes in some of the Project's critical assumptions.

E. Sensitivity analysis

Sensitivity analysis allows investigating the robustness of the results by introducing changes in some of the assumptions underlying the estimates, such as possible delays in project execution or reductions in the estimated level of benefits. Parameters examined in the sensitivity analysis are: (1) a two- and three-year delay in execution, (2) 20 and 40 percent reductions in the expected level of benefits, and (3) a combination of scenarios with a proposed 20 percent benefit reduction and two- and three-year delay in project implementation. The main results generated in net present value (NPV) and internal rate of return (IRR) are presented in the following tables.

Table 5. Project Sensitivity in the Face of Potential Implementation Delays

	Base	2-year delay	3-year delay
NPV	66,732,461	24,609,917	15,151,345
IRR	54%	31%	28%

Table 6. Project Sensitivity in the Face of Benefit Reductions

	Base	20% reduction	40% reduction
NPV	$66,732,461	$39,519,231	$12,306,002
IRR	54%	36%	20%

Table 7. Project Sensitivity in the Face of Potential Implementation Delays and Benefit Reductions

	Base	20% reduction and 2-year delay	20% reduction and 3-year delay
NPV	$66,732,461	$8,024,192	$2,702,907
IRR	54%	19%	15%

The project would be justified in any of the proposed scenarios, but with significant reductions in the internal rate of return and the present value of benefits.

In the case of a 2 or 3-year maximum delay in project implementation, the internal rate of return would go from 54 percent to a minimum of 28 percent, and the present value of net benefits would fall from US$67 million to US$15 million.

If reductions in the amount of benefits attributable to the project take place, the IRR would be reduced to 20 percent, which would still exceed the 12 percent discount rate used. The net

present value of expected net benefits would be US$12 million, which implies a more than 80 percent reduction in such category.

A combination of previously considered scenarios constitutes the most extreme case in terms of project sensitivity. If a 20 percent reduction in benefit flow takes place and project implementation is delayed by 3 years, the internal rate of return would be 15 percent, slightly higher than the one used to discount economic flows and the NPV of net benefits would be substantially reduced but would still total US$2.7 million.

F. Fiscal impact and sustainability

In accordance with conducted estimates and established disbursement flows, the fiscal impact of this project would be quite mild. Recurring project costs, to be assumed by MOH after the SWAp disbursements are completed, represent an average of 3 percent of the Ministry's projected expenditures.

Table 8. Fiscal Sustainability of the Nicaragua Health Project

	Year 0 (2004)	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
General Financial Information											
Recurrent Expenditures MINSA	93	97	101	105	109	113	118	123	127	133	138
Total Expenditure MINSA	158	165	171	178	185	193	200	208	217	225	234
Recurrent Govt. Expenditures	818	859	902	947	995	1044	1097	1151	1209	1270	1333
Total Govt. Expenditures	1,259	1,322	1,388	1,457	1,530	1,607	1,687	1,772	1,860	1,953	2,051
GDP	4,341	4,558	4,786	5,026	5,277	5,541	5,818	6,109	6,414	6,735	7,072
Project Costs to Government of Nicaragua		-	-	-	-	-	5.6	5.6	5.6	5.6	5.6
Total Project Costs (WB + GON)		11.6	14.6	19.0	21.5	15.6	16.4	16.4	16.4	16.4	16.4
MINSA Spending as % GDP	3.6%	3.6%	3.6%	3.5%	3.5%	3.5%	3.4%	3.4%	3.4%	3.3%	3.3%
MINSA Spending as % Govt. Spending	12.6%	12.5%	12.3%	12.2%	12.1%	12.0%	11.9%	11.8%	11.7%	11.5%	11.4%
Impact of Project on GON and MINSA Financing											
GON Proj. Costs / Total Spending MINSA		0.0%	0.0%	0.0%	0.0%	0.0%	2.8%	2.7%	2.6%	2.5%	2.4%
GON Proj. Costs / Recurrent Spending MINSA		0.0%	0.0%	0.0%	0.0%	0.0%	4.7%	4.5%	4.4%	4.2%	4.0%
GON Proj. Costs / Govt. Expenditure		0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	0.3%	0.3%	0.3%	0.3%
GON Proj. Costs / GDP		0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.1%	0.1%	0.1%
Total Proj. Costs / Total Spending MINSA		7.0%	8.5%	10.6%	11.6%	8.1%	8.2%	7.9%	7.6%	7.3%	7.0%
Total Proj. Costs / Recurrent Spending MINSA		11.9%	14.5%	18.1%	19.7%	13.8%	14.0%	13.4%	12.9%	12.4%	11.9%
Total Proj. Costs / Govt. Expenditure		0.9%	1.0%	1.3%	1.4%	1.0%	1.0%	0.9%	0.9%	0.8%	0.8%
Total Proj. Costs / GDP		0.3%	0.3%	0.4%	0.4%	0.3%	0.3%	0.3%	0.3%	0.2%	0.2%

The costs represent nearly 4.5 percent of the MOH's current recurrent expenditures. Total project cost throughout the project's 10-year temporal horizon remains less than 10 percent of MOH's projected total expenditures, and 15 percent of the Ministry's recurrent expenditures. As a percentage of GDP, project costs represent a relatively small amount that does not exceed 1 percent of GDP, which, together with cost flow analyses, benefits and profitability, make the Project not only viable, but an attractive option, from an economic perspective.

Annex 10: Safeguard Policy Issues

NICARAGUA: Health Services Extension and Modernization (2nd APL)

The World Bank is supporting the Government of Nicaragua (GON) on the preparation of the "Health Services Extension and Modernization 2nd APL – SWAp". The operation aims at improving the efficiency, effectiveness and equity of the Nicaragua health system. These objectives will be supported through activities concerning the strengthening of the first level of care, modernization of the hospital network, developing institutional capacity and supporting the social security reforms.

This project is expected to lead Nicaragua to an improvement of current conditions of the health sector, through its expansion and modernization, which will lead to an increment in the production of health care waste, and the generation of environmental impact in areas where remodeling activities will take place. This operation is a category B with minor and reversible environmental impact. In order to fulfill the requirements of the Bank and better support the preparation of this operation, the GON has prepared a standalone Environmental Assessment which addresses: a general objective; a methodology for the assessment; existing legal framework and legislation in Nicaragua regarding Health Care Waste Management (HCWM); an institutional framework; current practices to handle HWC; a baseline assessment on the existing facilities and their practices on HCWM; and a proposal to improve the management of HCW, indicators, strategies for implementing the HCWM plan, didactic materials, environmental mitigation measures, conclusions, schedule, budget and bibliography.

According to the LCSES- QAT review, this operation triggers the following safeguard policies: Environmental Assessment and Indigenous People. In order to comply with the requirements of these polices, the GON has prepared the Standalone Environmental Assessment and an Indigenous People Plan.

ENVIRONMENTAL ASSESSMENT (EA)

As described above, the EA contains several chapters which address all aspects of HCWM and a set of activities and procedures to manage the environmental impact generated by the construction, renovation or expansion of existing facilities.

The objective of this EA is to perform an assessment of current HCWM environmental conditions in the hospitals and centers participating in this project. The HCWM plans would be applicable where the Bank is supporting any of the activities mentioned in the project design. Once the sites and the projects are identified, the guidelines proposed in the EA will be implemented. A summary of the EA report will be part of the Operational Manual.

The Health Care Waste Management Plan

The proposed HCWM plan includes a general background with information on HCW production, which, according to latest estimates, is about 1.43 kilograms/bed/day.

Currently, the comprehensive legal framework to address HWC includes:

Decree No. 35, 1979, *Ley del sistema Nacional de Salud*; Decree No. 70, 1979, *Ley sobre exportación de producción farmacéuticos y medicinales*; Decree 432, 1989, *Regulación e Inspección Sanitaria*; Law 156, 1993, *Ley sobre radiaciones ionizantes*; Law 1168, 1994, *Ley que prohibe el tráfico de desechos peligrosos y sustancias tóxicas*; Law 202, 1994, *Ley de Prevención, Rehabilitación y Equiparación de oportunidades para las personas con discapacidad.*

Along with the above mentioned legislation, the GON has reported that the *Ley de Municipios* No 40, 1988, *Ley* 217, *Ley General del Medio Ambiente y los Recursos Naturales*, and the *Ley General de Salud*, on its articles 55, 56, 64, 65, 66, 67, 68, and 69, all address the framework for Health Care Waste Management in the country. It was noticed on the analysis the relation of this regulatory framework with the existing framework regarding solid waste management at the municipal level, which contributes to activities related to final disposal.

Current Situation of Health Care Waste Management in Nicaragua

The Ministry of Health of Nicaragua has been working on the issue of Health Care Waste Management since 1994, through technical cooperation and projects with the European Union, the IDB and the World Bank. Results of this cooperation have been mixed. The plans were applied in 10 out of a total of 33 hospitals. The main constraints faced by these institutions were with regards to maintenance and budget allocation. Most of the hospitals acquired technically advanced treatment facilities such as incinerators, but due to the circumstances above stated, some of them are not operative.

The current operation is expected to focus on improving the current HCWM systems and extending –but not limiting– its coverage to up to 9 new institutions as follows: Hospital Victoria Motta, Jinotega; Hospital Asunción, Juigalpa; HOSPITAL España, Chinandega; Hospital Dr. Juan A. Brenes, Somoto; Hospital Luis Alfonso Moncada Guillén, Ocotal; H. Nuevo Amanecer, RAAN; Hospital Regional Ernesto Sequeira, RAAS; Hospital Luis Felipe Moncada, de San Carlos, Río San Juan; Hospital Cesar Amador Molina, Matagalpa; Hospital Escuela Oscar Danilo Gonzalez, León; Hospital San Juan de Dios, Estelí; and Hospital José Nebrowski, Boaco.

The EA presented by the GON focused on HCWM and construction activity on the hospitals listed above, which will be part of the Bank's project, and will be disclosed according to Bank policy.

On the EA presented by the GON, a site visit to the following institutions is reported:

Hospital	HCWM Committee	Designed HCWM Plan	Implementation of a HCWM	Infrastructure to Implement the Plan	Treatment System for Biological waste	Recycling	Source Reduction Plans	% of Trained Personnel
Chinandega	Yes	Yes	No	No	Incinerator - NOC	No	No	10%
Jinotega	Yes	Yes	60%	No	Incinerator	No	No	95%
Matagalpa	Yes	Yes	Yes	No	No	No	No	20%
Juigalpa	Yes	Yes	80%	Yes	Incinerator - NOC	No	No	95%
Rivas	Yes	Yes	No	No	Incinerator - NOC	No	No	No
San Carlos	Yes	Yes	70%	No	No	No	No	95%
Bluefields	No	No	No	No	No	No	No	No
Puerto cabezas	Yes	Yes	70%	Yes	Incinerator	No	No	90%
Somoto	No	No	No	No	No	No	No	No
Ocotal	Yes	Yes	50%	Yes	Incinerator	No	No	95%

NOC - Not in operating condition

As seen in the previous analysis, the issues concerning HCWM are focused more on tools for the Plan's implementation rather than on willingness from the hospital management to implement it. With this operation, the GON expects to support the strengthening of current practices in order to fulfill the sector's needs.

The Health Care Waste Management Guidelines

The Ministry of Health (MOH) expects to implement the guidelines developed through technical cooperation with the European Union. These guidelines include the following material: guidelines for training and management of Health Care Waste (7 modules); a training video on HCWM best practices; a manual for technicians and supervisors; a manual for doctors and nurses; a manual for General Services Personnel; and a CD which includes all of the above.

The guidelines are based on a survey conducted in 1996, followed by a second phase which contemplated the following activities: development of a training program, definition of a management system, and purchase of necessary equipment to be distributed within the participating institutions. In 2000, four additional hospitals (Victoria Mota, Jinotega; Cesar Amador, Matagalpa; Luis Felipe Moncada, Río San Juan; Nuevo Amanecer, Puerto Cabezas) were included in the HCWM program.

The guidelines currently being used by MOH address doctors, nurses, technical staff and MOH supervisors. The document also contains guidelines to develop tailor-made plans for each institution where the plans will be applied. The process to be supported by MOH is the following:

Definition of General Objective and implementation of a working group: there should be an internal group at the hospital level to develop and implement the HCWM plans. This committee should account for the organizational and structural definitions of responsibilities at every level of attention, should be multidisciplinary, and the coordinator must have technical capacity to handle HCW. Responsibilities also include coordination between infirmaries, medical support, cleaning, maintenance and an epidemiologist.

The first activity of the committee is to perform a diagnostic of the current situation. The HCWM plan will be designed based on thediagnostic, the guidelines and the existing legal framework in Nicaragua.

The plan contains at least the following elements: determination of internal responsibilities, definition of the flow of operations and regulations regarding health care waste, coordination of provision of human and technical resources (procurement of equipment and supplies, personnel protection, etc). Also, the committee has the responsibility to implement and coordinate the plan and control and monitor its results. There are other technical responsibilities regarding segregation, final disposal, information to communities and patients, risk assessment and management, which are part of the committee's responsibilities. Also, the committee is responsible for maintaining the reports and files of HCWM.

As this project covers most of the Republic of Nicaragua, a strategy was specifically designed for the implementation of Health Care Waste Management Plans. This strategy calls for progressively including in the fiscal year budget the resources required to support the implementation of HCWM plans, specifically: allocate own funds to handle HCW; sign technical cooperation agreements with the major's offices to manipulate and dispose treated HCW in specific sites –previously agreed and under safety conditions– at the sanitary landfills; include standards for accomplishments of HCWM plans in the accreditation and certification plans. Also, pursing sustainability of the system, explore the possibility, in hospitals where the incinerator is in operating condition, to offer treatment services to other similar facilities in town. As supporting documentation, it was noticed that the following documents also contain some steps to enhance HCWM practices in Nicaragua: *Estándares para la Habilitación de Establecimientos de Salud; Estándares de Habilitación de Clínicas Médicas Provisionales; Estándares de Habilitación de Hospitales en Nicaragua*; and *Estándares de Habilitación de Centros de Salud en Nicaragua.*

In order to ensure the quality of implementation of this component, the GON has proposed a set of indicators which will measure the performance of MOH and the beneficiary hospitals with regards to HCWM. Also, these indicators will be the basis for reviewing the compliance of this operation with the Bank Environmental Assessment Policy. These indicators were proposed by the GON and will be supervised during the life of the project:

Indicator	Verification
Heath Care Waste Management Committee implemented	Report to MOH by beneficiary hospital of its conformation
Heath Care Waste Management Plan in place	Document presented to MOH for review and approval
Implementation of the HCWMP	Report by MOH of its implementation
Efficiency of the Segregation Process	Report by MOH of its implementation
Treatment for Biomedical Waste	Monthly report by the beneficiary hospitals
Training of Hospital Personnel	Annual Report to MOH by beneficiary hospital
Coordination with Municipal Authorities	Annual Report to MOH by beneficiary hospital
Consejos Consultivos support the Implementation of the Plan	Annual Report to MOH by beneficiary hospital
Inclusion of Budget for HCWM every Fiscal Year	Annual Report to MOH by beneficiary hospital

Environmental rules for contractors

The guidelines developed by the GON address all the needs of the minor works required and supported by this operation. These guidelines include the following general aspects:

Consideration of aspects such as ventilation, natural and artificial light energy efficiency, historical and cultural considerations, and security and handicapped access. Also, floor space (ft^2) per bed/ward, requirements for x-ray rooms, and adequacy of corridors for wheelchair/bed access. Moreover, waste management, maintenance, stockpiles and borrow pits, site cleanup, safety during construction, nuisance and dust control, community relations, chance find procedures for culturally significant artifacts, and environmental supervision during construction. More details can be found in the EA presented by the GON.

SOCIAL AND INDIGENOUS PEOPLE PLAN (OD 4.20)

As part of project preparation, the project team visited several municipalities throughout the country, including the Regional Governments of RAAN and RAAS, and interviewed with SILAIS, hospital staff and other health care providers and users. The team also interviewed Health Councils to discuss their Health Plans in the context of the National Health Plans and the National Health Law.

The social assessment reviewed the evaluations and studies carried out to assess the 14 programs under the Health Modernization Program of the Ministry of Health (PMSS) since 2001. It reviewed the evaluation results of the Women's Centers created under the Indigenous Peoples Development Plan (IPDP) for the PMSS, and corroborated the widely- recognized positive results. Moreover, a Social Feasibility study was carried out by a local independent firm (ALVA Consultants) in a selected sample of 15 municipalities in 7 departments: Jinotega, RAAN, RAAS, Rio San Juan, Madriz, Chontales and Nueva Segovia. The sample municipalities are among the 90 municipalities selected by MOH for installation of Women's Centers; they are among the poorest and more isolated municipalities in the country; they have high maternal-infant mortality rates; and they have access to a health care provider with surgical facilities (i.e. hospital, clinic, health center with beds present or future recipient of the FONMAT program).

The study included four parts: first, 15 Social Feasibility workshops were carried out in selected municipalities with the purpose of introducing, discussing, and seeking agreements for the creation of 15 new Women's Centers to be managed by their own communities. Cooperation was sought and agreed with the SILAIS, hospital or health center, or health organization supported by FONMAT, the Municipal Government, local NGOs, public institutions, private organizations, Women's Groups, etc. and with the support of the local networks of midwives and health promoters. Second, an assessment of users' satisfaction of existing Women's Centers was also conducted in Bilwi, Bluefields, Matagalpa and El Rama. Third, an assessment of perceptions of satisfaction among health care service users was carried out through a survey of 720 users and non-users of public primary health care services. Fourth, a similar survey was applied to 150 hospital patients to assess their satisfaction with hospital services, their knowledge/use of social controls installed by MOH and their recommendations towards the promotion of social auditing mechanisms. Finally, interviews were carried out to assess the coordination among the three levels in 15 municipalities: PHC, hospitals and Women's Centers.

The results of the Assessment and Feasibility Study were presented to the Regional Governments of RAAN and RAAS in December 2004.

1. Results of 1998 Indigenous Peoples Plan for the Health Modernization Project (APL I)

The 1998 IPDP for the Health Modernization Project called for the creation of Women's Centers in 10 municipalities serving Indigenous and Afro-Nicaraguan population mostly on the Atlantic Coast, Jinotega and Central region of Nicaragua. The present assessment evaluated users' satisfaction in four Women's Centers with positive results. Several evaluations of Women's Centers carried out between 2001-2003 corroborate the reduction of maternal and child mortality rates and high cost-effectiveness. The creation of 90 new Women's Centers is part of the National Health Plan for Nicaragua.

2. Demographic profile of Nicaragua

Eleven percent of the Nicaraguan population (out of a total of 5.6 million inhabitants) self-identify as indigenous and conserve their native languages. The majority of indigenous peoples belong to five Atlantic Coast groups: Miskito, Mayangna, Garífuna, Creole (Afro-descendants) and Rama who live in 300 communities of the Atlantic Coast and 15 communities of the Department of Jinotega and the Central Plateau of Matagalpa. Nearly half of the inhabitants of the Atlantic Coast at present are 'mestizos'. The indigenous peoples in the mentioned regions live in extreme poverty conditions with scarce basic health, education, water and sanitation services. Their living conditions have deteriorated in the past decade due to the invasion of *colonos*, degradation of natural resources in an unsustainable way, open-air mining and over exploitation of marine resources. On the Pacific Coast, the largest indigenous group is the Sutiaba in the Departments of León and Chinandega. Other groups include the Nahuas, Nicaraos and Chorotegas who live along the coastal departments of Madriz, Nueva Segovia and Chinandega.

3. Main recommendations of the Social Feasibility Study and Assessment of perceptions of satisfaction among users of public health care services

(1) Attention should be paid to traditional and intercultural medicine since people are combining both on a daily basis. This subject is of high priority in the Regional Health Plans.
(2) Strengthen local networks of midwives, MOH and traditional health promoters. Educate them to identify, refer, accompany and monitor women in need of pre and post-natal care; small children suffering from URI and diarrheic infections; and men, women and youths at risk of HIV/AIDS. Equip them with gear and access to transportation, to be efficient.
(3) Although the topic of social control in the health sector is a concern to the central level of the MOH and the Regional Health Councils, at present, the communities and health staff interviewed in the field are not aware of or engaged in any plans for social auditing/control in the sector.

4. The Situation of the Autonomous Atlantic Regions and their Health Plans

Extensive consultations with civil society and other sectors at the community, municipal and departmental levels were carried out in the past two years in order to discuss the Regional Health Plans for RAAN and RAAS. As part of the Plan, a Health Decentralization Commission that

includes the MOH and Regional health authorities was formed to oversee the decentralization process. Likewise, Regional Health Commissions and Regional Municipal Commissions have been formed. The Regional Communal Commissions are in the process of formation.

A number of workshops and forums have been held between the Regional Governments of RAAN and the present Minister of Health for the definition of decentralization of political, financial, administrative and operational power to the Regional Government and its Councils. The Health Plans for RAAN and RAAS are consistent with the National Health Plans for Nicaragua. At present, the definition of the Health Plan for RAAN is more advanced than that of RAAS. As part of project preparation, the MOH will finance the Diagnostic Study of Health in RAAS and a definition of the main elements of a regional health policy.

The most important issues related to the Autonomous Atlantic Region health plans are:

(a) Legal Framework

The Health Law (Title II, Chapter IV) warrants the Autonomous Regions of the Atlantic Coast the right to define their own health model according to their traditions, culture and costumes, within the framework of policies, plans, projects and programs of the Ministry of Health. Under the Health Law, the MOH will coordinate with the Regional Councils the management and institutional models, as well as those required to promote decentralization, de-concentration and delegation of responsibilities to those regions. The Regional Autonomous Councils, on the other hand, will be able to create their own health institutions for service administration and delivery, within the framework of autonomy and consistent with the national health policies, norms and procedures.

Law No. 28 warrants the Autonomy of the Northern and Southern Atlantic Coast Regions (RAAN and RAAS). This law was approved by Congress in October 1987 but its Operational Guidelines became effective in 2003. Under Law No. 28, Decentralization of Administrative responsibility is transferred from the Central Government to the Regional Government of the Atlantic Coast. The law requires that the Regional Governments be involved in the preparation, design, implementation, monitoring and evaluation of projects implemented on the Atlantic Coast of Nicaragua. The Law also requires that individuals integrating the Regional Governments and Commissions have a pertinent profile and be trained in the necessary skills.

Other important legislation pertaining to autonomy are: Law No. 445 of Land Tenure and Legalization and Law No. 162 on the Protection and Preservation of native languages and the teaching of Intercultural Bilingual Education.

(b) Administration of Health Care

Prinzapolka is the poorest municipality in the country and 95 percent of its population corresponds to Miskito Indians. It is the only municipality, however, without a Municipal Health Delegation on the Atlantic coast. At present it depends administratively on both Puerto Cabezas and Siuna. The Regional Health Plans recommend the creation of a Municipal Health Delegation and Council to attend the needs of Prinzapolka.

The re-incorporation to the Atlantic Region of seven municipalities presently administered by Pacific Regions (Waslala and Mulukuku in RAAN; and Paiwas, Nueva Guinea, El Rama, Muelle de Bueyes and El Ayote in RAAS) is high in the agenda of regional governments as fiscal distribution of revenues to municipalities is done on a per capita basis. The re-incorporation of municipalities has already been done for the education sector, but the decision is still pending for the health sector. The total number of municipalities on the Atlantic coast is 19. After the re-incorporation is implemented, the creation/construction and equipment of Municipal Delegations will be needed, as well as training of its members.

(c) Financial Autonomy

Decentralization entails that the decisions concerning financial planning and implementation be made by the autonomous regions, rather than by the central government.

(d) Participation

Participation of the civil society through the Communal, Municipal and Regional Commissions is a salient principle of decentralization and autonomy. The councils represent the peoples for making decisions regarding policy, planning and sharing of responsibilities.

(e) Human Resources

It is widely recognized that there are two major problems regarding human resources:

(i) Health professionals from the Pacific don't usually choose isolated regions to live; however, they are often assigned there for medical residency, resulting in a high turnover of health staff;
(ii) Local health staff of isolated regions who would like to work/live in those areas have a hard time becoming MOH staff.

It is therefore recommended that health workers graduating in URACCAN or other universities be given priority for MOH staffing in the isolated areas of their choice, which may contribute to keep hospitals and health units staffed.

(f) Expansion Strategy of Primary Health Care services for vulnerable groups

One of the strategies of the Health Plans is the expansion of basic primary health services for vulnerable populations through the creation/improvement of '*subsedes*', which were created to strengthen nuclei of health posts serving indigenous and isolated communities. They don't exist in the present nomenclature of MOH. They are strategically located to cover areas of difficult access. Staff includes medical staff, nurses, information systems for monitoring diseases, lab staff. They operate with energy from solar panels. *Subsedes* have basic equipment (stethoscope, tension meter) for child delivery and minor surgery, 5 or 6 beds for patient recuperation, transportation (boat or car) and communications. They assist a nucleus of communities with itinerant teams for vaccinations, and refer patients to bigger units and hospitals.

Ten *subsedes* have been created in the past with the support of different foreign donors, to serve Indigenous and Afro-Caribbean population. The two best-equipped *subsedes* are Bilwaskarma and Santa Martha which act as independent service providers. They have a Cooperation Agreement with MOH where the latter contributes with medical and nursing staff, information systems and transportation, medicines, extension services and vaccination campaigns. Although they have yielded successful results, they continue to have a low profile due to lack of financing. The regional governments seek financial resources to strengthen their operation. At present, most *subsedes* have medical staff but lack recuperation facilities, and means of transportation and communication.

(g) Strengthening of the traditional health care networks

Given the isolation and low density of population on the Atlantic Coast Region, access to public health services is much lower than in the rest of the country. To compensate for the supply deficit, traditional networks of traditional health agents such as midwives, health leaders (promoters) and volunteer health workers, 'sukias' and 'curanderos' (traditional healers), play a very important historical role in the surveillance, promotion and supply of health care. They are the pillars that support the health system in the regions inhabited by Indigenous and Afro-descendants. Studies find that more than 40 percent of child deliveries are done by traditional midwives. Also, the Regional Health Councils calculate that over 20,000 health consultations are made to traditional leaders by patients seeking health care. Moreover, the 'Sukias' and 'curanderos' together with the Institute of Traditional Medicine of the University of URACCAN (RAAN) are the healers responsible for providing health care to patients suffering from what is called "*krisi siknis*" and defined as a cultural-based psycho-somatic disease. According to the Council, over 5,000 people were treated with that disease in the past two years. In many cases, activities of the traditional networks are coordinated with local MOH institutions, NGOs, the coastal universities of URACCAN and BICU (RAAS) and international as well as national donors (European Union, Doctors without Borders, Acción Médica Cristiana, KEPA (Norwegian), etc.).

Traditional healers and health volunteer workers are respected prestigious leaders who are held responsible for the health of the community. They may do their work for free or charge a very small fee mostly to cover transportation and nourishment. An important item in the Regional Health Plans of RAAN and RAAS is the strengthening of these traditional healers and volunteers with training in safe health practices at the Institute of Traditional Medicine of URACCAN, equipment, and a fee for transportation to deliver reports.

(h) On the Definition of the Basic Health Care Package for isolated areas (PBHS)

A Diagnostic Study of the organization of health care services as prescribed by the Regional Health Plan is being implemented with the financial support of the Inter-American Development Bank (IDB). The study should be completed in March 2005. Financing is sought for a consultancy to determine the elements of the Basic Health Care Package for the Autonomous Regions (to include Intercultural Health Care).

(i) Contracting of Health Care Services Delivery to the private sector

Given past experience of extension of health care services to isolated indigenous and Afro-Caribbean communities, the Regional Health Care Plans contemplate strengthening of NGOs which currently deliver said services.

5. Indigenous and Afro-Nicaraguan Peoples and Gender Plan

Given the presence of Indigenous and Afro-Nicaraguan Peoples in the project area, the proposed project includes an Indigenous and Afro-descendant Peoples and Gender Plan intended to include all those living in the regions inhabited by ethnic population. The plan below results from the joint consultations of MOH and World Bank with the Central and Regional Governments, and seeks to respond in part to the Regional Health Plans being formulated. The interventions included in the Plan below are suggestions made by the Regional Governments and should be further discussed with the project team, and the MOH.

The objectives of the Indigenous and Afro-Nicaraguan Peoples and Gender Plan are:

1. To ensure that the Indigenous and Afro-Nicaraguan Peoples within the project area benefit from the project in an equitable and culturally-adequate manner;
2. To promote full and active participation of the indigenous and Afro-Nicaraguan peoples, their Regional Governments, Regional Health Councils, leaders and authorities in the project design, implementation, monitoring and evaluation of the proposed project.

Recommendations

Given that the bulk of the Indigenous and Afro-Nicaraguan population live in the Atlantic Coast, the following recommendations derive from the assessments and discussions with the Regional Health Councils, and are suggested to be incorporated in the project design:

Component 1: Extension of Access to the Basic Package of Health Services (PBHS) by the poorest and most vulnerable populations

(a) Consultancy to determine the PBHS for the RAAN and RAAS (US$30,000)

(b) Contracting of private health care providers, particularly NGOs and mobilization of private and public itinerant health care units, appropriately trained and equipped, to reach out to people living in remote areas.

(c) Installation of 15 new community-managed Women's Centers in selected municipalities of RAAN, RAAS, Rio San Juan, Jinotega, Madriz, Nueva Segovia and Chontales.

(d) Promotion of Women's Centers in 15 new communities on the Atlantic Coast.

(e) Strengthening and improving 10 existing subsedes of SILAIS operating in remote areas on the Atlantic Coast and serving Indigenous, Afro-Nicaraguans and mixed population. (US$200,000)

(f) Construction and Equipment of eight new subsedes in selected municipalities. (US$620,000)

(h) Creation of a Municipal Delegation in Prinzapolka.

Component 2: Strengthening the Network of Services in Targeted Areas to Support the Implementation of the PBHS

(a) Training of 900 midwives and 500 traditional healers. (US$200,000)

(b) Equipping midwives and health promoters (boots, backpack, rain poncho) and provision of supplies (gauze, umbilical clamp, scissors, etc). (US$200,000)

(c) Workshops with traditional health providers at the Institute of Traditional Medicine of URACCAN with the purpose of sharing experiences.

(d) Dissemination of best practices of health care provision and implementation of PBHS in isolated rural areas.

Component 3: Improving Stewardship, Institutional Strengthening and Decentralization

(a) Strengthening the technical skills of the Regional Health Councils to administrate health

(b) Strengthening the technical skills of the Regional Government

(c) Strengthening the operations of the Coordinating Commission to continue to manage the decentralization process (workshops, assemblies, mobilization, monitoring)

(d) Strengthening the social auditing mechanisms by financing workshops, training, with the Regional, Municipal and Communal Health Commissions.

Annex 11: Project Preparation and Supervision

NICARAGUA: Health Services Extension and Modernization (2nd APL)

	Planned	Actual
PCN review	6/28/04	6/28/04
Initial PID to PIC	8/12/04	8/12/04
Initial ISDS to PIC	8/12/04	8/12/04
Appraisal	2/14/05	2/14/05
Negotiations	3/01/05	3/2/05
Board/RVP approval	4/05/05	
Planned date of effectiveness		
Planned date of mid-term review		
Planned closing date		

Key institutions responsible for preparation of the project: Ministry of Health

Bank staff and consultants who worked on the project included:

Name	Title	Unit
Jesús María Fernández	Task Manager	LCSHD
Jack Fiedler	Sr. Health Economist	LCSHD
Christina Alquinta	Program Assistant	LCSHD
Manuel Vargas	Sr. FM Specialist	LCOAA
Luis Tineo	Sr. Procurement Specialist	LCOPR
José Ramón Gómez	Environmental Specialist	LCSEN
Andrea Guedes	Operations Officer	LCSHD
Morag Van Praag	Sr. Finance Officer	LOAG1
Ximena Traa-Valarezo	Social Evaluation Specialist	LCSHD
Selpha Nyairo	Legal Associate	LEGLA
Solange Alliali	Sr. Counsel	LEGLA
Fernando Lavadenz	Health Specialist	LCSHD
Luis Pérez	Sr. Public Health Specialist	LCSHD

Bank funds expended to date on project preparation:

1. Bank resources: US$62,555.22
2. Trust funds: US$170,825.00
3. Total: US$233,380.22

Estimated Approval and Supervision costs:

1. Remaining costs to approval: US$134,136.61
2. Estimated annual supervision cost: US$95,000.00

Annex 12: Documents in the Project File

NICARAGUA: Health Services Extension and Modernization (2nd APL)

Program Background Documents

1. Project Status Report, Nicaragua Health Sector Modernization Project, December 22, 2004.
2. Aide-memoire: Nicaragua Health Services Extension and Modernization SWAp – Supervision Mission, November 22-24, 2004.
3. Aide-memoire: Nicaragua Health Services Extension and Modernization SWAp – Pre-Appraisal Mission, January 24-28, 2005.

Country Documents produced/commissioned by the World Bank:

1. Nicaragua - Country Assistance Strategy – Volume 1, December 18, 2002.
2. Social Assessment, January 18, 2005.
3. Environmental Assessment, October 14, 2004.
4. Fiduciary Assessment, January 2005.
5. Financial Analysis of the Nicaragua Health Sector, Ricardo Meerhoff, 2004
6. Evaluation of Primary Health Care Projects and Programs, Bitran and Associates, 2004.
7. Evaluation of the Institutional Strengthening Component of the APL, First Phase, Fernando Marin, 2004.
8. Evaluation of Casas Maternas, Domingo Sanchez Ortega, 2003
9. Evaluation of Casas Maternas, Maria Elena Ruiz Abril
10. Evaluation of National Health Policies, Sanigest,
11. Costing of the Five-Year Implementation Plan, Fabio Duran, 2004
12. Evaluation of the Primary Health Care Component of the Health Modernization Program, Roser Fernandez, 2004.
13. Public Expenditure Review, 2001
14. Definition of the Basic Package of Health Services, Fabio Duran, 2004

Country Documents produced by the Government

1. National Health Policies 2004-2015
2. National Health Plan 2004-2015
3. Five-Year Implementation Plan
4. Modelo de Atención Integral de Salud (MAIS)
5. Code of Conduct (latest draft)
6. Analysis of the Health Sector, Avendaño, 2004
7. Nicaragua – Health and Equity, Magdalene Rathe, Dayana Lora, Fundacion Plenitud, 2003

Documents on the Sector produced by other donors

1. Nicaragua Strategy Document: Health sector Development , Royal Netherlands' Embassy, 2003.
2. Loan proposal for Strengthening Maternal and Child health in Nicaragua. A Performance-based loan, IDB, December 2004.

Annex 13: Statement of Loans and Credits

NICARAGUA: Health Services Extension and Modernization (2nd APL)

			Original Amount in US$ Millions						Difference between expected and actual disbursements	
Project ID	FY	Purpose	IBRD	IDA	SF	GEF	Cancel.	Undisb.	Orig.	Frm. Rev'd
P078990	2005	NI - EDUCATION	0.00	15.00	0.00	0.00	0.00	15.96	0.00	0.00
P077826	2004	NI Broad-Based Access to Finan Services	0.00	7.00	0.00	0.00	0.00	7.36	0.46	0.00
P078891	2004	NI PUBLIC SECTOR TA	0.00	23.50	0.00	0.00	0.00	21.19	3.05	0.00
P082885	2004	NICARAGUA PRSC I	0.00	70.00	0.00	0.00	0.00	36.03	-1.03	0.00
P073246	2003	NI Offgrid Rural Electrification (PERZA)	0.00	12.00	0.00	0.00	0.00	10.97	4.13	0.00
P075194	2003	NI Off-Grid Rural Electrification	0.00	0.00	0.00	4.02	0.00	3.74	1.90	0.00
P056018	2002	NI LAND ADMINISTRATION PROJECT	0.00	32.60	0.00	0.00	0.00	32.28	3.39	0.00
P064906	2001	NI Poverty Red.&Local Dev. FISE	0.00	60.00	0.00	0.00	0.00	15.90	8.24	-12.76
P070016	2001	NI Competitiveness LIL	0.00	5.00	0.00	0.00	0.00	2.62	1.80	0.52
P055823	2001	NI SECOND RURAL MUNICIPAL DEV. PROJECT	0.00	28.70	0.00	0.00	0.00	9.57	15.89	0.00
P064916	2001	NI Natural Disaster Vulnerability Reduc	0.00	13.50	0.00	0.00	0.00	10.51	8.51	0.00
P068673	2001	NI Road Rehab. and Maintenance III	0.00	75.00	0.00	0.00	0.00	13.43	-1.11	0.00
P064915	2000	NI AG TECHN & RURAL EDU (APL)	0.00	23.63	0.00	0.00	0.00	0.00	5.65	0.00
P056087	2000	NI Pension and Financ. Market Reform TA	0.00	8.00	0.00	0.00	0.00	0.80	-6.18	0.99
P055853	2000	NI - TELECOMMUNICATION REFORM	0.00	15.90	0.00	0.00	0.00	0.59	1.21	0.00
P050613	2000	NI SECOND BASIC EDUCATION PROJECT	0.00	52.50	0.00	0.00	0.00	0.99	1.92	0.00
P041790	1997	GEF NI Atlantic Biological Corridor	0.00	0.00	0.00	7.10	0.00	0.51	7.16	6.32
		Total:	0.00	442.33	0.00	11.12	0.00	182.45	54.99	- 4.93

NICARAGUA
STATEMENT OF IFC's
Held and Disbursed Portfolio
In Millions of US Dollars

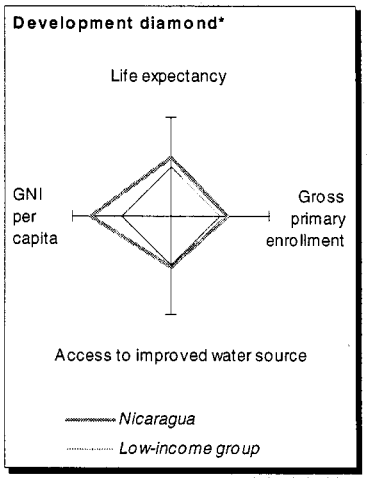
		Committed				Disbursed			
		IFC				IFC			
FY Approval	Company	Loan	Equity	Quasi	Partic.	Loan	Equity	Quasi	Partic.
2004	Confia	5.00	0.00	0.00	0.00	5.00	0.00	0.00	0.00
1998	Frutan	0.36	0.36	0.00	0.00	0.36	0.00	0.00	0.00
1998	La Colonia	1.00	0.00	0.50	0.00	1.00	0.00	0.50	0.00
1999	SEF Dicegsa	0.33	0.00	0.00	0.00	0.33	0.00	0.00	0.00
	Total portfolio:	6.69	0.36	0.50	0.00	6.69	0.00	0.50	0.00

		Approvals Pending Commitment			
FY Approval	Company	Loan	Equity	Quasi	Partic.
	Total pending commitment:	0.00	0.00	0.00	0.00

Annex 14: Country at a Glance

NICARAGUA: Health Services Extension and Modernization (2nd APL)

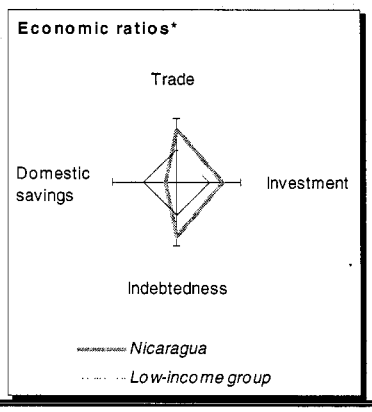
POVERTY and SOCIAL	Nicaragua	Latin America & Carib.	Low-income
2003			
Population, mid-year *(millions)*	5.5	534	2,310
GNI per capita *(Atlas method, US$)*	730	3,260	450
GNI *(Atlas method, US$ billions)*	4.0	1,741	1,038
Average annual growth, 1997-03			
Population *(%)*	2.6	1.5	1.9
Labor force *(%)*	3.8	2.1	2.3
Most recent estimate (latest year available, 1997-03)			
Poverty *(% of population below national poverty line)*	48	..	..
Urban population *(% of total population)*	57	77	30
Life expectancy at birth *(years)*	69	71	58
Infant mortality *(per 1,000 live births)*	32	28	82
Child malnutrition *(% of children under 5)*	10	..	44
Access to an improved water source *(% of population)*	77	86	75
Illiteracy *(% of population age 15+)*	23	11	39
Gross primary enrollment *(% of school-age population)*	105	129	92
Male	104	131	99
Female	105	126	85



KEY ECONOMIC RATIOS and LONG-TERM TRENDS

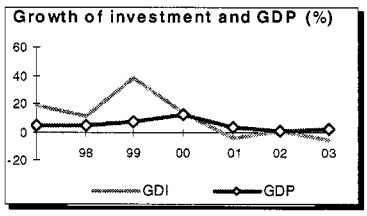
	1983	1993	2002	2003
GDP *(US$ billions)*	2.8	1.8	4.0	4.1
Gross domestic investment/GDP	22.5	19.5	32.1	31.2
Exports of goods and services/GDP	19.4	20.4	22.9	22.8
Gross domestic savings/GDP	11.9	-8.0	6.0	6.0
Gross national savings/GDP	5.5	-29.2	12.8	13.6
Current account balance/GDP	-21.3	-51.5	-19.6	-17.6
Interest payments/GDP	1.4	3.2	1.1	1.3
Total debt/GDP	148.9	643.5	162.0	166.6
Total debt service/exports	21.2	34.1	10.9	12.3
Present value of debt/GDP	..	..	71.5	..
Present value of debt/exports	..	..	205.9	..

	1983-93	1993-03	2002	2003	2003-07
(average annual growth)					
GDP	-2.6	5.3	1.0	2.3	4.0
GDP per capita	-5.1	2.5	-1.6	-0.3	1.7

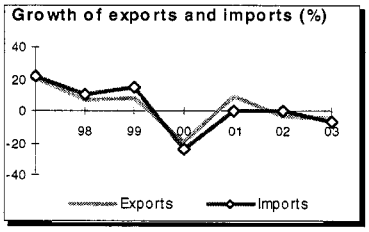


STRUCTURE of the ECONOMY

	1983	1993	2002	2003
(% of GDP)				
Agriculture	23.1	29.7	18.0	17.8
Industry	30.7	21.8	25.0	24.9
Manufacturing	24.2	17.5	14.5	14.3
Services	46.2	48.4	57.0	57.3
Private consumption	56.7	90.4	78.0	78.3
General government consumption	31.4	17.6	15.9	15.7
Imports of goods and services	30.0	47.9	49.0	48.1

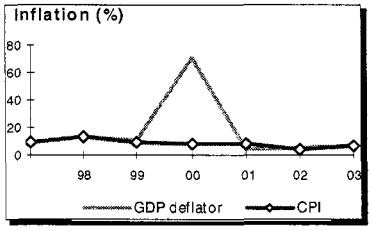


	1983-93	1993-03	2002	2003
(average annual growth)				
Agriculture	-2.4	1.8	-0.4	0.2
Industry	-3.5	3.0	-0.4	0.5
Manufacturing	-4.4	2.1	2.1	-0.3
Services	-2.2	8.3	2.2	3.9
Private consumption	1.9	5.2	4.1	2.4
General government consumption	-9.2	-1.0	-13.0	1.3
Gross domestic investment	-8.1	13.6	1.1	-5.5
Imports of goods and services	-1.2	5.6	-0.5	-7.1



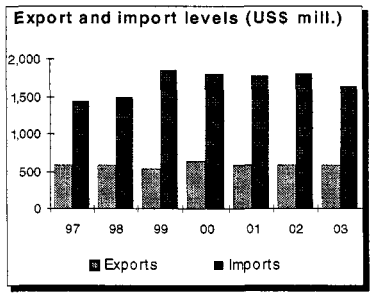
PRICES and GOVERNMENT FINANCE

	1983	1993	2002	2003
Domestic prices				
(% change)				
Consumer prices	31.0	20.4	4.0	7.3
Implicit GDP deflator	11.0	20.4	5.3	6.1
Government finance				
(% of GDP, includes current grants)				
Current revenue	..	20.1	14.9	16.7
Current budget balance	..	-1.1	-1.9	0.8
Overall surplus/deficit	..	-7.6	-8.7	-6.9



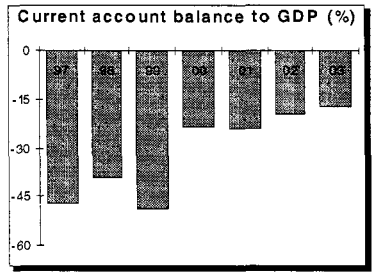
TRADE

	1983	1993	2002	2003
(US$ millions)				
Total exports (fob)	452	270	596	596
Coffee	153	32	73	..
Shrimp and lobster	17	27	76	..
Manufactures	64	91	191	214
Total imports (cif)	806	744	1,796	1,624
Food	131	179	..	..
Fuel and energy	148	104	..	..
Capital goods	204	184	..	401
Export price index *(1995=100)*	67	70	73	79
Import price index *(1995=100)*	59	96	116	129
Terms of trade *(1995=100)*	113	73	63	61



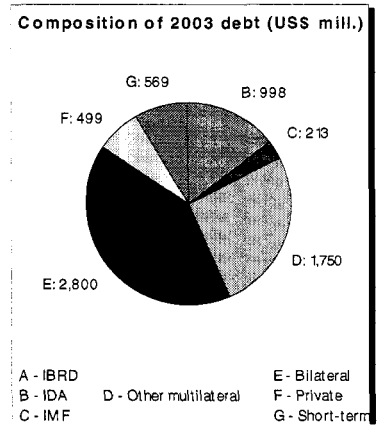
BALANCE of PAYMENTS

	1983	1993	2002	2003
(US$ millions)				
Exports of goods and services	498	364	918	936
Imports of goods and services	873	862	1,974	1,971
Resource balance	-375	-498	-1,057	-1,035
Net income	-212	-432	-193	-195
Net current transfers	0	25	464	507
Current account balance	-587	-905	-785	-723
Financing items (net)	549	804	834	708
Changes in net reserves	38	101	-49	15
Memo:				
Reserves including gold *(US$ millions)*	221	88	454	447
Conversion rate *(DEC, local/US$)*	2.39E-9	6.1	14.3	15.1



EXTERNAL DEBT and RESOURCE FLOWS

	1983	1993	2002	2003
(US$ millions)				
Total debt outstanding and disbursed	4,098	11,303	6,485	6,829
IBRD	146	87	0	0
IDA	57	196	811	998
Total debt service	107	135	151	178
IBRD	13	29	0	0
IDA	1	3	2	3
Composition of net resource flows				
Official grants	49	207	218	..
Official creditors	260	42	155	162
Private creditors	28	-5	32	-26
Foreign direct investment	0	39	174	..
Portfolio equity	0	0	0	..
World Bank program				
Commitments	0	93	33	27
Disbursements	24	15	72	112
Principal repayments	6	21	0	0



Annex 15: Map IBRD 33456

NICARAGUA: Health Services Extension and Modernization (2nd APL)

MAP SECTION