

PUBLIC

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

ARGENTINA

NATIONAL WATER SUPPLY AND SEWERAGE PROGRAM

FIRST STAGE

(AR-0116)

LOAN PROPOSAL

March 5, 1991

ARGENTINA
NATIONAL WATER SUPPLY AND SEWERAGE PROGRAM
(AR-0116)

CONTENTS

	<u>Page</u>
I. INTRODUCTION	1
A. General features	1
B. Characteristics of the utilities	1
C. Priority of institutional strengthening	1
D. Execution of works	2
E. Mix of components	2
F. Global credit program	3
G. Government policies and IDB operating guidelines	3
H. Request and missions	4
II. FRAME OF REFERENCE	5
A. Assessment of the sector	5
B. National sanitation program - goals	9
C. Evaluation of previous loans in the sanitation sector	9
D. Program for financial restructuring and economic development of the provinces of Argentina	14
III. THE PROGRAM	16
A. Objectives	16
B. Description	16
C. Total cost and financing	19
D. IDB and IBRD financing	20
E. Local counterpart	20
IV. EXECUTION OF THE PROGRAM	21
A. General mechanism	21
B. Execution of the projects	21
C. Indicative sample of projects	21
D. Disbursement period	22
E. Disbursement schedule	22
F. Procedure for bidding on construction works and equipment procurement	23
G. Procedure for selecting and hiring consultants	23
H. Subloan conditions and project eligibility requirements	23
I. Exchange risk stabilization fund	26
J. Cost recovery - rate schedules	27
K. COFAPyS Plan of Action	28

L.	Reports and annual review meeting	28
M.	Supervision	29
N.	Ex post evaluation	29
V.	THE BORROWER AND THE EXECUTING AGENCY FOR THE PROGRAM	32
A.	The borrower	32
B.	The executing agency	32
C.	Subborrower entities	36
VI.	JUSTIFICATION AND FEASIBILITY	37
A.	Justification for Bank participation	37
B.	Risks in the operation	37
C.	Technical and environmental feasibility	38
D.	Institutional and financial feasibility	39
E.	Feasibility of the local counterpart	41
F.	Socioeconomic feasibility	42

ANNEXES:

1. Sector policy paper
2. Credit Regulations
3. Terms of Reference for Consultants

ACRONYMS

COFAPyS	Federal Water and Sanitation Board [Consejo Federal de Agua Potable y Saneamiento]
DIC	Distributive impact coefficient
EIA	Environmental impact assessment
EIRR	Economic internal rate of return
ENTES	Subborrowers
FENTOS	National Federation of Sanitary Workers [Federación Nacional de Trabajadores de Obras Sanitarias]
FSO	Fund for Special Operations
IBRD	International Bank for Reconstruction and Development
IDB	Inter-American Development Bank
NPV	Net present value
OSN	National Sanitary Works Authority [Obras Sanitarias de la Nación]
SNAP	National Water and Sanitation Authority [Servicio Nacional de Agua Potable y Saneamiento]
SVOA	Department of Housing and Environmental Affairs [Secretaría de Vivienda y Ordenamiento Ambiental]
UNDP	United Nations Development Programme
UW	Unmetered water
WTP	Willingness to pay

Basic Socioeconomic Data of Argentina

1. General

Total Population (Millions of Inhabitants, 1988)	32.0
Rural Population (Percentage) (1988)	14.3
Land Area (Thousands of Km2)	2,776.7
Population per Km2	11.5
Birth Rate per 1,000 Inhabitants (1985-90)	23.2
Population Growth Rate (1980-88) (Percentage, average)	1.4
Death Rate per 1,000 Inhabitants (1985-90)	8.6
Infant Mortality Rate per 1,000 Live Birth (1985-90)	32.2
GDP per Capita (1988) Dollars	2,862.0
Life Expectancy at Birth (1985-90)	71.0
Literacy (1982) (Percentage)	94.2
Official Exchange Rate (Australas/Dollars)	0.80
December 1985	0.801
December 1986	1.257
December 1987	3.750
December 1988	13.370
December 1989	1,795.00
Energy Consumption per Inhabitant, 1988 (Kwh)	1,541.7
Low Income Level per Inhabitant (in Australas)	
December 1986	1,423
December 1987	2,415
December 1988	12,230
December 1989	613,115

Economically Active Population by Sectors (1986):

	<u>T h o u s a n d s</u>	<u>P e r c e n t a g e</u>
<u>T o t a l:</u>	<u>9,989</u>	<u>100.0</u>
Agriculture and Fishing	1,289	12.9
Mining	50	0.5
Manufacture	2,138	21.4
Construction	1,079	10.8
Commerce	1,828	18.3
Transportation	499	5.0
Electricity, Gas and Water	109	1.1
Financial Services and Others	2,997	30.0

Unemployment and Underemployment Rate (Urban Sector, All Country)

	<u>Unemployment</u>	<u>Underemployment</u>
October 1983	3.9	5.9
October 1984	4.5	5.9
October 1985	5.9	7.4
October 1986	5.2	7.3
October 1987	5.7	8.1
October 1988	6.1	7.9
April 1989	8.1	8.9

2. Gross Domestic Product a/ (At Market Prices)	Composition (Percentage)						Real Annual Growth Rate (Percentage)			
	1984	1985	1986	1987	1988	1989	1984	1985	1986	1987
<u>Expenditure of GDP</u>										
GDP	100.0	100.0	100.0	100.0	100.0	100.0	2.6	-4.3	5.6	2.2
Gross Domestic Investment	12.3	10.3	11.4	13.0	12.0		-11.1	-20.0	16.6	17.1
Consumption	83.7	82.1	84.1	83.3	79.9		6.1	-6.2	8.1	1.2
Exports	14.2	16.7	14.7	14.3	17.8		-0.7	12.5	-7.0	-1.0
Imports	10.3	9.2	10.2	10.6	9.7		6.1	-14.5	17.5	6.1
<u>By Origin b/</u>										
	100.0	100.0	100.0	100.0	100.0	100.0	2.6	-4.3	5.6	2.2
Agriculture	13.6	14.0	12.8	13.0	13.2		3.1	-1.7	-3.2	3.6
Mining	2.3	2.4	2.2	2.1	2.4		-0.6	-2.6	-3.8	0.2
Manufacturing	21.3	20.0	21.4	20.8	19.9		4.0	-10.3	13.0	-0.6
Construction	2.9	2.8	2.9	3.3	2.9		-20.0	-6.7	9.7	14.7
Electricity, Water and Gas	3.9	4.1	4.2	4.3	4.7		6.5	1.4	7.4	6.1
Commerce	13.0	12.4	12.8	12.7	12.3		4.5	-8.3	8.7	1.4
Transportation	10.3	10.3	10.3	10.3	10.3		5.5	-3.8	5.1	2.5
Financial Services	6.7	6.9	7.0	7.0	7.2		1.2	-1.2	7.0	2.9
Government	9.4	10.0	9.7	9.7	10.2		2.8	2.6	1.7	3.0
Other Services	5.3	5.6	5.4	5.4	5.5		2.7	1.4	1.6	0.8

a/ At 1970 constant prices.

b/ At factor cost.

Source: Central Bank and Ministry of Economy.

Millions of Dollars

3. <u>External Trade</u>	<u>1984</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>
<u>Exports of Goods (FOB)</u>	<u>8,107</u>	<u>8,396</u>	<u>6,852</u>	<u>8,360</u>	<u>8,944</u>	<u>9,100</u>
Beef	182	160	226	274	309	309
Other Meat	75	64	60	63	68	68
Fresh Fruit	95	123	138	153	165	165
Corn	744	766	651	298	377	377
Wheat	923	1,133	393	351	241	241
Sorghum	451	296	152	67	122	122
Oil Seeds	948	731	647	326	626	626
Vegetable Oil	945	970	645	532	873	873
Leather Goods	331	317	381	419	443	443
Wool	112	130	122	127	180	180
Other Agricultural Products	539	481	511	512	600	600
Industrial Foods Products	1,141	855	1,168	1,337	1,947	1,947
Other Manufacture Goods <u>1/</u>	1,284	1,712	1,574	1,778	2,814	2,814
Mineral Products	365	657	184	125	178	178
<u>Imports of Goods (CIF)</u>	<u>4,585</u>	<u>3,814</u>	<u>4,724</u>	<u>5,819</u>	<u>5,322</u>	<u>4,585</u>
Capital Goods	643	648	614	973	847	847
Consumption Goods	250	198	286	318	226	226
Intermediate Goods	3,692	2,968	3,824	4,528	4,249	3,692
Fuel	468	454	415	654	389	389
Other	3,224	2,514	3,409	3,874	3,860	3,224

1/ Includes textiles other than wool.

n.a. Not available.

Source: Central Bank.

Millions of Dollars

4. <u>Balance of Payments</u>	<u>1984</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>
Current Account Balance	-2,543.0	-962.5	-2,855.5	-4,228.3	-1,594.2
Merchandise Balance	3,940.1	4,897.0	2,460.1	975.0	4,254.4
Exports of Goods (FOB)	8,072.0	8,419.2	6,851.3	6,359.3	9,162.1
Imports of Goods (FOB)	4,131.8	3,522.2	4,391.2	5,384.3	4,907.7
Net Services	-6,484.2	-5,859.5	-5,318.0	-5,195.6	-5,848.6
Transfers	1.0	0.0	2.3	-7.8	0.0
Capital Account (Net)	2,738.8	2,462.2	1,671.8	2,496.9	3,634.7
Change in Net Reserves (- = Increase)	-143.5	-977.8	874.0	1,949.9	-1,904.7
Errors and Omissions	-52.3	-521.9	309.7	-218.5	-135.8

* Preliminary.

n.a. Not available.

Source: International Monetary Fund and Central Bank.

Percentage of GDP

5. <u>Non-Financial Public Sector</u>	<u>1984</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>
Current Revenues	21.2	26.2	26.9	25.0	23.9
Current Expenditures	25.6	25.3	24.9	24.6	25.1
Current Savings	-4.3	0.8	2.0	0.4	-1.2
Capital Expenditures	7.2	6.5	6.9	7.0	7.9
Deficit (-) Surplus (+)	-11.6	-5.7	-4.9	-6.6	-9.0
Domestic Financing	5.6	2.0	-1.0	0.3	0.6

* Preliminary.

n.a. Not available.

Source: Ministry of Economy.

	Annual Growth Rate				
<u>Monetary Survey</u>	<u>1984</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>
Domestic Credit <u>a/</u>	535	426	88	250	321
Central Government (Net)	509	508	93	313	292
Private	553	374	83	196	356
Monetary Supply (M1)	567	500	87	125	337

a/ Not included credit to "Other Financial Institutions".

* Growth rate from December 1988 to October 1989.

Source: International Financial Statistics, June 1990.

<u>P r i c e s</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>
(Annual Growth Rate)											
GDP Deflator	154.0	96.0	107.0	184.0	349.4	653.9	684.0	78.0	128.0	366.0	3.28
Consumer Prices (Annual Average)	159.5	100.8	104.5	164.8	343.8	626.7	672.2	90.1	131.3	343.0	3.07
(December to December)	139.7	87.6	131.3	109.7	433.7	688.0	385.4	81.9	174.8	387.7	4.92
Wholesale Prices (Annual Average)	149.3	75.5	109.6	256.2	360.9	575.1	662.9	63.9	122.9	412.5	2.60

Source: Central Bank.

8. <u>External Debt</u>	<u>1983</u>	<u>1984</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989*</u>
<u>Total</u>							
(000 Millions of Dollars)	<u>45.07</u>	<u>46.17</u>	<u>49.33</u>	<u>51.42</u>	<u>58.32 a/</u>	<u>57.86</u>	<u>58.49</u>
Public Sector	31.71	35.53	40.87	44.72	51.79	51.56	53.49
Private Sector	13.36	10.64	8.46	6.70	6.53	6.30	5.00
Bilateral Institutions	1.34	2.02	0.90	0.59	0.71	1.19	1.56
Paris Club	-	-	2.06	4.53	5.30	5.18	5.23
Multilateral Institutions	1.72	1.68	2.28	2.89	4.50	4.50	4.77
IMF	1.17	1.14	2.29	2.72	3.83	3.72	3.68
Bonds Holders	4.21	4.31	3.92	3.64	3.53	3.10	2.91
Banks	31.87	32.74	33.78	33.70	36.85	36.71	37.28
Other Creditors	4.76	4.29	4.10	3.35	3.62	3.46	3.95
<u>Debt Services</u>							
Total Services							
(000 Millions of Dollars)	8.56	6.26	8.26	6.18	6.45		
Services/Exports of Goods and							
Non-Factorial Services (Percentage)	91.9	86.0	81.8	72.8	81.3		

* Preliminary.

a/ Non dollar denominated obligations valued at exchange rates as of December 31, 1986.

Source: Central Bank.

9. <u>IDB Loans</u>	<u>Millions of Dollars</u>	<u>Percentage of Total</u>
(Approved through December 31, 1989)		
<u>T o t a l</u>	<u>4,201.2</u>	<u>100.0</u>
Ordinary Capital	3,633.1	86.5
Fund for Special Operations	519.0	12.3
SPTB	45.9	1.1
Other Funds	3.2	0.1
 <u>B Y S e c t o r</u>	 <u>4,201.2</u>	 <u>100.0</u>
Agriculture and Fishing	671.0	16.0
Industry and Mining	442.0	10.5
Transportation and Communications	344.8	8.2
Energy	1,713.3	40.8
Education, Science and Technology	277.6	6.6
Housing and Urban Welfare	163.5	3.9
Health	465.3	11.1
Preinvestment	3.3	0.1
Export Financing	120.4	2.8

DOC. DATAAR.DOC
28-VI-90
DST/POOL

ARGENTINA
(AR-0116)

SUMMARY OF THE LOAN AND THE PROGRAM

A. BASELINE DATA

Borrower: Republic of Argentina.

Central executing agency: Federal Water and Sanitation Board [Consejo Federal de Agua Potable y Saneamiento] (COFAPyS).

Subborrowers: Provincial and municipal sanitation companies.

Loan application: The Ministry of Economic Affairs of Argentina presented its application to the Bank for the proposed loan on September 7, 1990. An application was also submitted to the IBRD. Between them these two institutions would finance 80% of the overall cost of the program, which is estimated at US\$250 million.

Proposed amount: US\$100 million, of which US\$70 million would be drawn on the ordinary capital resources and the equivalent of US\$30 million in local currency would be drawn on the resources of the FSO.

Proposed terms: Amortization period: 20 years, to include a disbursement period of six years; interest rate: a variable rate on the ordinary capital resources set in accordance with current IDB policies, and a fixed annual rate of 3% on the FSO resources.

Financing: (in US\$ millions)

IDB:	100.0
IBRD:	100.0
Local:	<u>50.0</u>
Total	250.0

Local contribution: The subborrowers would be required to contribute funding of their own for at least the equivalent of 70% of the local counterpart for each project type to be financed under the program. The remaining 30% is to be provided by the provincial governments.

B. SPECIAL FEATURES ¹

1. IDB strategy for Argentina

The proposed operation fits in with the policies adopted by Argentina for the restructuring and eventual privatization of federal and provincial public enterprises. It is also associated directly with the series of reforms proposed for the provincial governments, to be partially financed by the Bank in a separate operation. The two areas of enterprises in the public sector and provincial government reform are part of the strategy adopted by the government to bring down the deficit and to allocate resources in the public sector more effectively.

The operations that the Bank has planned for 1991 are designed to support the sweeping changes being undertaken by the Argentine administration, including the reform of the federal government. As progress is achieved in implementing the stabilization measures proposed under the new economic policy, efforts must be made to support the sectors of production so that the stage can be set for economic recovery. Investment in infrastructure is now limited to what are considered key areas; this means upgrading existing infrastructure, providing agencies with sufficient funding for maintenance, rehabilitating works in progress, and providing institutional and financial strengthening for the agencies responsible for these services.

The financing for sanitation companies has been planned as part of the move to upgrade public utilities and to make more effective use of existing infrastructure. Only in special cases, where the deterioration of the last few decades has been excessive, would consideration be given to the possibility of expanding a system.

2. Objectives and description of the program

As stated earlier, the purpose of this program is to provide institutional and financial strengthening for utility companies, so that they can be established as fully legal entities, and to provide financing for technical assistance and investment that is needed to ensure that optimal use is made of the services provided by the utility. A municipal or provincial utility can participate in the operation only if the province in which it is located has been declared eligible for the provincial financial reorganization and economic development program.

The loan would be provided to finance a global line of credit, under which subloans would be granted solely for projects to upgrade

¹ Data on Argentina's macroeconomic situation was included as Appendix I-1 to document PR-1764 of February 5, 1991.

operations, to rehabilitate existing systems, and, in special cases, to boost and expand existing services. Eligible activities would also include preinvestment and the institutional strengthening of COFAPyS.

3. Benefits

The program would be carried out on the terms proposed so that provincially-controlled sanitation companies could become fully independent. This new status would enable these companies to operate as commercial concerns which in most cases was not possible in the past. At the same time, this would eliminate one of the chief causes of provincial deficits since each company would have to apply financial principles in order to become financially independent.

With respect to planned investment, the program would mark the first stage in the recovery of the Argentine sanitation sector which has been left to deteriorate steadily for the last 30 years.

4. Risks and guarantees

Given the institutional weakness and financial condition of utilities in the country's sanitation sector, the most serious risk to the program is the capacity of these companies to make efficient use of available resources. Although there are still no signs of change in the guidelines set out in government economic policy, the unprecedented nature of this initiative to privatize utilities in the sanitation sector could be opposed by a number of provincial governments while the program is implemented. In such a scenario, those governments that opposed the process would be ineligible for financing under the loan, a factor that could hamper the program.

To overcome these risks, this operation has been linked to efforts aimed at reforming the provincial governments and it has been decided that the proceeds of the loan should be used for sanitation activities. Accordingly, works and technical assistance for water and sewage utilities would not be eligible for financing under the provincial program.

5. Records

Management's conclusions with respect to the study on the water and sanitation program are given in the loan proposal. The project report and the working documents used for the study are available on request at the Sanitation and Urban Development Division of the Project Analysis Department.

I. INTRODUCTION

A. General features

- 1.1 This document proposes the financing, jointly with the World Bank, of a global program designed to grant credit to provincial and municipal water and sanitation utilities. The IBRD approved the corresponding loan on December 18, 1990. The objectives of the program would be the institutional strengthening of these utilities to make them financially self-sufficient and improve their operating capability, as well as to upgrade the quality and coverage of the services by executing works to rehabilitate, enlarge and expand them. The reform of sanitation companies and the upgrading of their operations would be the first step in an effort to attract investment by the private sector.
- 1.2 The total cost of the program is estimated at US\$250 million. The individual amounts of the IDB and World Bank loans would be \$100 million, which in the case of the IDB would include the equivalent of US\$30 million in australs. In the analysis of the operation, its principal components were analyzed as a function of the requirements of the sanitation sector, the government policies and plans to which the objectives of the proposed program are responsive, and the justification of the latter in terms of the IDB's operating guidelines for Argentina.

B. Characteristics of the utilities

- 1.3 The utilities in Argentina's sanitation sector generally operate with severe shortcomings in their management, policies, and systems, inappropriate procedures, little or no way of metering service, and inadequate rates. This means that operations are costly, revenues are insufficient and little attention is paid to repair, rehabilitation, and expansion of coverage. In most cases, considerable subsidies are needed from provincial and municipal governments to keep the utilities in operation.
- 1.4 Since decentralization of utilities in 1980, which until then had been part of the Obras Sanitarias de la Nación (OSN), investments in the sector have dropped off considerably, and this has caused coverage ratios to fall. At present only 60% of the urban and concentrated rural population is connected to water supply systems and only 35% have sewer service. This is below the average for the region as a whole.

C. Priority of institutional strengthening

- 1.5 Because of the need to upgrade the institutional and financial capability of the utilities to devise and execute investment projects in works, the institutional strengthening that is one of the program's objectives is considered to be a top priority. The priority attached to this part of the program is evident in the following features of the proposed operation:

1. The operation includes a component for operational improvement that involves those activities in the program that are targeted at institutional strengthening. Because of their nature and objectives, those projects would be tantamount to technical assistance operations.
2. The operational improvement component would in most cases be carried out in one phase, which would precede the phase for execution of the components for rehabilitation and expanding the coverage of the service, which are the components involving investments in works.
3. The local counterpart in subloans for operational improvements would be only 10% of the cost of the respective project. In keeping with the Bank's policy, for the technical assistance component that the operational improvement projects would involve, approval of the subloans would not be contingent upon applicant utility compliance by each applicant utility with the minimum rate requirement established in that policy.

D. Execution of works

- 1.6 To qualify for subloans to execute works, the utilities would have to have the institutional and financial capacity needed to operate their system and have the legal authority and autonomy to administer their liquid assets, conclude contracts to execute works and purchase goods and services, manage their customers' accounts, set up and operate a business-type financial accounting system and select, hire, promote and discipline their personnel. The applicant utility will have to be in compliance with the minimum rate requirement stipulated in the IDB's policy.

E. Mix of components

- 1.7 As for the mix of components, it is important to realize that while institutional strengthening is essential in order to create the basic conditions that an efficient operation requires, a rehabilitation project can have a considerable impact on efficiency, especially on the utility's finances and the quality of the service.
- 1.8 The rehabilitation projects were justifiably given more priority than projects to expand service coverage by building new works. This explains the differences in the percentages of the local counterpart assigned to the rehabilitation component, the expansion component and the component for execution of new works.
- 1.9 The program also includes studies and institutional strengthening for the executing agency of the operation. The studies to be financed could include those on new systems, others on projects and measures of an environmental nature, and those that may be required

in some cases for an examination or execution of privatization procedures.

F. Global credit program

- 1.10 With public finances as they now are in Argentina, measures must be instituted to eliminate or reduce the fiscal deficit. Hence, the provincial and municipal governments have decided to eliminate gradually the subsidies given to water and sewer utilities.
- 1.11 The basic prerequisite for success here is that the utilities manage to become financially self-sufficient, one of the principal objectives of the proposed operation. Hence, the operation is being proposed as a global credit program in which the borrower of the IDB and World Bank financing is the Argentine State. The funds from the loans would be lent to the executing agency, the COFAPyS, on the same terms granted the borrower. The COFAPyS would, in turn, channel the subloans at interest rates that reflect the cost of the financing (from the IDB and the IBRD), plus a spread of two percentage points to cover the exchange risk incurred by the Banks (Exchange Risk Stabilization Fund), since the subloans would be denominated in dollars, and another two percentage points to cover the administrative costs of the Program.
- 1.12 The COFAPyS will have to have sufficient revenues to finance all the expenses that execution of the program will involve and to generate sufficient revenue to ensure timely servicing of the debt.

G. Government policies and IDB operating guidelines

- 1.13 The principal purpose of the measures instituted by the Government has been to increase fiscal revenues and reduce public spending. Among the measures calculated to reduced outlays are the amendments aimed at reducing the federal government bureaucracy, limiting the number of public works and activities under way and privatizing public companies in order to remove them from the State budget, improve their operating efficiency and upgrade the quality of service. As for the increase in fiscal revenues, an in-depth reform of the tax system has been instituted and important measures have been adopted to improve its administration.
- 1.14 Another important element in the economic policy concerns decentralization and its impact on the organization and operations of the provincial governments and their public utilities. A program has been designed for this, and it will receive World Bank and IDB financing. Finally, the reform of the utilities and their privatization is also a fundamental objective of the government's national strategy, for which the World Bank approved financing of around US\$325 million.
- 1.15 The objectives of the program to make the utilities in the sanitation sector financially self-sufficient, to strengthen them

institutionally and to improve the quality and coverage of service are consistent with the Argentine government's economic policy objectives as described above. The operation will also help to create conditions that would facilitate possible private sector participation in the sanitation sector. The program is also consistent with the IDB's operating guidelines with respect to Argentina.

H. Request and missions

- 1.16 The loan request was presented to the Bank on September 7, 1990. An identification mission was conducted in November 1989, an orientation mission in June 1990, and an analysis mission in September of that year.

II. FRAME OF REFERENCE

A. Assessment of the sector

1. Background

- 2.1 Since the early part of this century, the urban water and sewer subsector in Argentina has received preferential attention from the government. Obras Sanitarias de la Nación (OSN), with its headquarters in Buenos Aires and offices in all the provincial capitals, was in charge of the subsector's development for purposes of increasing coverage and the quality of the services. Accordingly, it was subsidized by the Government and had a rate policy geared to income redistribution and not metered consumption.
- 2.2 In 1980, a decision was made to turn the provincial systems over to the provincial governments, thereby limiting the OSN's jurisdiction to Greater Buenos Aires (the Federal Capital and 13 municipalities in Buenos Aires Province). While that measure did tend to get the provinces more actively involved, there was no attendant economic support or technical advisory assistance at the central level, which is essential if the systems are to function properly and if the sector and operating policies devised are to help it achieve sustained development.
- 2.3 During the 1980s, deteriorating operation conditions and declining maintenance in numerous provincial utilities led to higher operating costs and reduced the return on new investments. From an operational and business standpoint, the decline has also had a significant impact in terms of inadequate rates, the presence of major water losses within the systems (unaccounted for water), and a high customer delinquency ratio.
- 2.4 The following table shows sector coverage for 1980 and 1985. The figures for those two years are compared with similar figures for Latin America and the Caribbean as a whole. As one can see, coverage of urban service in Argentina remains almost unchanged in relative terms, while for the region as a whole (defined in terms of countries that are Bank borrowers) coverage has increased in both absolute and relative terms.
- 2.5 As for the rural subsector, though the increase between 1980 and 1985 was just 2.4%, water supply coverage was consistently higher than the rate for the region as a whole. In this subsector, with IDB financing and active community participation, five stages of the national program have been under way since 1964, under the direction of the National Rural Water Supply Service, which in 1988 became the Federal Water and Sanitation Board (COFAPyS).

<u>Sector</u>	<u>1980</u>	<u>%</u>	<u>1985</u>	<u>%</u>
I. Urban Population (thousands)				
<u>Argentina</u>	22,359		25,114	
- With water service	14,636	65.0	16,573	66.0
- With sewer system	8,060	36.0	9,432	37.0
<u>Region</u>	216,894		252,195	
- With water service	161,764	75.0	202,354	80.3
- With sewer system	100,437	46.0	121,034	48.0
II. Rural Population (thousands)				
<u>Argentina</u>	5,504		5,450	
- With water service	1,505	27.0	1,600	29.4
<u>Region</u>	126,000		131,449	
- With water service	23,558	18.7	34,052	25.9

- 2.6 It is apparent that the deterioration within the urban subsector is the result not just of decentralization without technical support, but also of these utilities' fiscal situation and their financing policies. In the period from 1980 to 1987, annual investments came to US\$85 million, the lowest they had been in the last 30 years.
- 2.7 Given how important proper water supply and sewer services are to health and urban development (85% of Argentina's population of 33 million live in urban areas), in 1988 the Secretariat of Water Resources completed the National Sanitation Program for the 1988-2003 period, with UNDP financing. That program is the basic supporting document for this operation.
- 2.8 What follows is a summary of the assessment of the sector. Annex 1 is the sector policy paper that names the COFAPyS as the agency responsible for the sector.

2. Institutional, financial and operational problems

- 2.9 The assessment of the operators in the country's various provincial and municipal jurisdictions shows that they have been severely weakened both institutionally and financially. They have serious shortcomings, so much so that in most cases they lack the capacity and efficiency needed to accomplish their basic objectives.
- 2.10 In general, the operators need to have their organizational structure shored up in such a way as to put the "service" concept ahead of the works construction concept. They are also in need of support in the areas of organization and methods to enable them to compile data properly and devise and implement administrative standards and procedures; they must improve their planning tools so

that they are able to develop institutional and financial measures to be adopted in the future, allocate resources and set up the necessary operational and management control systems. These deficiencies have meant that as a rule they have had to rely heavily on the provincial budgets.

- 2.11 As for the administrative-accounting systems, most of the companies do not have satisfactory financial data systems, the kind needed to monitor and control the financial-assets situation as it evolves, to accurately ascertain the costs of the services that they provide and establish suitable rate mechanisms. To this must be added the fact that the individual meter, as an instrument essential for measuring consumption and establishing proper rate policies, is seldom installed except for large-scale consumers.
- 2.12 The billings/collections ratio has been relatively low. An overview of these utilities' delinquent accounts ratios shows that in some provinces, over 40% of the accounts may be delinquent. Furthermore, accounts are now usually billed on a bimonthly basis, though studies show that where inflation is higher than 3% per month, a monthly billing system is preferable; otherwise collections are never more than 90% of the real value of the amount billed.
- 2.13 These companies are characterized for the most part by high turnover, over-staffing, and inadequately trained professional and technical personnel. The personnel used to build and install sanitary facilities are, as a rule, qualified. A special effort must be made to raise the level of management personnel. They should be given an intensive training program and incentives so that selection is based on professional and technical merit.

3. Water supply coverage

- 2.14 A total of 9.4 million inhabitants (8.6 million in urban areas and 800,000 in rural areas), and 2,073 communities (138 urban and 1,935 rural) have no service. There are places that have no service because of the high levels of arsenic and fluorine in the sources of water supply. Cities with populations of over 60,000 have a low water supply coverage (60-65%). In most cases, what is needed are improvements to the existing physical plant and institutional development of the entities that supply the services at the provincial and/or municipal level.

4. Sewer service coverage

- 2.15 A total of 17.4 million inhabitants and 3,594 communities (577 urban and 3,017 rural) are without sewer service. Nearly all cities with populations of over 60,000 have service, though the coverage is low and service coverage needs to be improved and/or expanded. The companies are generally provincial or municipal and,

as a rule, manage both utilities. The OSN is the utility company for Buenos Aires. The existing plant also needs improvement.

5. Community participation

- 2.16 Community participation through intermediary institutions (cooperatives, boards, development corporations, neighborhood committees, and so on) is essential for expanding or upgrading existing services. In late 1987, 10.1% of the water supply coverage was handled by private companies and cooperatives; 15.6% by municipalities, 43.2% by provincial agencies and the remaining 31.1% by the OSN (Greater Buenos Aires).

6. Quality and conservation of water resources

- 2.17 Water resources are unevenly distributed in the country. Population is also unevenly distributed: some areas are heavily populated while others are virtually uninhabited. These factors complicate the problem of conserving the country's surface and ground water resources.
- 2.18 The degradation and pollution of water resources have been caused mainly by untreated industrial effluents, urban waste water, storm water entraining pollutants, infiltration from leaching cesspools, effluents carrying pesticides and fertilizers, spillage of oil and oil products, tanker discharges, industrial sludge, thermal pollution, leaching of solid wastes, and salinization of aquifers.
- 2.19 Pollution control is decentralized at the provincial level, and most provinces do not have pollution standards or an agency to monitor pollution. Accordingly, a document has been prepared to establish basic criteria and features to be considered in environmental impact assessments in the evaluation of projects under the program.

7. Waterborne diseases

- 2.20 The common waterborne diseases, such as the diarrheal ailments that strike mainly children under the age of five, can be caused by bacteria, viruses or parasites. The bacteria commonly present in the environment are *Escherichia coli* in its various varieties, *shigella* and salmonella (typhoid or paratyphoid). In addition, the presence in the water of inorganic elements such as arsenic and fluorine, at higher than acceptable levels, is linked to their own pathologies such as waterborne arsenic poisoning and fluorosis.
- 2.21 There are waterborne diseases that can influence the development of productive capabilities, since they weaken the strength of the labor force; high mortality associated with some diseases calls for a considerable increase in investments in health, with water supply and excreta disposal being the most important.

8. Findings of the assessment

2.22 The assessment, which is the basis of the National Sanitation Program whose initial phase the COFAPyS proposes to carry out with IBRD and IDB financing, indicates that the actions should be ranked in the following order:

- (a) Preferential attention for operational improvement of the entities providing service and of the existing facilities, involving the following: (i) institutional strengthening; (ii) marketing, to include the planning and levying of rates with metered service; (iii) improvement of the physical plant, including water quality, and better operation and maintenance, and (iv) training.
- (b) Optimization and rehabilitation of the existing systems as a cost-effective means of deferring investment to expand capacity.
- (c) Execution of capacity expansions and construction of new works to increase coverage and supply communities now without service.

B. National sanitation program - goals

2.23 The national sanitation program was prepared by the Secretariat of Water Resources with the help of consultants, on the basis of a nationwide survey. Its coverage goals for a 15-year period are to provide 90% of the urban and concentrated rural population with water service, and 70% with sewer service.

2.24 It also points out that to accomplish the coverage and quality goals set for the services under the program, around US\$520 million would have to be invested each year. Finally, it notes that to undertake a program designed only to improve the sector's operations and rehabilitate existing facilities, an investment in the order of US\$2 billion would be needed over that 15-year period.

C. Evaluation of previous loans in the sanitation sector

1. Rural water supply program

2.25 Over the last 25 years, the IDB has made a sustained and significant effort in Argentina, with seven loans financing the rural water supply program that is now in its fifth stage.

2.26 The population that benefitted from the first four stages of the program numbers some 1.3 million persons. The fifth stage would benefit another 400,000.

2.27 The role of the IDB in the rural sector has been a fundamental one, since for all practical purposes it has been the only relatively

stable source of financing for water supply services in rural areas. The IDB's role made it possible to increase the coverage of the rural water supply systems, in contrast to what has happened in urban areas where there has been virtually no increase in coverage.

(a) Previous stages: stages one to four

- 2.28 The numbers, approval dates and amounts of the IDB loans to finance the four stages of the rural water supply program that have already been executed are as follows: first stage, 114/TF-AR, August 1965, US\$5.0 million; second stage, 302/SF-AR, June 1971, US\$12 million; third stage, 14/IC-AR and 526/SF-AR, November 1977, US\$37 million (portions earmarked for the rural component); fourth stage, 83/IC-AR and 661/SF-AR, October 1981, US\$53.2 million.
- 2.29 The population that benefitted exceeded the goals by 12%. The factors that contributed to that result were as follows: (i) the construction of systems in places where the population was higher than originally projected; (ii) increases, in local currency terms, in the value of the dollar, which was the denomination for the bulk of the IDB's financing; and (iii) savings on costs. In the second, third and fourth stages, per capita real investment was 27%, 42% and 47%, respectively, below the estimated figures.
- 2.30 There were delays in starting disbursement of the loans and actual execution took longer, on average, than the time periods originally established for each stage. The principal causes of these delays were as follows: (i) the time that initially had to be devoted to developing policies and procedures for execution and the negotiations involved in the signing of the first federal-provincial agreements; (ii) on several occasions, the need to settle legal questions involving bidding; (iii) frequent changes in officials and authorities in the provincial and federal governments; and (iv) the effects of the deterioration in public finances on the timely availability of the local counterpart.
- 2.31 At every stage in the program, there have been components intended for the institutional strengthening of the management boards set up for each system. Obviously, this is not a question of duplication; instead, because the executing agencies changed with each stage, each one had to be given the necessary technical assistance. The National Water and Sanitation Authority [Servicio Nacional de Agua Potable y Saneamiento] (SNAP) would be responsible for the first four stages of the program.

(b) Fifth stage

- 2.32 In March 1988, the Bank approved loan 545/OC-AR, for US\$70.0 million, to finance the fifth stage of the Program. The total cost of that fifth stage was estimated at US\$140 million equivalent. Execution of the operation is currently in the hands of the COFAPyS.

- 2.33 To accomplish this stage's goal of 400,000 beneficiaries, there are plans to build approximately 110 water supply systems for some 130 communities. The Bank has approved a total of 70 systems; of these contracts have been awarded for nine systems, while bidding is under way on another 24 systems.
- 2.34 In recent months, the program has been given a considerable boost. Nevertheless, the operation is being executed slowly, primarily because: (i) projects need frequently to be reformulated after their initial submission to the Bank; (ii) viable projects in the eligible population-size range (a maximum population of 15,000) are now harder to identify and appraise because the smaller and simpler projects have already been executed; and (iii) a slump in the construction sector means that many contractors participate and bids are evaluated slowly. As of January 31, 1991, disbursements from loan 545/OC-AR totaled US\$6.3 million, or 9% of the IDB financing.

(c) Compliance with the clauses of the loan contract

- 2.35 The information on the balance of the COFAPyS loan portfolio, i.e., total amount overdue broken down by provinces and the length of time overdue, the balances of the accounts receivable as of the end of the respective year, was presented to the IDB after an audit by an independent firm of public accountants. It shows that the balances as of June 30, 1990 of the loans for stages I through IV of the rural water supply program include an overdue percentage of only 3.86%. This is low and, therefore, satisfactory.
- 2.36 To make better information available to management, to process that data more effectively and be in a position, in 1991, to satisfactorily comply with the contractual requirement of presenting financial statements, the COFAPyS hired a firm of independent public accountants. This firm instituted an accrual basis accounting system, posted the balances, prepared an opening balance sheet and the program's financial statements as of June 30, 1990, and trained the executing agency's accounting staff. In addition to those services, contracts have been awarded for a review of the statements and an audit of operations, as well as advisory assistance on systems and computers.
- 2.37 The COFAPyS has completed the contracting for the consulting services in connection with: (i) the establishment of data systems in the financial-accounting and administrative areas; and (ii) the review and updating of the design standards and criteria for water supply and sewer systems. These services would help considerably in making more accurate information available concerning compliance with program rate schedules and in providing more effective monitoring of contractual conditions.
- 2.38 The delay in contracting the above-mentioned advisory services and the budgetary constraints were some of the reasons why the

executing agency did not submit to the Bank the training program planned as one of the program's activities.

(d) Provisions regulating rates

- 2.39 There are 664 systems in the rural water supply program that must comply with the rate clause agreed upon with the Bank. Those systems must obtain sufficient revenues to cover all their operating expenses, including those relating to administration, operation, maintenance and depreciation. Depreciation may be excluded in the case of smaller rural systems, defined as those that supply communities with a population of under 3,000.
- 2.40 Compliance must be demonstrated on an annual basis. In 1990, 513 systems, or 77% of the total of 664, submitted data to the COFAPyS in accordance with the rate schedule provision during the previous year, and of these, 393 were in compliance, while 120 failed to comply. In relative terms, the systems reporting compliance represent 77% of the 513 systems whose rate schedule coverage has been ascertained.
- 2.41 Over 70% of the systems where the rate clause is ignored serve localities with under 3,000 inhabitants or provinces that participated only in the first two stages of the rural water supply program. In this connection, the IDB's evaluation report on the second and third stages of the rural water supply program underscores the lack of an effective system to store and analyze data, and states that the situation might be different if the data were stored and processed by means of the available data processing equipment. ^{1/} Hence, the consulting services mentioned in paragraph 2.37 are essential.
- 2.42 Considering the inflationary pressure that Argentina has experienced and the resulting erosion in the real value of rates, the figure of 77% cited above for systems that are in compliance could be considered reasonable. Moreover, the low delinquency percentage, i.e. 3.86% in program credit balances, can be taken as a sign that, overall at least, the rates cover operating expenses and allow for internally generated funds in the managing boards that are sufficient to service the debt corresponding to 50% of the project's total cost.
- 2.43 The contract for loan 545/OC-AR stipulates, as one of the conditions for the provinces to take part in the program, that the water supply systems from previous stages must be in compliance with the rate clauses or, failing that, that the corresponding Provincial

^{1/} "Ex Post Evaluation - Rural Water Supply Program - Stages II and III - Argentina - Loans 526/SF-AR and 302/SF-AR (OER-57/89)," Operations Evaluation Office, Office of the Controller, Inter-American Development Bank, January 1989.

Rural Water Supply Service must be taking appropriate steps to comply. Through its office in Argentina, the Bank is using the contractual clause referred to in the preceding paragraph to declare whether or not the systems that apply for financing from the program are eligible.

2. Water supply projects for the urban sector

- 2.44 The IDB has financed two water-supply projects in urban areas. One of these operations in the amount of US\$98 million was loan 552/OC-AR approved in November 1988 for a water supply project for the western section of the city of Buenos Aires and the other in the amount of US\$46 million approved in November 1977 employed the proceeds of loans 14/IC-AR and 526/SF-AR for the OSN urban subprogram for the La Matanza water supply project. 1/

(a) Water supply project for the western section of Buenos Aires

- 2.45 The water supply project for the western section of Buenos Aires, at an estimated value of US\$245 million equivalent, was intended to supplement existing water services in the areas of Tres de Febrero and Morón in Buenos Aires through the replacement of their existing water supply, which was ground water, with a supply of properly treated surface water. The loan also helped to finance the expansion of the microm easurement program implemented by OSN, which carried out the project, and contributed to the latter's institutional strengthening with financing from the World Bank.
- 2.46 The Government of Argentina has not yet granted the authorization requested by the OSN for the project to proceed. As part of the privatization program, the government has also decided to study the possibility of turning over to the private sector those services that are currently provided by the OSN. The Bank is monitoring the project closely and it is expected that a final decision will be made in the second quarter of 1991.

(b) OSN urban subprogram - La Matanza water supply project

- 2.47 This project successfully achieved the subprogram objective of extending coverage of water service to approximately 1,100,000 inhabitants in the La Matanza district and other areas of Buenos Aires. An additional goal of installing 440,000 meters in Buenos Aires and other cities could not be fully met because the executing agency, the OSN, had its jurisdiction curtailed. It is no longer responsible for the whole country but for the city of Buenos Aires alone, where 200,000 meters were installed.

1/ As previously mentioned, some of the proceeds of loans 14/IC-AR and 526/SF-AR were used to finance the third stage of the rural water supply program.

- 2.48 Because the meters could not all be installed as planned, it was found that the final cost of the subprogram of US\$85.6 million equivalent was well below original the estimate of US\$130.5 million equivalent. The amount of the IDB loan of US\$46 million originally approved was reduced to US\$26.2 million, or 30.6% of actual investment made.
- 2.49 The IDB loan contracts contained a rate clause that was to be applied to the suburban area of La Matanza alone. Given the nature of the OSN's present accounting system, additional statistical information would therefore have to be furnished to supplement the accounting figures to demonstrate compliance with the rate clause, and this the OSN has done successfully.

The operation was carried out slowly over a period of seven and one half years. The term originally established for completion was four years.

D. Program for financial restructuring and economic development of the provinces of Argentina

- 2.50 The Bank has processed a loan for the financing of the program for reform of the provincial governments of Argentina (PR-1764 of February 5, 1991), under a program valued at US\$575 million to be cofinanced with the World Bank. The basic objective of this operation is to carry out a fiscal clean up of the provincial governments through projects for technical assistance and public investment that would have the immediate effect of improving their current accounts. All of the provincial governments and the municipality of Buenos Aires may participate in the program provided they satisfy the eligibility criteria that have been established. A list of these criteria, their applicability, and the scope of the operation is given in the above-mentioned document.
- 2.51 The provincial development program is one of three programs drawn up by the federal government to institute profound changes in the Argentine economy, leading to the reduction and eventual elimination of the public sector deficit and sustained economic growth. The time frame for the implementation of these reforms is approximately 15 years. The operation recently considered by the Bank is the first step in the process of implementing needed institutional reform of the provincial governments and giving priority to financing for maintenance, repair, and rehabilitation of infrastructure, while improving their fiscal condition through expenditure recovery mechanisms, cost controls, and the elimination of subsidies to utilities.
- 2.52 The Argentine authorities have indicated that for a provincial government to qualify for the financing that would be available for different sectors, such as the present loan for a sanitation program, it would have to implement the provincial development

program. The relationship between the provincial program and the eligibility of sanitation companies that participate in the COFAPyS program will depend on the corresponding province's eligibility under the provincial program. The objectives of both programs also are similar since they seek to institute reforms aimed at increasing the efficiency and effectiveness of these companies, achieving financial independence, and improving provincial administration.

- 2.53 As mentioned earlier, the availability of financing for specific sectors means that these sectors will be automatically excluded from the provincial program until the resources have been fully committed. Since the operations are cofinanced by the IDB and the World Bank, both institutions have included these conditions in their loans contracts.
- 2.54 Another area in which both the programs complement each other has to do with selection criteria. For a sanitation company to qualify for a subloan under the water and sewer system program the government of the province in which that company is located must have assigned priority to these works under the financial restructuring program as well as the financial and investment action plan.

III. THE PROGRAM

A. Objectives

- 3.1 The National Program is compatible with the Government's sector policy (see Annex 1) and has the following objectives: (a) to strengthen the decentralized system in the provision of services by reinforcing the utilities that supply those services, in an environment of operating efficiency and financial improvement; and (b) to increase the coverage and quality of the services by executing rehabilitation works, optimization and expansion works, paying special attention to remedying any environmental problems that such works might create.
- 3.2 Since the utilities that supply the services are generally subsidized by the provincial or municipal governments, improvement of their financial position, with the ultimate aim of self-sufficiency, will help to reduce the fiscal pressure now being exerted on those governments. This, in turn, will help reduce the federal fiscal deficit, which is one of the paramount objectives the Government is keenly interested in achieving through the public sector reform currently under way.

B. Description

- 3.3 Stage I of the National Water Supply and Sewerage Program is seen as a global line of credit co-financed by the IBRD and the IDB to grant subloans to utilities that serve urban communities with populations of over 15,000 and are eligible according to the criteria established in the Credit Regulations (see Annex 2).
- 3.4 Those utilities will be able to access that line of credit by applying for subloans to finance and execute one or more of the following four types of projects and the project for the institutional strengthening of COFAPys, as described below:
1. Type "A" projects on operational improvements
- 3.5 Projects of this type fall into the following two categories:
- (a) Technical assistance, which will be regulated by the Bank's technical assistance policy whereby, in addition to the consulting services, up to 30% can be included for the procurement of goods and equipment, and compliance with the minimum rate schedule is not required. It has the following subprojects:
 - (i) Institutional development for improvement of the utilities' organizational structure, including the systems for accounting and finances, auditing,

management and logistics, data processing -including software, procurement and inventory. Also included is the development of the utilities' ability to evaluate environmental impact;

- (ii) Marketing, which includes surveying and updating the register of users and installations, design and implementation of rate schedules based on metered service, and improvement of billing and collections and customer service;
 - (iii) Personnel training for the utilities, using different methods such as on-the-job training by similar foreign companies, seminars and training courses in the country and abroad, and the acquisition of teaching materials and equipment; and
 - (iv) Initial operational improvement, which includes the purchase and installation of bulk and individual metering equipment, leak-detection equipment so as to make studies on unaccounted-for water, office equipment and data processing equipment.
- (b) Supplementary operational improvements which, if the utility has satisfied the minimum rate requirement, would be for operation and maintenance equipment, laboratory equipment, workshop equipment, equipment for disinfecting water and such materials as pipes, valves, meters, etc., for dividing water supply systems into sectors and rationalizing their operation.

2. Type "B" projects on rehabilitation

- 3.6 Under this component, resources from the program would be used to finance the purchase of equipment and materials and execution of works to:

- (a) Repair or replace the various components of the system that hamper their efficient operation.
- (b) Optimize existing facilities, especially water and sewage treatment plants.

3. Type "C" projects for expansion and execution of new works

- 3.7 Under this component, funds from the program would be used to finance the purchase of equipment and materials and execution of works to:

- (a) Expand the capacity of all or some of the components of the water supply system such as production, treatment, transmission and distribution.

- (b) Expand the capacity of all or some of the components of the sewer systems such as: catchment, conveyance, treatment and final disposal, including recycling of water.
- (c) Execute new water supply and sewerage works for localities that do not have those services.

4. Type "D" projects for preparation of studies and designs

3.8 Under this component, the contracting of consulting services would be financed to:

- (a) Prepare master plans and specific studies including the prefeasibility, feasibility and final design phases and the environmental impact assessment (EIA) studies and other technical research studies related to the purpose of the program.
- (b) Prepare studies and plans to transform the utilities by means of privatization or by awarding concessions with a view to getting the most efficient companies.

5. Project "E" on institutional strengthening of the COFAPyS

3.9 The program also includes technical assistance for strengthening COFAPyS' capability strictly in connection with this program since funds from loan 545/OC-AR are being used to conduct institutional activities intended to strengthen the execution of the rural water supply program. This project involves the following:

- (a) Institutional development. The following would be included:
 - (i) Improvement of its capacity to promote, evaluate and supervise the activities of the program;
 - (ii) Improvement of its capacity to evaluate environmental impacts;
 - (iii) Improvement of its capacity for financial and credit management;
 - (iv) Improvement of its administrative and logistical system;
 - (v) Improvement of auditing; and
 - (vi) Improvement of its capacity to do technical studies of use at the national level.
- (b) Training. Designed to improve the professional and technical calibre of the staff, this would include the following:

- (i) Seminars and short courses given by duly qualified personnel;
- (ii) Purchase of teaching materials for the above purpose; and
- (iii) Short study trips to visit modern water supply and sewerage companies, especially in the management and business area.

3.10 For execution of this project the COFAPyS will use the financing to hire five experts (see paragraph 5.10), to take part in the institutional development and training activities described above.

C. Total cost and financing

3.11 The total cost of the program is estimated at US\$250 million equivalent, as detailed in the following table:

<u>Cost and Financing</u> (US\$ millions)						
<u>Description</u>	<u>Financing</u>			<u>Local</u>	<u>Total</u>	<u>%</u>
	<u>IDB/OC</u>	<u>IDB/FSO</u>	<u>IBRD</u>	<u>Contribution</u>		
I. Credit						
<u>Type A project</u> Operational improvement	31.5	13.5	45.0	10.0	100.0	40.0
<u>Type B project</u> Rehabilitation	21.0	9.0	30.0	15.0	75.0	30.0
<u>Type C project</u> Expansion and execution of new works	12.3	6.0	18.7	25.0	62.0	25.0
<u>Type D project</u> Studies	3.3	1.2	5.0	-	9.5	3.7
<u>Type E project</u> COFAPyS institutional strengthening	1.2	-	1.3	-	2.5	1.0
II. Inspection and supervision	<u>0.7</u>	<u>0.3</u>	<u>-</u>	<u>-</u>	<u>1.0</u>	<u>0.3</u>
Total	70.0	30.0	100.0	50.0	250.0	100.0
Percentage	28.0	12.0	40.0	20.0	100.0	

- 3.12 As shown above, external financing, which altogether accounts for an average of 80%, ranges from 60% to 100%, depending upon the type of project, as follows:

Type A projects	90%
Type B projects	80%
Type C projects	60%
Type D projects	100%
Type E projects	100%

- 3.13 That table also shows that to achieve the ranking recommended in the national program, 70% of the cost would be earmarked for operational improvements and rehabilitation, while only 25% would go toward expansions and new works.

D. IDB and IBRD financing

- 3.14 The IDB financing to the Argentine Nation would consist of a loan in the amount of US\$70 million in foreign exchange from the ordinary capital, which would be amortized over a 25-year period, at a variable interest rate with a six-year grace period, and a loan in australs of US\$30 million equivalent, at an interest rate of 3%, to be amortized over 25 years with a six-year grace period.
- 3.15 The commitment period for the IDB funds would be four years for works, with a total disbursement period of six years.
- 3.16 The commitment fee is 0.75% per annum for the loan chargeable to the ordinary capital and the contribution to the inspection and supervision fund is 1% in both cases.
- 3.17 The IBRD financing would be US\$100 million in foreign exchange repayable over a period of no more than 17 years at a variable interest rate. The commitment fee would also be 0.75% per annum, but there would no be charge for inspection and supervision. The commitment period would be five years and the disbursement period seven years.
- 3.18 Before the first disbursement is made, the borrower will have to demonstrate to the Bank's satisfaction that the IBRD loan has been signed (see Proposed Resolution).

E. Local counterpart

- 3.19 The local counterpart funding will be supplied by the subborrowers, which will be obliged to contribute at least 70%. The remaining 30% will be supplied by the province or the municipality, as described in paragraph 6.19.

IV. EXECUTION OF THE PROGRAM

A. General mechanism

- 4.1 Execution of the program would be carried out by COFAPyS and the subborrower entities, whose relationship for purposes of the program will be governed by the following documents:
- (a) The relevant stipulations spelled out in the eventual loan contracts between the IDB, the IBRD and the Argentine Nation;
 - (b) The Memorandum of Agreement between the Ministry of Economic Affairs and COFAPyS, stipulating the conditions and procedures for transfer to COFAPyS of the proceeds of the loan and both the obligations that it would assume as executing agency for the program and the federal government's obligation to allow the recoveries from loans for rural water supply projects to be used for financing the administrative costs of this program. The financing would be reimbursable (see paragraph 5.18).
 - (c) The Credit Regulations for the program and its annexes, the content of which has been agreed on in principle by the Banks with COFAPyS and the Ministry of Economic Affairs, and the effectiveness of which is one of the preconditions for the first disbursement (see Proposed Resolution);
 - (d) The agreements to be concluded between COFAPyS and the provincial and municipal governments for the purpose of enforcing the obligations assumed by the province as guarantor of the subloans granted by COFAPyS to the subborrower; and
 - (e) The agreements and subloan contracts to be signed by the COFAPyS and the utilities, setting out the financing terms and conditions and the plan for defraying the costs of the entire project.

B. Execution of the projects

- 4.2 The subborrower entities will be responsible for executing the type A projects on operational improvements, the type B projects on rehabilitation, the type C projects on expansion and new works, and the type D projects on studies. The COFAPyS itself will execute the type E projects on institutional strengthening.

C. Indicative sample of projects

- 4.3 The COFAPyS currently has a pipeline of projects prepared by the provincial and municipal entities for US\$450 million equivalent (see paragraph 6.28), including the projects in the above-mentioned indicative sample. These projects, except for those in the

indicative sample, constitute a potential demand, but have not been appraised using the criteria set out in the program.

- 4.4 To prepare the indicative sample, COFAPyS selected seven projects from the previous universe, namely five water supply projects (including three in operational improvements) and two sewer system projects, and asked the respective entities to prepare the projects following the technical, financial, environmental and socioeconomic guidelines normally used in the country for projects of this type. With assistance from four consultants hired with funds provided under the PAHO/IDB agreement, these seven projects, totaling US\$64.8 million equivalent, were prepared. The conclusion was that six of them, involving the sum of US\$55.6 million equivalent (representing 23.5% of the estimated cost of the type A, B and C projects), will meet the basic requirements of the program. Applying the criteria given in the Credit Regulations to the technical, economic, institutional, and financial analysis, it was found that the projects could be financed under the program. Final eligibility will naturally depend on additional criteria that may be applicable to utility companies and the provinces under the provincial program for financial restructuring and economic development.

D. Disbursement period

- 4.5 For the program, a six-year disbursement period has been set (for the prospective contract with the IDB) and a seven-year disbursement period (for the IBRD loan contract).
- 4.6 These time periods are considered realistic when one considers that the projects for operational improvements and studies could take two to three years, while investments in type B and C projects could take another three or four years. This has been the experience with similar projects in Argentina.

E. Disbursement schedule

- 4.7 On the basis of the program's features as described, the schedule of disbursements for the IDB and IBRD loans is expected to be as follows:

(US\$ millions)

Loan	Y e a r s							Total	%
	1	2	3	4	5	6	7		
IDB/OC	1.4	1.7	7.3	14.7	17.5	27.4	-	70.0	28.0
IDB/FSO	0.6	0.8	3.2	6.3	7.5	11.6	-	30.0	12.0
IBRD	2.0	2.5	10.5	21.0	25.0	23.0	16.0	100.0	40.0
Local Ct.	<u>1.0</u>	<u>1.5</u>	<u>5.5</u>	<u>10.5</u>	<u>12.5</u>	<u>12.0</u>	<u>7.0</u>	<u>50.0</u>	<u>20.0</u>
Total	<u>5.0</u>	<u>6.5</u>	<u>26.5</u>	<u>52.5</u>	<u>62.5</u>	<u>74.0</u>	<u>23.0</u>	<u>250.0</u>	<u>100.0</u>

F. Procedure for bidding on construction works and equipment procurement

- 4.8 The Banks have different limits above which international competitive bidding is required. For the IDB, that limit is US\$200,000 for the execution of works and the procurement of equipment. The IBRD's limits are US\$4.0 million and US\$200,000. There is also a marked difference between the number of member countries in the IDB and those in the IBRD.
- 4.9 To remedy the issue of the procurement policy between the two Banks, the COFAPyS will prepare a breakdown of projects by province and will see to it that the proportion of each Bank's respective contributions is maintained for the duration of the program.
- 4.10 The procedures to be applied in using the loans from the two Banks appear as Annex B of the Credit Regulations and of the prospective loan contract and have been discussed and agreed upon in principle with the COFAPyS.
- 4.11 As for the announcement of the bidding, Annex B stipulates that the subborrowers are obliged to advertise the international competitive bidding in two international publications when the contract value exceeds US\$1.0 million in the case of construction works and US\$200,000 in the case of procurement.

G. Procedure for selecting and hiring consultants

- 4.12 The Bank's current policy on the hiring of consulting services, which calls for international competition for contracts valued in excess of US\$200,000, will continue to be used. The IBRD does not have any limit as to amount and requires only a short list.
- 4.13 When the amount involved is below that limit, the procedure to be followed shall conform to current Argentine requirements, which call for competition based on merit in all cases.
- 4.14 The procedure to be applied for hiring consultants has been discussed with the COFAPyS and appears as Annex C of the Credit Regulations and the prospective IDB loan contract.

H. Subloan conditions and project eligibility requirements

- 4.15 The Credit Regulations, which appear as Annex 2, specify the criteria that the COFAPyS is to follow for declaring subloans eligible.
- 4.16 The principal eligibility criteria are as follows:
- (a) Provincial program - To make good on these guarantees, the provincial governments will pledge the resources that the federal government transfers through the federal revenue

sharing system, pursuant to current legislation in accordance with regulations established under the program for financial reorganization and provincial development. For a municipal or provincial utility to qualify for financing under the program, the province in which it is located must be eligible for the provincial program for financial restructuring and economic development.

- (b) Technical and economic criteria - Each project must be evaluated in order to determine its technical and economic feasibility and must represent the least-cost alternative. The cost-benefit analysis must also show that the net present value is positive, discounted at a rate of 12%.
- (c) Environmental considerations - An environmental impact assessment (EIA) will have to be made for each project as a prerequisite for eligibility. The study will have to spell out the measures to be taken to mitigate or eliminate the project's negative environmental effects. The Credit Regulations stipulate the environmental assessment guidelines, which are to be completed as environmental guide by an international consultant to be hired with program funds. At the present time, there are general criteria that were prepared by a national expert contracted with funding provided under the PAHO/IDB agreement. The COFAPyS will have to set up an environmental unit within its operational framework. That unit will be staffed by the aforementioned international consultant and national support personnel. The hiring of this expert and the establishment of the environmental unit are prerequisites for the first disbursement (see Proposed Resolution).
- (d) Institutional - Each subborrower must be legally incorporated with full administrative and financial capacity to operate as a business and provide users with adequate service. As a minimum, these entities must have the authority to: (i) manage their assets and liabilities; (ii) contract for works and services; (iii) administer their customer accounts, including the authority to establish rates and apply corrective measures; (iv) establish an accrual-basis financial accounting system, and (v) administer their personnel, including the capacity to hire, promote, and discharge staff and to set wages and salaries.
- (e) Financial - (a) All entities, regardless of their financial status, will be eligible for subloans that enable them to execute type A projects involving technical assistance for operational improvements, including: (i) institutional development, (ii) business improvements, (iii) the first phase of institutional improvements, and (iv) training, as well as type D projects on studies. These projects need not comply with the minimum rate requirement but at least 70% of the counterpart funding will have to be provided. (b) For all other

projects, each subborrower will be required to have sufficient revenues to cover its operating costs (minimum requirement) and, in order to qualify, will have to present a financial plan demonstrating that those revenues will be sufficient to service the debt, pay its share of the counterpart funding, and generate funds for its own future investment plan.

- 4.17 All of the type B projects (rehabilitation) must be accompanied by a type A project on operational improvements, designed to increase its operating efficiency and provide good service at the lowest possible cost. These projects must include at least the following elements and a schedule for implementation thereof:
- (a) A metering plan for measuring water consumption for at least 30% of the connections representing at least 50% of the system's total consumption;
 - (b) Design and implementation of a rate schedule system based on metered consumption;
 - (c) A plan to improve billing and collection and to achieve a target of at least 85%;
 - (d) A plan for improving operation and maintenance, including human and financial resources.
- 4.18 In order to ensure fulfillment of the program objectives and to facilitate repayment of the subloans, the financing from COFAPyS and the maximum amortization periods have been staggered. Repayment will begin six months after the date set for the final disbursement. The periods are shown below:

<u>Type</u>	<u>Description</u>	<u>Period</u> (years)
A.	Operational improvements	12
B.	Rehabilitation	12
C.	Expansion and new works	16
D.	Studies	6

- 4.19 The interest rate to be charged for the subloans granted would be the same as the IDB and the IBRD are charging, plus four percent per annum to cover: (i) the program's administrative costs (two points), and (ii) the establishment of an exchange risk regularization fund (another two percent) to cover any exchange losses that may result from the basket of currencies in which the IDB and IBRD loans will be disbursed. The provincial and the municipal governments, as the case may be, will guarantee the national

government that they will service the debt in respect of the subloans and pay the respective local counterpart funding.

- 4.20 The funds from the program can be used to finance projects executed in urban areas having a population of over 15,000.
- 4.21 As for the limits that would be applied to the use the IDB and IBRD financing, the Credit Regulations include the following provisions: (i) the discretionary limit is US\$5.0 million, save for the first three projects that the COFAPyS processes, which will have to receive clearance from the Bank (see Recommendations); and (ii) unless clearance is given by the IDB or IBRD, program funds may not be used to grant subloans: (a) in amounts exceeding US\$20.0 million equivalent; or (b) in an amount exceeding US\$35 million equivalent when added to the balance outstanding on previous loans granted to the same subborrower with funds from this program and credits under programs financed previously with loans from the IDB and/or IBRD.
- 4.22 In paragraph 4.11, the Credit Regulations establish the conditions governing the use of the financing, and these are consistent with the Bank's policy on operations of this kind. To show that a loan has been used in accordance with the parameters governing the operation, the subborrowers will have to submit proper documentation showing the outlays made and establishing their eligibility.
- 4.23 The subloan will be considered granted once the following legal instruments have been signed: (a) the province's guarantee for the credit requested by the entity, and (b) the loan subcontract between COFAPyS and the subborrower.
- 4.24 A subborrower that is over 100 days overdue in payment of obligations arising from a subloan granted with funds from this or any other IDB or IBRD financed program shall not be eligible to receive new subloans from the program's resources; nor may such subborrower continue to receive disbursements so long as that situation persists. Should the guarantor be a province, those restrictions shall apply to all institutions and municipalities in respect of which it is guarantor.

I. Exchange risk stabilization fund

- 4.25 As stated in paragraph 4.19, the interest rate that COFAPyS would charge the subborrowers is to include a two-percent spread for the establishment of a fund could be set up to cover possible exchange losses arising from fluctuations between the basket of currencies in which the loans from the IDB and the World Bank would be disbursed and the dollar, the currency in which the subloans would be denominated.
- 4.26 The portion of the interest corresponding to the two-percent spread would be used for a fund to be set up within 12 months of the effective date of the IDB loan contracts (see Recommendations).

The corresponding regulations, a draft of which has been agreed on between borrower and COFAPyS, must be presented to the Bank for approval within the above-mentioned 12-month period.

- 4.27 The Fund would be administered by COFAPyS and for accounting purposes COFAPyS would record it as part of its own operations, and would have full access to this fund, except as otherwise provided in the Credit Regulations.
- 4.28 COFAPyS would be entitled to invest the resources in the Fund temporarily, on terms that ensure maintenance of value. A monitoring and control committee on which there would be one official appointed by COFAPyS and two representatives from the federal government would examine the exchange risk factors from time to time to determine whether or not the portion of the interest earmarked for the fund should be increased or reduced. The World Bank and the IDB would also review the fund to see whether it was adequately funded during their annual review of the present program (see Recommendations).

J. Cost recovery - rate schedules

- 4.29 For technical assistance projects in the operational improvements component and in which equipment associated with the provisions of such advisory services [see paragraph 3.5 (a)] is included, compliance with the minimum rate schedule requirement need not be demonstrated except for the proceeds of the local contribution, where applicable. In the case of the IBRD loan, other than providing the local counterpart there are no financial requirements for any of the operational improvement projects both for technical assistance and supplementary operational improvements [see paragraph 3.5(b)].
- 4.30 For type A(b), type B, and type C projects, the subborrower shall demonstrate to the IDB that, at the time the subloan is approved, it receives sufficient revenue from customers to cover at least its operating, maintenance, and administration expenses (excluding depreciation). With respect to type B and C projects, the World Bank requires the subborrower to demonstrate by the effective date of the subloan that it generates sufficient revenue to cover the costs of operations and maintenance and the servicing of its debt. It must also present a financial plan to cover the project execution period, that indicates its share of the local counterpart funding for the project in question.
- 4.31 To expedite execution of the program for type B and C projects, it is recommended that, as in the case of the IBRD and as a condition precedent to disbursement of the subloan, the subborrower be required to cover operating and maintenance expenses and to generate sufficient revenue for timely servicing of its debt and the local contribution. The subborrower would also be requested to comply with the conditions of the Bank's standard clause contained

in the proposed resolutions attached as Appendix I and Appendix II of this proposal [Clauses 8(e) and 7(e), respectively] within a period of four years of the date of the loan. The same requirement concerning compliance with the IDB clause within a four-year period would also apply to type A(b) projects.

- 4.32 The agreements corresponding to the subloan shall stipulate that the entities' rates charged by the utility are high enough to generate sufficient revenue to cover the operating costs, including those associated with administration, operation, maintenance and depreciation. If, on application of the foregoing provision, any entity fails to generate sufficient revenue to cover the timely servicing of all its obligations and a portion of its respective expansion program, appropriate measures must be adopted; this may include a rate increase for the purpose of accomplishing that end (see Proposed Resolution). Not less than 10% of the expansion plan must be financed with funds generated by the application of its rate. The COFAPyS may come to some agreement with these entities for programs to adjust their rates gradually or some other measure calculated to achieve the above indicated goals within a period of four years.
- 4.33 The guarantee contracts to be signed by the provinces or municipalities, depending upon the entity's jurisdiction will provide that whatever rate adjustments may be needed shall be taken to make the operation financially feasible and the company financially self-sufficient.

K. COFAPyS Plan of Action

- 4.34 As said before, one of the Bank's basic concerns has been to define the basic technical unit that COFAPyS must have in order to serve as the program's executing agency. In this sense, the view is that one of the prerequisites for disbursement of the IDB financing should be that COFAPyS submit to the Bank a work plan for its institutional strengthening and a timetable for its implementation including the hiring of any consultants they deem essential to discharge their functions satisfactorily.
- 4.35 Since COFAPyS' administration costs must be reflected in the interest rate that it charges to the utilities, the Bank has stressed the need for a plan of action, which spells out the operational and financial targets that determine the maximum level of administrative expenditures of COFAPyS' executing unit and, consequently, the surcharge that will have to be applied to the interest rate. In principle, this surcharge ought not to be more than two percent over the interest rate that the IDB and the World Bank charge (See Proposed Resolutions and Appendix IV, section XI).

L. Reports and annual review meeting

- 4.36 The COFAPyS will have to present the Banks with a semiannual progress report on the operations. These reports must itemize both the subloans and the financial transactions.
- 4.37 In the second quarter of each year, a meeting will be held between COFAPyS and the Banks to monitor the following points:
- (a) The extent to which program resources have been used and the proportions to ensure that, by the end of the IDB disbursement period, these funds and those of the IBRD do not represent more than 80% of the program's total cost;
 - (b) Review of the evaluations of at least two approved subloans, selected at random, falling below the discretionary limit;
 - (c) The financial condition of the COFAPyS and how reasonable its charges for intermediation are, in order to decide on any changes that may be needed;
 - (d) The degree of compliance with the Credit Regulations and any changes that would be recommended;
 - (e) The rate of progress achieved in the following areas: implementation of measures proposed for each project with a view to reducing the environmental impact, rate schedule policy, progress in compiling the annual data by the subborrowers to facilitate the ex post evaluation of the projects to be made by COFAPyS, and operational and financial goals established in the action (see paragraph 5.15).
- 4.38 COFAPyS and the guarantor undertake to institute the changes agreed upon at these annual meetings within 60 days of receiving notification from the Banks indicating their agreement with the changes recommended by the meeting and duly set down in the respective minutes (See Recommendations).

M. Supervision

- 4.39 General supervision of the program will be in the hands of the staff of COFAPyS, including the team of consultants who will reinforce its activities during the first four years of execution. Inspection of the works, procurement of equipment and the work of consultants will be handled by subborrower's staff or by the consultants hired for that purpose with COFAPyS' approval.

N. Ex post evaluation

- 4.40 To obtain reliable data on which to base the ex post evaluation of the program, it is recommended that the borrower, through the executing agency, submit the necessary information to the Bank (see

Recommendations). In this regard, it will have to present the reports listed below:

- (a) An initial report 12 months after the effective date of the loan, to include the methodology and system used for compiling the data needed to fulfill the objectives of the ex post evaluation.
- (b) A periodic report, 18 months after the effective date of the loan and every year thereafter, during the first quarter of each calendar year, until the final disbursement of the loan, stating the progress of the ex post evaluation, in accordance with the methodology agreed on with the Bank (described in the original report). This report should include, an analysis of the major problems detected in the program's execution, together with a description of the measures taken to correct them.
- (c) A final report, at the end of the second year after the last disbursement of the Bank's loan. This report must contain an analysis of the financial intermediation mechanism, identifying its problems and accomplishments, and an evaluation of the successes and failures in execution of the program, based on a representative sample of at least ten projects executed by program subborrowers.

4.41 To comply with those objectives, the reports described above should evaluate at least the following:

- (a) Description, analysis and time spent in identifying, preparing, evaluating and approving the projects under the program. This analysis will have to be based on a documented follow-up of the successive stages in the process of submitting projects to the COFAPyS and its evaluation thereof. Special attention must be paid to the main problems identified in the subborrowers' preparation of projects and the measures that the COFAPyS took to correct those problems.
- (b) Statistics relating to the projects identified, on the basis of preparation, evaluation and execution, by type of project category and subborrower. Data must include budgeted costs and outlays for investment and operations and maintenance, coverage ratios without the project, the population that benefitted from the project and the total population of the community.
- (c) Impact of COFAPyS' institutional strengthening plan. An evaluation must be made of the impact of improvements in project promotion, evaluation, and supervision, on the environmental impact evaluation financial management capability, on administrative and logistical systems, on the capacity to evaluate environmental impacts and the results of the personnel training.

- (d) Impact of the program-financed institutional strengthening on the subborrowers. An evaluation must be made of the improvements in the administration of the services, personnel and financial resources, rates, billing and collections and recovery of costs.
- (e) The trend in the rates and the financial condition of the subborrower entities of the program.

V. THE BORROWER AND THE EXECUTING AGENCY FOR THE PROGRAM

A. The borrower

- 5.1 The borrower, to be the Argentine Nation, through the Ministry of Economic Affairs, will enter an agreement on the transfer of the funds from the loan to the Consejo Federal de Agua Potable y Saneamiento [Federal Water and Sanitation Board - COFAPyS], which will act as executing agency for the program.

B. The executing agency

1. Nature

- 5.2 COFAPyS is an independent, state agency that has legal status as a juristic person, established pursuant to a law enacted on September 27, 1988; it reports to the National Executive Branch through the Under Secretariat for Public Works of the Ministry of Economic Affairs.
- 5.3 Pursuant to that law, COFAPyS assumed all the rights and obligations, including staff, pertaining to what had until then been the National Potable Water and Sanitation Service (SNAP). SNAP had been responsible for execution of five programs financed with funds from the Bank. The transfer of responsibilities was formalized within the IDB by a resolution passed by the Bank's Board of Executive Directors (No. 148/89) on August 11, 1989.

2. Objective

- 5.4 The general objective of COFAPyS is to promote, encourage, supervise, finance and administer programs for water supply, waste disposal and other sanitation services to communities, with a view to promoting development and a better quality of life for the people. The powers conferred on COFAPyS include: (a) setting a policy for action in the sector; (b) organizing, coordinating, administering and supervising the securing of financial resources from domestic and external sources -including those from international agencies- to be used to finance through loans water supply and sewerage projects nationwide; (c) concluding agreements with the provinces, municipalities, and communities for the purpose of developing plans and programs in the sector; (d) supervising compliance with the applicable rate schedule at the provincial, municipal and community level, in keeping with the agreements signed, and (e) conducting socioeconomic and technical studies, works projects and applied research in the water supply and sanitation sector.
- 5.5 COFAPyS is a federal agency. The government, the provinces, the municipality of the city of Buenos Aires, the National Territory of Tierra del Fuego and Antarctica and the Federación Nacional de

Trabajadores de Obras Sanitarias (FENTOS) are all represented proportionally on its executive and supervisory bodies and report to those state entities.

3. Organization

- 5.6 COFAPyS is run by three bodies: the Federal Assembly (representatives of the provincial governments), the Supervisory Board and the Executive Board. Of these, the one that is directly responsible for managing and supervising COFAPyS is the Executive Board composed of four members: one designated by the Federal Assembly, another by FENTOS, and the remaining two by the Executive Branch. These last two members that are appointed by the Federal Government serve as COFAPyS President and Vice President. The other two are regular members of the Executive Board.
- 5.7 The Executive Board is in charge of overseeing the operations and management of the financial, physical and human resources of the COFAPyS. It must also approve the action for the sector programs. The latter function must be performed in accordance with the general policy, objectives and goals set by the federal government, taking care to achieve adequate levels of performance in carrying out the objectives established under the pertinent law.
- 5.8 The Supervisory Board is in charge of supervising and monitoring COFAPyS' activities, including those that are the responsibility of the Executive Board. The Supervisory Board is composed of twelve members: six are appointed by the federal government, five by the provincial governments, and one by FENTOS.

4. Functions

- 5.9 Since it has been assigned the functions heretofore performed by SNAP, the COFAPyS has a reasonably well suited organizational operational structure and extensive experience in handling and executing projects involving populations of up to 15,000. However, its internal organization, procedures, standards of operations and the experience of its present staff are not in line with the new and broader role it is now called upon to play.

5. Institutional capacity

- 5.10 For COFAPyS to be in a position to properly administer the proposed program, a plan will have to be carried out to reinforce its institutional capacity. That plan is to be executed and financed with funds from the program, for a total of US\$2.5 million. There are plans to hire five international consultants who would give the agency and its staff technical support for a period of from two to four consecutive years. The consultants must have had extensive experience in the water supply and sewerage sector in countries where that sector is more developed than it is in Argentina. They will deal with the following areas: (a)

technical appraisal of projects (for four years); (b) marketing systems for water and sanitary sewerage and financial management of sanitation entities (for four years); (c) financial management of lending institutions (for two years); (d) environmental impact assessment (for four years), and (e) socioeconomic appraisal (for four years).

- 5.11 To ensure that the work of the consultants produces results, COFAPyS will be contractually obligated, once the consultants have been selected and hired, to appoint the respective counterparts for each consultant, and these will continue to perform tasks for as long as each of the consultants is there. They must also help put into practice the results of the work that they do. Execution of the plan in question will be monitored closely each year by the Banks, for the duration of its execution. The belief is that the work of the consultants will enable COFAPyS to become an institution with the kind of expertise needed to invest and recover the funds of the program. The terms of reference for the five consultants appear in Annex 3 (see Proposed Resolution).
- 5.12 It is also stipulated that the work of this group of consultants shall be complemented by that performed by the other group of consultants hired with funds from IDB Loan 545/OC-AR (Stage V) to deal with the Bank-financed programs that the COFAPyS inherited from the SNAP (see paragraph 2.37).
- 5.13 As part of the organization process for COFAPyS, the federal government was planning to approve its basic structure on the basis of an organization chart submitted by COFAPyS in late 1989. On November 16, 1990, by decree No. 2386, the Executive Branch approved that organization, which has a total of 150 employees (90 from the defunct SNAP); of those 150, 110 are permanent and 40 temporary. It should be noted that in late 1990 COFAPyS used its own funds to contract a consulting firm to design its definitive structure.

6. Executing unit

- 5.14 The operation being proposed in this document is considerably different from those previously executed by the COFAPyS (SNAP). This means that the COFAPys will have to continue managing the earlier programs and at the same time launch this new operation. To that end, an executing unit will have to be set up to assume, by means of clear and transparent methods, the responsibilities and the costs that will fall to it as executing agency. That unit will have to have the minimum staffing, in principle an estimated 36 people spread out among three offices. This will provide it with special operating capability, separate from the rest of the COFAPyS.
- 5.15 While the COFAPyS' principal function will be to carry out the activities to which this document refers, one must consider the

fact that the bulk of its staff is taken up by the functions that had once been performed by SNAP. To differentiate the costs that correspond to each function and bearing in mind that the financing of the operations of the SNAP stages will continue to be in the hands of the federal government, it is recommended that a prerequisite of the first disbursement be an obligation to demonstrate, to the Bank's satisfaction, that: (i) it has formally established, as part of its organizational structure, an executing unit specifically for this program, following the guidelines and criteria agreed upon; and (ii) it has prepared a detailed timetable for implementation of the institutional strengthening program, with the support of the group of international consultants.

7. Financial and accounting administration

- 5.16 The financial and accounting administration of COFAPyS, particularly as regards execution of the program, will have to be regulated not only by the provisions of its bylaws and the Credit Regulations, but also by a set of set of standards set out in a Memorandum of Agreement to be signed by the Ministry of Economic Affairs, on behalf of the borrower, and the President of COFAPyS as the highest ranking administrative official of that executing agency. The obligation of the borrower to formally submit this Agreement to the Bank will be contained in the loan contract as a prerequisite for the first disbursement.
- 5.17 The Agreement sets out the details of the financial and accounting criteria by which COFAPyS is to operate in the future, both in relation to the program and in relation to the five stages of the rural water supply program.
- 5.18 That same document sets forth the financial guidelines according to which the program and COFAPyS are to operate. They are to generate a surplus or at least incur no deficits. In that sense, the program will have to charge interest rates that are positive and real and, that at least cover the financial and administrative costs and financing of an exchange risk fund for the basket of currencies in which the Banks will disburse their loans. The subloans should be denominated in US dollars and repayable to COFAPyS in local currency, but at the exchange value of the foreign currency at the time of repayment. This entire scheme for an active interest rate means that COFAPyS will have to execute the program without any type of subsidy from the federal government. The operating deficits that are incurred in the first years would be financed with loans from the federal government, which COFAPyS would repay as net revenue is generated from lending the funds from the program [see paragraph 6.18(b)].

8. Accounting systems

- 5.19 For the administrative management of the program, COFAPyS will be required to keep an accrual basis accounting system that must

operate alongside the state accounting system. As of December 31, 1989, COFAPyS had an opening balance sheet prepared by a firm of independent public accountants on the basis of the accrual basis accounting system. The following were also prepared: (a) a balance sheet as of June 30, 1990, for each of the programs financed by the Bank in the past and now being executed by COFAPyS; (b) a chart of accounts for the purpose of recording the transactions that COFAPyS has made since January 1, 1990, by to the accrual basis accounting method; and (c) a training program for the staff who are handling COFAPyS' new accounting system.

9. External audit

- 5.20 For the now defunct SNAP, as the executing agency, and for each of the rural water supply programs financed by the Bank (stages I through V), the rule was that the annual audit of their respective financial statements had to be done by the General Accounting Office of the Nation. Nevertheless, it is recommended that the prospective loan contract provide for an audit of each annual fiscal period for the duration of the program's execution and the audit of COFAPyS as executing agency to be done by a firm of independent public accountants acceptable to the Bank.
- 5.21 It should be emphasized that the IBRD, in order to facilitate the contracting of these private auditors, has included a clause in its respective loan contract to the effect that the payment of the annual fees to the auditing firm should be eligible to be financed charged against the loan. This mechanism would serve to establish an important mechanism for ensuring that the COFAPyS contracts, on an annual basis and promptly, the external auditing services required.

C. Subborrower entities

- 5.22 The entities that must act as recipients of the program's credit resources, as provided in the respective Credit Regulations, would be the formally constituted entities responsible for administering water supply and sewerage services in the country.
- 5.23 The entities currently providing this type of service in the country can be classified in the following categories: (a) those having provincial jurisdiction (19); (b) those having municipal jurisdiction (69); (c) those constituted as cooperatives (14); and (d) private entities with a profit motive (3). Save for the three private entities, all would represent the potential demand. The category of greatest relative importance from the standpoint of the population it serves is the provincial category, which in all accounts for more than 80% of the service now provided in the country.

VI. JUSTIFICATION AND FEASIBILITY

A. Justification for Bank participation

- 6.1 The IDB has been involved in sanitation in Argentina since 1965, having partially financed five stages of the urban water supply and sewerage program (three of them for the Greater Buenos Aires area) and five stages of the rural water supply program. Other global, multi-works operations have also financed water supply works and sewerage works.
- 6.2 Until 1984, the IDB was the sole external source of financing for the sector. That year, the IBRD approved its first loan for water supply and sewerage in Córdoba, Santa Fe, and Buenos Aires, and provided partial financing for the preparation of the National Sanitation Program on the basis of which the operation being proposed in this document was put together.
- 6.3 With execution of this program, a credit mechanism will be used to steer investments within the sector toward supporting the effort that the government has undertaken to provide institutional strengthening for utilities and establish proper financial discipline. In addition to being strengthened as institutions, the utility companies need to recover their ability to operate and repair their systems and to generate enough revenue needed to cover the local counterpart and debt servicing required. The prolonged period without growth in service coverage, especially in the sanitation area, makes it imperative that the measures designed by the country be aimed at investments to get a water supply to the neediest sectors of the population, since as a rule they have been most affected by the sector's lack of development.
- 6.4 The Bank attaches particular importance to the role of women in the investment projects it finances. There are no activities identified within this sector that can be conducted specifically to benefit women. However, the ex post evaluation mechanism should be used in other operations to define specific aspects that can help quantify measures calculated to benefit women directly. On the whole, the view is that improving the quality of water will be very beneficial to all users and will reduce the incidence of waterborne diseases that have such a tremendous impact on families.

B. Risks in the operation

- 6.5 The risks inherent in this operation are in the following areas:
- (a) Institutional: COFAPyS is a relatively new agency. Its experience is confined to the rural subsector, in which it has executed four stages and is currently carrying out a fifth. It uses provincial coordination mechanisms similar to those proposed in this program.

Its experience as an intermediate credit agency is limited to the functions performed by the now defunct SNAP. Accordingly, it is recommended that it be reinforced with the support of five international consultants.

- (b) Technical assistance for operational improvements: It is possible that some operational improvements projects will not accomplish their objectives. For that reason, the entities involved could not be considered eligible for financing for rehabilitation projects or projects involving new works. This risk, which is normal considering the nature of that component of the program, would be mitigated by the effect of the proposed six-year period of execution, which would provide ample time for the results expected of projects of this type to materialize.
- (c) Demand: This risk is always present in global operations of this type. However, the risk is considered minimal in this operation because the scale of the program is small by comparison to the need and because it would be the only source of investment financing in the country for this subsector in the years ahead. Obviously, the major limitation in lending the funds from the program is not the potential demand, but rather the institutional and financial capacity of the entities supplying the service.
- (d) Sector policy: Control of the sanitation sector, like many other activities, was centralized at the federal government level. The decentralization process that the previous administration began and that the present administration is pressing forward, has meant that the federal government is now focusing on financial reorganization of the provincial governments and their utilities. This has become an important part of the government's economic policy and, accordingly, of its development strategy. Preparation of the Sanitation Program at the national level represents a commitment to find solutions for a sector that underwent a severe crisis in the 1980s. The evidence received at the IDB and World Bank alike reflect the government's resolve to get the sector's development moving again by means of new institutional schemes in which the possibility of private-sector participation figures prominently. This operation can establish the bases for collaborating in that direction.

C. Technical and environmental feasibility

- 6.6 In accordance with the guidelines for project appraisal that are contained in the Credit Regulations, to be approved by COFAPyS, projects must submit a study of all technically feasible expansion alternatives. The optimum expansion plan will be the alternative with the lowest net present value, taking into consideration not only capital costs but also operating and maintenance costs.

- 6.7 Adoption of the least-cost expansion plan will entail constant review of the design specifications , which have been found to be overdimensioned in some cases.
- 6.8 Argentina has sufficient installed capacity for proper project preparation and no problems are anticipated with materials supply in the construction phase.
- 6.9 Reinforcing the executing unit with five international experts will ensure that the projects are technically satisfactory and that they meet the technical requirements set by the entity for preparation of the different types of projects included in the National Program.
- 6.10 COFAPyS' environmental assessment capability has been duly strengthened with the establishment of an environmental unit through the hiring of an international expert for four years plus national personnel who will be taken on in stages. The sewerage projects are expected to have a negative environmental impact when final disposal is into water or the subsoil. However, the environmental impact reports that are mandatory for subloans should identify those impacts and propose adequate mitigation measures, all of which will be subject to approval by COFAPyS and reviewed and monitored by the two Banks at their annual review meetings. The Environmental Management Committee, at its meeting of October 22, 1990, confirmed the environmental measures included in this operation, which comprise: (a) approval of the final assessment guidelines prior to the first disbursement; (b) strengthening of COFAPyS' capacity through the establishment of an environmental unit prior to the first disbursement; (c) environmental impact assessment reports on each project, and (d) training for COFAPyS and the entities on environmental issues. The program was classified under group III.

D. Institutional and financial feasibility

1. Institutional feasibility

- 6.11 The present operational capability of COFAPyS as executing agency for the program is limited to processing, financing and tracking water supply and sanitation projects for the rural sector and in communities of up to 15,000 inhabitants. This limitation is basically the result of the fact that under the law establishing it, the COFAPyS took over all the credit activity handled by the now defunct SNAP, which was responsible for serving said sector in the financial sphere.
- 6.12 The proposed program includes financing of a component that is intended, over the next four years, to create the institutional and operational capability needed for the COFAPyS to be able to perform its assigned role to the fullest. As those changes are implemented, the COFAPyS will have to increase its operating

capability in order to act effectively upon those matters involved in financing and executing projects funded with program resources.

- 6.13 The institutional feasibility of the program will, therefore, be based on the fact that over the next few years COFAPyS will be subject to an institutional strengthening plan, to be devised and executed with the support of international consultants. Some of the most pertinent aspects of the COFAPyS' institutional strengthening have already been defined and set down as contractual obligations in other sections of this document. These include the creation, within the present structure of COFAPyS, of a unit whose specific purpose will be execution of the program.
- 6.14 To ensure that this institutional strengthening plan for the COFAPyS is properly executed, provision is included for it to be subjected to systematic annual monitoring by the Banks for the duration of its execution. This will enable the Banks to determine the degree of progress made and fulfillment of the plan.

2. Financial feasibility

- 6.15 For execution of the proposed program, the Credit Regulations and the Agreement both stipulate that the program is to be self-financing and must meet the requirements of accounting and financial transparency. This means that the program funds must be placed in subloans to eligible sanitation companies, under the terms established in the Credit Regulations of the program. This means that COFAPyS must examine the operations to demonstrate that they are financially viable.
- 6.16 The proposed program has been designed on the premise that it will finance itself. To achieve that end, it has been determined that the interest rate to be charged to subborrowers must be positive in real terms. Additional measures built into its design include the following: (a) that the interest rate will have to be increased to cover the COFAPyS' administrative costs and any financial costs that may be entailed because of the basket of currencies in which the IDB and the IBRD will disburse their respective loans; (b) that the percentage of overdue payments in the program loan portfolio will in no event be allowed to exceed 5% of the total balance due at the end of each fiscal year, and (c) that in the event a debtor entity fails to pay, the COFAPyS will be able to draw directly, through the Ministry of Economy, on the federal revenue-sharing funds allocated in the National Budget each year to the respective provincial government, which must serve as guarantor of the subborrower entity.
- 6.17 To cover the annual deficits that COFAPyS will have to incur during the first five years of the program's execution, provision has been made for the COFAPyS to make temporary use -not subject to the granting of new credits- of the funds deriving from repayment of the credits granted with the IDB loans to finance the rural water

supply program being administered by COFAPyS. To that end, the Memorandum of Agreement that COFAPyS and the Federal government will sign will stipulate, as a prerequisite for the first disbursement, that the COFAPyS undertakes to repay those funds when its revenues from the subloans awarded with program funds so allow (see Proposed Resolution). This mechanism is responsive to the Argentine authorities' desire that any deficits corresponding to the proposed program's execution are not to be financed by means of a direct transfer of funds from the government to the COFAPyS.

6.18 The following pertinent conclusions can be drawn from the Bank-prepared projections, which consist of the income statement, the statement of condition, and the statement of changes in financial position:

- (a) The program will register annual net operating deficits for the first five years of its execution. Then, after the fifth year, it will begin to generate annual net profits. It will continue to generate net profits over the remaining four years. The annual deficits will be generated by the impact of the launching of the program and by the executing agency itself; in terms of amount, disbursements will be larger than operating expenditures incurred, which are, under the contract, to be covered by the federal government.
- (b) Since the Federal Government will cover the deficits for the first five years of execution, the Program is expected to obtain additional revenues estimated at US\$5.5 million equivalent. This figure will have a positive effect on the amount of credit available in the program and on its projected performance in all years thereafter.
- (c) The performance of the projected capital structure would indicate that once the positive effect of the fund for exchange regularization is figured in, the performance of the program will continue to climb as of the sixth year of execution.
- (d) The overall projected results for the program during its first ten years of execution would support its feasibility based on these premises.

E. Feasibility of the local counterpart

- 6.19 As shown in the table in paragraph 3.11, the local counterpart requirement for the program will be the equivalent of US\$50.0 million. Of that amount, 70% will come from the subborrower entities, while the remaining 30% will come from the provincial and/or municipal governments, depending on the jurisdiction in which the respective subborrower falls.
- 6.20 With execution of the operational improvements projects, the entities will be able to have immediate access to financing for a

project to begin a specialized technical assistance process and procure the basic and supplementary equipment they will need for their institutional and operational strengthening. This preliminary financing is expected to enable these entities to reverse, in the medium term, the financial decline, to satisfy the minimum rate schedule requirements and generate the local counterpart resources they will need to have access to the "B" and "C" components of the program.

- 6.21 In the agreements that COFAPyS and the provincial governments are to sign, the latter undertake to include within their budgets of income and expenditures the line items needed to pay the local counterpart. These agreements, which have to be ratified by provincial laws enacted by the corresponding Legislative Branch, and the eventual contributions from users would guarantee that the program will have the local counterpart funds needed for its execution.
- 6.22 As to the contribution from the provincial or municipal governments, its feasibility is based on each government having, when needed, the liquidity and financial capability to provide support to the respective subborrower entities. Here it is vital to the execution of the program that the provincial governments be able to consolidate their present financial position, through the financial reorganization and economic development program of the Argentine provinces (AR-0042).

F. Socioeconomic feasibility

1. General aspects

- 6.23 The objective of the economic analysis for this program was: (a) to identify the possible types of projects that COFAPyS would consider and evaluate; (b) to determine the status of preparation of the projects; (c) to review COFAPyS' project evaluation capacity; (d) to determine existing demand for funding within the sector; (e) to establish appropriate methodologies for analyzing the program's remaining projects.
- 6.24 With this aim in view, a set of seven projects constituting an indicative sample of the program were reviewed. That sample is composed of:
- (a) Three type A projects - operational improvements
 - (i) Mendoza US\$16.9 million
 - (ii) Mar del Plata US\$ 8.4 million
 - (iii) Río Negro US\$ 1.1 million
 - (b) Two type B projects - improvement, optimization and rehabilitation of systems

- (i) Santiago del Estero
(sewerage) US\$ 9.2 million
- (ii) Victoria (water supply) US\$ 2.7 million

(c) Two type C projects - expansion and new works

- (i) Carlos Paz
(sewerage) US\$17.3 million
- (ii) Merlo (water supply) US\$ 9.1 million

6.25 The following conclusions can be drawn from this analysis: (a) the sample projects underwent major changes in their scaling and, in some cases, new components had to be added to optimize the proposed design. Although these projects show returns above those required by the Bank, all of them will have to be reviewed and completed before being executed; (b) COFAPyS has no experience in evaluating the types of projects that were presented, especially their socioeconomic aspects. Hence, for the program to develop, it is crucial that COFAPyS add to its technical staff at least two professional economists and that it receives advisory assistance from an international consultant who is experienced in the economic evaluation of projects similar to those in the program. Both the economists and the consultant must be added to the staff of the executing unit of the program before the first disbursement from the loan is made. The consultant will have to be contracted for four years (see Proposed Resolution).

2. Credit demand

6.26 The national sanitation program calculated that to achieve 90% coverage in water supply for the urban and concentrated rural population and 70% coverage for sanitary sewerage, including treatment of liquid sanitary sewage, and rehabilitation of the deteriorated systems, the investment would have to be in the order of US\$7.8 billion over the next 15 years (US\$2.3 billion for water supply, US\$3.1 billion for sewer systems, US\$1.0 billion for treatment of liquid sewage and US\$1.4 billion for rehabilitation). That same document states that annual investments in the order of US\$135.0 million will be needed just for operational improvement of the sector and rehabilitation of systems, in order to stave off the collapse of the water supply and sanitary sewerage services.

6.27 Taking the population without any type of public water supply or sanitary sewerage service in communities of over 15,000, the minimum size established for participation in the program, as one additional indicator of the potential demand, the available data show: (a) approximately 4.7 million people have no water supply service, or 31.2% of the total population of these communities. In 20 communities that have no public water supply service, there are about 500,000 people; (b) in the case of sanitary sewerage, the unsatisfied demand is even higher. There are almost 10 million people who have no public sanitary sewerage service; this

represents close to 65% of the total population of communities that the program targets. There are 45 communities that have no form of public sanitary sewerage service at all.

- 6.28 Without any promotional work at all, COFAPyS has identified 97 projects, involving approximately US\$385 million, over and above those in the sample which together account for US\$65 million. Although changes will have to be made in the design of most of the projects, the figures indicate the willingness of the various entities to improve the services they provide. The following table shows the projects that COFAPyS has identified, by category. This demand, however, could shrink since in most cases, the program would have to begin with an operational improvements component before any further investment can be considered.

Projects Identified by the COFAPyS

<u>Project</u>	<u>Number of projects</u>	<u>Budget (US\$ millions)</u>
Type A + B Operational improvements Improvement and optimization	<u>15</u>	<u>37.6</u>
Type C Expansion and new works	<u>82</u>	<u>347.8</u>
Water supply	37	144.3
Sanitary sewerage	45	203.5

- 6.29 As noted earlier, on the one hand funds are tight for investment in the sector, while on the other the water supply and sanitary sewerage services have greatly deteriorated. This makes for a considerable potential market for the COFAPyS. Moreover, with a clear-cut policy for the sector that includes decentralization of the services and the entities' financial self-sufficiency and the institutional strengthening of COFAPyS itself, as planned under this operation, the main prerequisites for demand to materialize are present. Despite the financial costs and the restrictions set forth in the Credit Regulations, the view is that there will be an adequate demand for the funds from the program since COFAPyS, according to the Government's guidelines, is the sole source of financing for this sector in the country.
- 6.30 Of the various investment categories, the program attaches priority to financing operational improvements projects. The universe of entities in the country that could qualify to execute projects of this type is very large. For the projects the COFAPyS has already identified there would be 15 entities interested in participating in the type "A" and "B" projects. The considerable demand for type "C" projects under the program can only be looked into when the entity seeking to enlarge its system has met the requirements

established in the type "A" projects on operational improvements. With that in mind, the distribution of funds among the program's various investment categories is considered reasonable.

3. Methodology

- 6.31 The analysis of the projects in the indicative sample of the program followed the traditional methods of socioeconomic analysis used by the Bank to appraise water supply and sewerage projects. Basically, the analysis consisted in ensuring that the alternative selected was properly scaled, represented the least-cost solution for the service levels provided and had an economic internal rate of return (EIRR) of at least 12%.
- 6.32 The scaling of the projects was established by balancing the projected demand and the present supply without the project. The demand and, therefore, the incremental supply from the project were adjusted to the average estimated rates that would result from the prospective project. In the case of supply without the project, the gradual decline in the installed capacity of the facilities and equipment as a result of deterioration or obsolescence was taken into account. Before the work commences, all the projects in the indicative sample will have to be optimized using appropriate models, especially for the water supply distribution networks and the main or trunk sewer lines; simulation of the present and future quality of the receiving body of water and its dilution capacity will have to be used to make certain that the treatment of the sewer waters is at the proper level.
- 6.33 The evaluation used only the incremental benefits and costs (fixed and variable capital, operating and maintenance costs) generated by the project. Both the benefits and the costs were valued at efficiency prices by applying conversion factors to the values estimated at financial prices. To do this, the project costs were broken down into the main input categories (imported and domestic equipment and material, unskilled labor and other types of manpower, energy, etc.) on the basis of the unit cost analysis. In addition to the direct project costs, the cost of project management and supervision, other associated costs and technical contingencies were considered. Financial costs and costs attributable to price escalation, however, were excluded.
- 6.34 The institutional development, service marketing and training components (in the operational improvements category) will have to be fully or partially included in all program-financed projects, in order to cover the specific weaknesses of the subborrowers. A cost-benefit analysis was not performed for any of these components because they are essential for improving the efficiency of the entities and the proposed investments.
- 6.35 For the projects that call for physical operational improvements, including bulk metering, individual metering, procurement of

operating and maintenance equipment, or a survey of systems, difficulties were encountered in assessing the benefits deriving from the project. This is because the entities do not currently have either meters for proper measurement of production, losses, and leakages from the existing water supply system or an adequate cost accounting system. The cost-benefit analysis was performed in these cases on the basis of estimated data.

- 6.36 Execution of this type of project, together with implementation of an appropriate rate schedule structure, would make for more efficient use of water on the part of the population. Lower demand for water would generate savings in production costs (energy, chemicals, etc.), defer further investment in the production system and increase coverage.
- 6.37 The projects for new systems and rehabilitation and expansion of water supply systems were appraised on the basis of the SIMOP model. This model measures the benefits, taking into consideration the willingness of users to pay and the savings in resources that would result from transferring to the public system customers who would otherwise have to use more costly supply systems.
- 6.38 For purposes of analysis, the sewer system projects can be divided into three categories, namely: (a) house connections to public sewer systems which would take the place of individual private arrangements, and generate savings accordingly in maintenance costs plus improvements in health; (b) interceptors and main trunk lines which would clean up watercourses and improve the environmental and health conditions of nearby communities, and (c) treatment plants that would bring environmental benefits.
- 6.39 The population's willingness to pay, as measured by the contingent valuation method, was determined for both projects in the sample. In principle, this method should make it possible to record all the benefits referred to in the preceding paragraph. It simulates a market through interviews with potential beneficiaries of a project who are asked to place a value on their willingness to pay for it. For these interviews, 15 price levels were selected and randomly distributed among the potential beneficiary population so that they could answer either "yes" or "no" to the price quoted for the project. Econometric methods were then applied to the data obtained in order to arrive at an estimate of the population's willingness to pay for the proposed project.

4. Results of the cost-benefit analysis

- 6.40 The results of the cost-benefit analysis of the projects in the indicative sample, reservations expressed above, are set out in the table below:

Economic return on the projects
(efficiency prices in US\$ millions)

<u>Projects</u>	<u>Costs 1/</u>	<u>NPV</u>	<u>EIRR(%)</u>
Type A			
Mendoza	21.1	3.5	21.0
Mar del Plata	16.4	2.3	23.0
Rio Negro	2.3	0.1	13.0
Type B			
Santiago del Estero	5.1	11.8	37.9
La Victoria	2.2	2.6	24.4
Type C			
Carlos Paz	8.7	2.0	14.6
Merlo	13.1	0.5	12.8

1/ In present value and they include incremental maintenance and operation.

5. Sensitivity analysis of the projects

6.41 Based on the economic analysis of the indicative sample an examination was performed to determine how sensitive those results are to changes in certain variables used in the analysis. The analysis depended on the type of project.

6.42 A sensitivity analysis was done to examine the impact of changes in the following variables on the return on the projects:

- (a) Price elasticity of demand
- (b) Initial consumption
- (c) Growth rate of demand
- (d) Periodic costs
- (e) Variable production costs
- (f) Nonrecurrent costs (investment)

6.43 The variation ranges tested have been +/-10%, 20% and 30%. The parameters for which changes resulted in negative values in the following projects were (the variations are shown in parentheses):

<u>Project</u>	<u>Variable</u>
Mendoza	None
Mar del Plata	Initial consumption (-30%)
Rio Negro	Initial consumption (-30%) Growth rate of demand (-20%) Variable production cost (+10%)

Merlo (Buenos Aires)	Initial consumption (-10%) Growth rate of demand (-20%) Variable production cost (+20%) Nonrecurrent costs (+10%)
Victoria (Entre Ríos)	Price elasticity of demand (-30%) Initial consumption (-20%) Growth rate of demand (-20%)

- 6.44 In the case of sewerage projects, the impact of the following variables was analyzed: total cost and willingness to pay. The following table shows the change required in these variables for the net present value to equal zero:

<u>Project</u>	<u>Variable</u>	<u>Variation</u>
Santiago del Estero	Increase in total costs	+ 210%
	Decrease in willingness to pay	- 68%
Carlos Paz	Increase in total costs	+ 23%
	Decrease in willingness to pay	- 18%

6. Distributive impact of the projects

- 6.45 The direct cost and benefit flows that the projects would generate would fundamentally affect three economic agents: the public sector, the low-income private sector and other private-sector groups. Persons whose annual per capita income is below 462,000 australs at July 1990 prices are in the low-income group in Argentina.
- 6.46 The coefficient of distributive impact of the projects is the percentage of net benefits generated by the projects that accrue to low-income private groups. The benefits to low-income private groups come in the form of: (i) savings through the replacement of alternative water supply sources with the system; (ii) willingness to pay of the users of the water supply and sanitary sewerage services, when the rates to be charged have been discounted; and (iii) the difference between the wage contemplated for unskilled labor and their wages in an alternative activity. The benefits accruing to other private sector groups, which include residential customers whose per capita income is higher than that of the low income group as well as commercial and industrial customers, would be generated through savings from the replacement of more costly alternative sources of water and by the difference between the willingness to pay of the customers in this group and the rates to be charged by the utility companies that operate the water supply and sewerage systems.
- 6.47 Although the projects analyzed constituted an indicative (and not representative) sample of the program, the distributive impact coefficient, based on components of the program, was computed for

the projects analyzed. Of the seven projects in the indicative sample, income distribution data are available for four: two rehabilitation and improvement projects, and two projects to build new systems. There were no data on income distribution for the three projects on operational improvements. ^{1/} Bearing in mind that the cost of the type B projects on rehabilitation, optimization and improvement is US\$11.9 million and that of the type C projects for expansion and new works is US\$26.4 million, the analysis presented has a representative ratio of approximately 28.0%.

- 6.48 The coefficient figured for type B projects was 65.4% and for type C projects 53.1%. The weighted CDI for the planned investments for both types of projects yielded 59.8%. The table on the next page shows the economic agents directly affected by possible execution of the projects and the corresponding benefit and cost flows.
- 6.49 These coefficients should be taken only as approximate estimates, since their definitive value will depend on such factors as future rate levels, which may be significantly different from those used in the analysis; moreover, as to what the complete basket of projects to be carried out under the program is not known at this time. Only the ex post evaluation will be able to ascertain the true value of the distributive impact coefficient of the program.

^{1/} The type A projects for operational improvements should provide an initial net transfer of funds from the private sector to the public sector, through the improvements in the marketing system (rates, billing and collections). Then, through more efficient consumption and a reduction in losses and leaks in the existing water supply system, it is expected that the increased availability of water will be passed on to prospective customers, who are presently using other sources of water, or will be used to upgrade the services being provided to existing customers.

Distributive impact of components B (Improvements, optimization and rehabilitation)
and C (Expansion and execution of new works) of the program

<u>Breakdown</u>	<u>Public Sector</u>		<u>Private Sector</u>		<u>Benef/Cost</u>
	<u>Government</u>	<u>Entities</u>	<u>Low-income</u>	<u>Others</u>	
Total gross benef.	876.9	-	13,484.5	7,367.7	21,729.1
Rates	(173.2)	2,235.1	(1,245.0)	(816.9)	-
Willingness to pay+Savings	703.7	-	12,239.5	6,550.8	-
Invest. costs & AO&M	3,545.3	(10,942.7)	119.2	-	(7,278.2)
Total net benefit	4,249.0	(8,707.6)	12,358.7	6,550.8	14,450.9
DIC (Type B projects, Improvements, optimization and rehabilitation) = 65.4%					

DIC = Distributive impact coefficient.

<u>Breakdown</u>	<u>Public Sector</u>		<u>Private Sector</u>		<u>Benef/Cost</u>
	<u>Government</u>	<u>Entities</u>	<u>Low-income</u>	<u>Others</u>	
Total gross benef.	183.1	-	11,609.5	12,599.7	24,392.3
Rate	(153.2)	10,701.8	(4,480.6)	(6,068.0)	-
Willingness to pay+Savings	29.9	-	7,128.9	6,531.7	-
Invest. costs & AO&M	7,460.9	(29,623.6)	276.3	-	(21,886.4)
Total net benefit	7,490.8	(18,921.8)	7,405.2	6,531.7	2,505.9
DIC (Type C projects, expansion and new works) = 53.1%					
DIC (Type B + C projects) = $75.0 \times 65.4\% + 62.0 \times 53.1\% / (75.0 + 62.0)$					
DIC (Type B + C projects) = 59.8%					

DIC = Distributive impact coefficient.

PROPOSED RESOLUTION 1/ARGENTINA. LOAN /OC-AR TO THE NACION ARGENTINA
(National Water Supply and Sewerage Program -
First Stage)

The Board of Executive Directors

RESOLVES:

That the President of the Bank, or such representative as he shall designate, is authorized, in the name and on behalf of the Bank, to enter into such contract or contracts as may be necessary with the Nación Argentina, as Borrower, for the purpose of granting it a Financing to cooperate in the execution of the National Water Supply and Sewerage Program - First Stage (the "Program"). This Financing shall be subject substantially to the following conditions:

1. Amount and currencies: Up to US\$70,000,000, or its equivalent in other currencies, except that of Argentina, which are part of the ordinary capital resources of the Bank, to pay for goods and services acquired through international competition in the member countries of the Bank and for such other purposes as may be specified in the loan contract. Payments of amortization and interest shall be made in the currency or currencies specified by the Bank, in an amount equivalent to the corresponding amount owed, calculated in units of account in terms of dollars of the United States of America, in accordance with provisions to be included in the loan contract.
2. Source of funds: The ordinary capital resources of the Bank.
3. Guarantee: The general responsibility of the Borrower.
4. Credit fee: 0,75% per annum on the undisbursed portion of the Financing, commencing to accrue 60 days after the date of the loan contract and payable in dollars of the United States of America on the same dates as the interest.
5. Amortization: The Borrower shall amortize the loan in a period of 25 years from the date of the loan contract by means of semiannual, consecutive, and insofar as possible, equal installments. The first installment shall be paid 6 months after the date of the last disbursement of the Financing.

1/ The provisions contained in this Appendix I and in Appendices II, III and IV will be final only when the Board of Executive Directors has approved the proposed loan.

6. Interest: The Borrower shall pay interest semiannually on the daily outstanding balances of the loan. The first payment shall be made six months from the date of the loan contract. The Bank shall determine the rate of interest to be applied during the life of the loan, in accordance with the lending rate policy of the Bank.
7. Commitment and disbursement: The term for commitment of the resources of the Financing for the execution of works shall expire 4 years from the effective date of the loan contract and the term for disbursement of the Financing shall expire 6 years after the same date.
8. Special conditions:
 - (a) The resources of the loan shall be used in their entirety by the Borrower through the Consejo Federal de Agua Potable y Saneamiento (hereinafter referred to as "COFAPyS" or "Executing Agency"). If modifications in the legal provisions or the basic regulations concerning COFAPyS are approved which, in the opinion of the Bank, may substantially affect the Program, the Bank shall have the right to require the Borrower and COFAPyS to provide explanatory and detailed information in order to determine whether such modification or modifications have or may have an adverse impact on the execution of the Program. Only after hearing the Borrower or COFAPyS and assessing its information and clarifications, may the Bank take such measures as it deems appropriate, in accordance with provisions to be set forth in the loan contracts.
 - (b) The resources of the loan and those of loan /SF-AR shall be used to participate in the execution of a program estimated at the equivalent of US\$250,000,000. Consequently, the loan contracts shall contain the appropriate provisions to ensure that the additional resources to the loan as may be necessary for the complete execution of the Program shall be duly provided, in accordance with an investment plan satisfactory to the Bank, in an amount estimated at the equivalent of US\$150,000,000, which shall include: (i) the equivalent of at least US\$100,000,000 from a loan from the International Bank for Reconstruction and Development (IBRD), and (ii) the contributions from the entities, provinces, municipalities and beneficiaries, participating in the Program.
 - (c) Prior to the first disbursement of the Financing, the Borrower, through COFAPyS, shall demonstrate to the satisfaction of the Bank that:
 - (i) It has placed in force the Credit Regulations of the Program, the text of which has been previously approved by the Bank;

- (ii) The Ministry of the Economy and COFAPyS have signed an Agreement ("Acta-Acuerdo"), the text of which shall have been agreed upon in advance with the Bank, which shall stipulate, in addition to the provisions set forth in Chapter VII of Appendix IV, the conditions and procedure for transferring to COFAPyS the resources of the Financing and the obligations, established in the loan contracts, incumbent upon it as Executing Agency of the Program;
 - (iii) The loan contract with the IBRD for the extension of credit referred to in Clause 8(b) of this Appendix, has been signed;
 - (iv) A specific Executing Unit for the Program has been formally established within COFAPyS, pursuant to the guidelines, criteria and personnel previously agreed upon with the Bank;
 - (v) With respect to the environmental aspects of the Program it has: (1) established an Environmental Unit within the functional structure of COFAPyS, with the organization and the personnel previously agreed upon with the Bank; (2) contracted, pursuant to procedures and terms of reference approved by the Bank, an international expert in environmental matters for a period of at least four years; and (3) prepared an environmental assessment guide, the draft of which shall have been previously agreed upon with the Bank;
 - (vi) It has contracted, with the resources of the Program, four international consultants in the technical, financial-banking, commercial and socioeconomic areas who, in conjunction with the environmental expert indicated in Clause 8(c)(v) above, shall assist COFAPyS and the entities participating in the Program;
 - (vii) It has approved the work plan and schedule for implementing the Component for the Institutional Strengthening of COFAPyS, with the help of the group of consultants referred to in clauses (v) and (vi) above, for the purpose of establishing adequate and effective mechanisms for the execution of the Program, including the preparation of an action plan with operational and financial goals for COFAPyS, in accordance with the provisions of Section XI of Appendix IV.
- (d) The beneficiaries of the credits to be extended with the resources of the Financing shall be charged on account of interest, commissions, insurance or any other charge, the annual rate or rates which, being consistent with the legislation and policies on interest rates of Argentina, are

compatible with the policy of the Bank on rates of interest for this type of financing.

- (e) The Borrower, through COFAPyS, agrees to take appropriate measures acceptable to the Bank in order that the tariff rates of all the entities receiving financing under the Program shall produce revenue at least sufficient to cover the operating costs of their respective systems, including those related to administration, operation, maintenance and depreciation. If the application of the foregoing does not generate sufficient resources to cover the timely service of all the obligations of the corresponding entity and a proportion of their respective investment plans, as provided in Chapter IX of Appendix IV, COFAPyS shall require the adoption of the necessary measures, which may include rate increases, to obtain the additional resources to achieve that purpose.
- (f) With the resources of the Financing credits shall not be granted for: (i) general and administrative expenditures of the beneficiaries; (ii) working capital; (iii) purchase or lease of real property; (iv) financing of debts; (v) purchase of shares; (vi) acquisition of used machinery and equipment; and (vii) payment of taxes.
- (g) In the acquisition of machinery, equipment and other materials for the Program and in the awarding of construction contracts, the respective entities participating in the Program shall follow the system of public bidding in each case in which the value of such acquisition or contracts exceeds the equivalent of US\$200,000. The bidding shall be subject to the procedures to be appended as an annex to the loan contracts. This provision shall not apply to acquisitions made with resources from other sources of financing.
- (h) The funds resulting from recoveries of credits granted with the resources of the Financing, to the extent they accumulate in excess of the amounts needed to service the loan, may be used only for the granting of new credits conforming substantially to the rules established in the loan contracts and in the Credit Regulations, unless after five years from the date of the last disbursement of the Financing, the Bank and the Borrower agree upon another use for recoveries that does not depart from the basic objectives of the Financing, or agree to reduce the period of validity of this obligation.
- (i) The Bank shall establish such inspection procedures as it deems necessary to assure the satisfactory execution of the Program, and the Borrower shall extend all cooperation which is required for the most effective accomplishment of this purpose. From the amount of the Financing the sum of

US\$700,000 shall be credited to the accounts of the Bank to meet expenses of general inspection and supervision.

PROPOSED RESOLUTION ¹

ARGENTINA. LOAN /SF-AR TO THE NACION ARGENTINA
(National Water Supply and Sewerage Program -
First Stage)

The Board of Executive Directors

RESOLVES:

That the President of the Bank, or such representative as he shall designate, is authorized, in the name and on behalf of the Bank, to enter into such contract or contracts as may be necessary with The Republic of Argentina as Borrower for the purpose of granting it financing to cooperate in the execution of the National Water Supply and Sewerage Program, First Stage (the "Program"). This financing shall be subject substantially to the following conditions:

1. Amount and Currencies: Up to the equivalent of US\$30,000,000 in Australes which are part of the Fund for Special Operations to cover local expenses and for such other purposes as may be specified in the loan contract. Payments of amortization and interest shall be made in Australes.
2. Source of Funds: The Fund for Special Operations.
3. Guarantee: The general responsibility of the Borrower.
4. Amortization: The Borrower shall amortize the loan in a period of 25 years from the date of the loan contract, by means of semiannual, consecutive and, insofar as possible, equal installments. The first installment shall be paid 6 months after the date scheduled for the last disbursement of the Financing.
5. Interest: 3% per annum, payable semiannually on the outstanding balances of the loan. The first payment shall be made 6 months after the date of the loan contract.
6. Commitment and Disbursement: The term for commitment of the resources of the Financing for the execution of the works shall expire 4 years from the effective date of the Loan Contracts, and the term for disbursement of the Financing shall expire 6 years from the same date.

¹ The following note shall be included: "the provisions contained in this Appendix and in Appendices I, III and IV will be final only when the Board of Executive Directors has approved the loan proposal."

7. Special Conditions:

- (a) The resources of the loan shall be used in their entirety by the Borrower through the Consejo Federal de Agua Potable y Saneamiento (hereinafter referred to as "COFAPyS" or "Executing Agency"). If modifications in the legal provisions or the basic regulations concerning COFAPyS are approved which, in the opinion of the Bank, may substantially affect the Program, the Bank shall have the right to require the Borrower and COFAPyS to provide explanatory and detailed information in order to determine whether such modification or modifications have or may have an adverse impact on the execution of the Program. Only after hearing the Borrower or COFAPyS and assessing its information and clarifications, may the Bank take such measures as it deems appropriate, in accordance with provisions to be set forth in the loan contracts.
- (b) The resources of the loan and those of loan ____/OC-AR, shall be used to participate in the execution of a program estimated at the equivalent of US\$250,000,000. Consequently, the loan contracts shall contain the appropriate provisions to ensure that the additional resources to those of the loan as may be necessary for the complete execution of the Program shall be duly provided, in accordance with an investment plan satisfactory to the Bank, in an amount estimated at the equivalent of US\$150,000,000, which shall include: (i) the equivalent of at least US\$100,000,000 from a loan from the International Bank for Reconstruction and Development (IBRD), and (ii) the contributions from the entities, provinces, municipalities and beneficiaries, participating in the Program.
- (c) Prior to the first disbursement of the Financing, the Borrower, through COFAPyS, shall demonstrate to the satisfaction of the Bank that:
 - (i) It has placed in force the Credit Regulations of the Program, the text of which has been previously approved by the Bank;
 - (ii) The Ministry of the Economy and COFAPyS have signed an Agreement ("Acta Acuerdo"), the text of which shall have been agreed upon in advance with the Bank, which shall stipulate, in addition to the provisions set forth in Chapter VII of Appendix IV, the conditions and procedure for transferring to COFAPyS the resources of the Financing and the obligations, established in the loan contracts, incumbent upon it as Executing Agency of the Program;

- (iii) The loan contract with the IBRD for the extension of credit referred to in Clause 7(b) of this Appendix, has been signed;
 - (iv) A specific Executing Unit for the Program has been formally established within COFAPyS, pursuant to the guidelines, criteria and personnel previously agreed upon with the Bank;
 - (v) With respect to the environmental aspects of the Program it has: (1) established an Environmental Unit within the functional structure of COFAPyS, with the organization and the personnel previously agreed upon with the Bank; (2) contracted, pursuant to procedures and terms of reference approved by the Bank, an international expert in environmental matters for a period of at least four years; and (3) prepared an environmental assessment guide, the draft of which shall have been previously agreed upon with the Bank;
 - (vi) It has contracted, with the resources of the Program, four international consultants in the technical, financial-banking, commercial and socioeconomic areas who, in conjunction with the environmental expert indicated in Clause 7(c)(v) above, shall assist COFAPyS and the entities participating in the Program;
 - (vii) It has approved the work plan and schedule for implementing the Component for the Institutional Strengthening of COFAPyS, with the help of the group of consultants referred to in clauses (v) and (vi) above, for the purpose of establishing adequate and effective mechanisms for the execution of the Program, including the preparation of an action plan with operational and financial goals for COFAPyS, in accordance with the provisions of Section XI of Appendix IV.
- (d) The beneficiaries of the credits to be extended with the resources of the Financing shall be charged on account of interest, commissions, insurance or any other charge, the annual rate or rates which, being consistent with the legislation and policies on interest rates of Argentina, are compatible with the policy of the Bank on rates of interest for this type of financing.
 - (e) The Borrower, through COFAPyS, agrees to take appropriate measures acceptable to the Bank in order that the tariff rates of all the entities receiving financing under the Program shall produce revenue at least sufficient to cover the operating costs of their respective systems, including those related to administration, operation, maintenance and

depreciation. If the application of the foregoing does not generate sufficient resources to cover the timely service of all the obligations of the corresponding entity and a proportion of their respective investment plans, as provided in Chapter IX of Appendix IV, COFAPyS shall require the adoption of the necessary measures, which may include rate increases, to obtain the additional resources to achieve that purpose.

- (f) With the resources of the Financing credits shall not be granted for: (i) general and administrative expenditures of the beneficiaries; (ii) working capital; (iii) purchase or lease of real property; (iv) financing of debts; (v) purchase of shares; (vi) acquisition of used machinery and equipment; and (vii) payment of taxes.
- (g) In the acquisition of machinery, equipment and other materials for the Program and in the awarding of construction contracts, the respective entities participating in the Program shall follow the system of public bidding in each case in which the value of such acquisition or contracts exceeds the equivalent of US\$200,000. The bidding shall be subject to the procedures to be appended as an annex to the loan contracts. This provision shall not apply to acquisitions made with resources from other sources of financing.
- (h) The funds resulting from recoveries of credits granted with the resources of the Financing, to the extent they accumulate in excess of the amounts needed to service the loan, may be used only for the granting of new credits conforming substantially to the rules established in the loan contracts and in the Credit Regulations, unless after five years from the date of the last disbursement of the Financing, the Bank and the Borrower agree upon another use for recoveries that does not depart from the basic objectives of the Financing, or agree to reduce the period of validity of this obligation.
- (i) The Bank shall establish such inspection procedures as it deems necessary to assure the satisfactory execution of the Program, and the Borrower shall extend all cooperation which is required for the most effective accomplishment of this purpose. From the amount of the Financing the sum of US\$300,000 shall be credited to the accounts of the Bank to meet expenses of general inspection and supervision.

RECOMMENDATIONS

- A. It is recommended that the following conditions, to be fulfilled to the Bank's satisfaction, be included in the loan contracts in addition to those set forth in the proposed Resolutions:
1. Unless the Bank expressly states that it has no objection, COFAPyS shall not grant subloans out of the resources of the Program that exceed the equivalent of US\$5,000,000. Notwithstanding the foregoing, COFAPyS shall present to the Bank the documentation related to the first three projects to be financed with resources of the Financing, whatever the amount thereof, for the purpose of obtaining the Bank's non-objection.
 2. The Borrower, through COFAPyS, shall undertake:
 - (a) to present to the Bank:
 - (i) within 12 months from the date of the loan contracts, evidence that COFAPyS and the Ministry of the Economy have signed an agreement, in accordance with terms previously agreed upon with the Bank, for the establishment of a Fund, and its respective regulations, to cover the exchange risks resulting from the different currencies used by the Bank for disbursing the resources of the Financing;
 - (ii) within 12 months from the date of the loan contracts, an initial report, which shall include a description of the methodology and system for compiling the data needed for the ex-post evaluation, in accordance with the guidelines set forth in Chapter X of Appendix IV;
 - (iii) within 18 months from the date of the loan contracts, and during the first quarter of each year to the date of the last disbursement of the Financing, periodic reports, which shall include an analysis of the progress made in the evaluation process, in accordance with the methodology referred to in Clause 2(a)(ii) above and an analysis of the principal achievements and problems detected in the execution of the Program, including a description of the measures taken to resolve the same; and
 - (iv) within 12 months from the date of the last disbursement of the Financing, a final ex-post evaluation report, which shall contain an analysis of the financial intermediation mechanism, identifying its problems and achievements, and an evaluation of the achievements and failures in the execution of the Program, based on a representative sample of at least 10 projects executed by the sub-borrowing entities of the Program, and

emphasizing technical, financial, institutional, economic and environmental matters;

- (b) to ensure that, with respect to projects financed with the resources of the Program, COFAPyS and each sub-borrowing entity shall sign sub-loan contracts in accordance with the models previously approved by the Bank, through which said agencies shall assume, among others, the following obligations:
 - (i) to establish and charge tariff rates that will enable them to cover the requirements mentioned in Clause 8(e) of Appendix I and Clause 7(e) of Appendix II;
 - (ii) unless the Bank agrees otherwise, prior to issuing each call for public bids or, if public bidding should not be appropriate, prior to the procurement of the goods or the commencement of construction works, the sub-borrower shall submit to COFAPyS, for subsequent remittal to the Bank: (a) the general plans, specifications, budgets, and other documents required for the procurement or the construction and, as the case may be, the specific bidding guidelines required for the call for bids; and (b) in the case of works, proof of legal possession, easements, or other rights to the land required for the construction of the same;
 - (iii) (a) that the works of the respective project shall be adequately maintained, in accordance with generally accepted technical standards; and (b) submit for the consideration of COFAPyS and for subsequent remittal to the Bank, within the first quarter of each calendar year for 10 years after the completion of the works of the respective project, an annual plan for the maintenance of the works and equipment of the project for that year, and a report on the state of repair of the works and equipment. If the inspections conducted by COFAPyS or the Bank, or the reports received by them should indicate that maintenance is being carried out to a lesser standard than that agreed upon, the corresponding sub-borrowing entities shall take the necessary steps to see that the deficiencies are fully corrected; and
 - (iv) to gather the necessary data for the ex-post evaluation referred to in clauses A.2(a)(ii) and (iii) of this Appendix, relating to the respective project, during its execution;
- (c) to carry out, jointly with the IDB and the IBRD (the "Banks"), annual review sessions, within the second quarter of each year, in which the items set forth in Chapter VIII of Appendix IV shall be examined. The Borrower, through COFAPyS, shall undertake to implement the necessary changes arising from these sessions, as identified by the Banks through a subsequent notification to be

sent to the Borrower and COFAPyS, within 60 days following said notification, unless some other term is approved by the Banks.

3. During the execution of the Program, the Borrower, through COFAPyS, on the one hand, and the Bank, on the other, shall periodically review the interest rate on the sub-loans. If necessary, the Borrower and COFAPyS shall take appropriate measures consistent with the economic policies of the country, to make the interest rates of the sub-loans compatible with the policy objective envisaged by the Bank; and
 4. The financial statements of the Program, during its execution, and those of COFAPyS, during the life of the loan contracts, shall be submitted to the Bank annually, duly audited by a firm of independent public accountants acceptable to the Bank.
- B. An annex substantially similar in content to Appendix IV (The Program) shall be included in the loan contracts.

THE PROGRAM

(Annex A of the Loan Contracts)

I. Objectives

- 1.01 The main objectives of the Program are: (a) strengthen the decentralized system for the provision of water supply and sewerage systems, by reinforcing the institutional capacity of the entities responsible for rendering those services, within a framework of operational efficiency and financial improvement, and aimed at their self-sufficiency; and (b) increase the levels of coverage and the quality of the services, by carrying out rehabilitation, optimization and expansion works, giving preferential attention to solving any environmental problems those works might create.

II. Description

- 2.01 The Program consists of a global line of credit for granting, through COFAPyS, sub-loans to the entities responsible for water supply and sewerage services to urban localities of more than 15,000 inhabitants that are eligible pursuant to the criteria set forth in the Credit Regulations.
- 2.02 The resources of the Program may be used to grant sub-loans for carrying out one or more of the following four types of projects:

Type A Operational improvement of the beneficiary entities of the Program, which includes the procurement of goods and services for institutional development, commercialization of the services, physical operational improvements, staff training and studies for encouraging increased participation by the private sector;

Type B Improvement, optimization and rehabilitation of water supply and sewerage systems;

Type C Expansion and construction of new water supply and sewerage works; and

Type D Preparation of master plans and feasibility studies, the design of water supply and sewerage works, environmental impact assessments, and investigations related to improving the systems.

- 2.03 The Program also includes a Type D project to support the operational activities of COFAPyS, which includes the training of its staff.

III. Total cost of the Program

- 3.01 The Program is estimated to cost the equivalent of US\$250,000,000, as broken down in the table below, by investment categories and sources of financing:

COST AND FINANCING
(millions of US\$)

COMPONENTS	IDB	IDB	IBRD	LOCAL CONTRIBUTIO N	TOTAL	%
I. CREDIT						
A. Operational Improvement	31.5	13.5	45.0	10.0	100.0	40
B. Improvement/Optimization and Rehabilitation	21.0	9.0	30.0	15.0	75.0	30
C. Expansion and Execution of New Works	12.3	6.0	18.7	25.0	62.0	25
D. Studies and Designs	3.3	1.2	5.0	---	9.5	3.7
E. Institutional Strengthening of COFAPYS	1.2		1.3	---	2.5	1
II FIV	0.7	0.3	---	---	1.0	0.3
TOTAL	70.0	30.0	100.0	50.0	250.0	100
%	28	12	40	20	100	

IV. Procurement and Contracting

- 4.01 When goods and services to be procured or contracted are financed in whole or in part with foreign exchange from the Financing, the procedures and specific requirements for the invitation for bids or other form of purchase or contracting shall permit the unrestricted participation of goods and services, including those relating to any mode of transport, originating in the member countries of the Bank. Consequently, no conditions that would either limit or restrict the supplying of goods or the participation of contractors originating in such countries may be imposed through such procedures and specific bidding requirements.

V. Consulting services

- 5.01 In the selection and contracting for consulting services to be financed either in whole or in part with the resources of the Financing: (i) the procedures set forth in the loan contracts and as an annex to the Credit Regulations, shall be used; and (ii) no stipulations or conditions may be set that would limit or preclude the participation of consultants from the member countries of the Bank.

VI. Maintenance

- 6.01 The basic purpose of the maintenance will be to conserve the works of each project financed under the Program in substantially the same condition they were in at the moment of their completion.
- 6.02 The annual reports referred to in Clause A.2(b)(iii) of Appendix III shall contain at least the following information:
- (a) a description of the entity responsible for maintenance, with information on the staff assigned to maintenance, the number, type and condition of maintenance equipment, the location, size and condition of maintenance shops and warehouses;
 - (b) the funds invested in maintenance during the preceding fiscal year, the funds available for maintenance in the current year's budget, and the amount to be assigned for this purpose in the budget for the year in which the maintenance plan is to be carried out; and
 - (c) maintenance conditions, based on a sufficiency evaluation system, including the quality of the water, based on representative reports on the major parameters.

VII. Agreement between the Ministry of the Economy and COFAPyS ("Acta-Acuerdo")

- 7.01 The Agreement referred to in Clause 8(c)(ii) of Appendix I and Clause 7(c)(ii) of Appendix II shall include, in addition to the requirements set forth therein, at least the following:
- (a) COFAPyS shall be required to maintain its own administrative structure, with operational costs defined for the execution of the Program;
 - (b) the Program's cash flow deficits from 1991 through 1994, inclusive, shall be financed with funds, not subject to the concession of new credits, resulting from the recovery of credits granted under the Bank loans for the financing of the Rural Water Supply Program administered by COFAPyS, and COFAPyS shall agree to repay the same once it has reached financial autonomy; and
 - (c) that COFAPyS shall:
 - (i) carry out the Program in accordance with adequate administrative and financial practices, to which end it shall maintain qualified personnel according to its statutes;
 - (ii) comply with its obligations set forth in the loan contracts, the Credit Regulations and the Operational and Financial Action Plan; and

- (iii) for the sub-loans which require a guarantee by the Province, require that the corresponding Province has been declared eligible to participate in the Financial Recovery and Economic Development Program for the Argentine Provinces, prior to the approval of the respective subloan.

VIII. Annual review sessions

8.01 In the annual review sessions referred to in Paragraph A.2(c) of Appendix III, the following topics shall be analyzed:

- (i) the degree to which the resources of the Program and the pari passu contribution have been used, so as to assure that, at the end of the disbursement period, this shall not exceed an average of 80% of the external financing;
- (ii) the evaluations, by sample, of at least two of the approved sub-loans whose amounts are below the discretionary limit of COFAPyS;
- (iii) the financial situation of COFAPyS and its charge for intermediation, for the purpose of recommending justified modifications to said charge;
- (iv) the degree of compliance with the Credit Regulations and the changes needed to facilitate the use of the resources;
- (v) the degree of implementation of the measures for mitigating undesirable environmental impacts, proposed for each project financed under the Program;
- (vi) the degree of compliance with the tariff rate policy;
- (vii) the degree of compliance with the regulations concerning the Program's current interest rate;
- (viii) the degree to which annual data has been collected by the sub-borrowers to facilitate the ex-post evaluation of the projects to be carried out by COFAPyS;
- (ix) the degree of advance in the institutional and operational development achieved by COFAPyS, and of the operational and financial goals established in the Action Plan;
- (x) the work done by each of the five consultants referred to in Clauses 8(c)(vi) and (vii) of Appendix I and Clauses 7(c)(vi) and (vii) of Appendix II; and
- (xi) starting with the second review session, the results achieved in the preceding annual session.

IX. Tariff rate provision

- 9.01 The proportion of the investment plan to be contributed by the revenue from tariff rates of the entities receiving financing with the resources of the Program referred to in Clause 8(e) of Appendix I and Clause 7(e) of Appendix II, shall not be less than 10% of the total investments for each year, which percentage may be increased in order to comply with the financial obligations of the sub-borrowing entities. The percentage shall be determined by comparing the net internal generation of funds with the total construction program, including its financial costs. Internal generation shall be understood to mean the total operating revenue less operating expenses, before considering depreciation and amortization charges, financing costs and non-operational results, plus the items pertaining to other revenue of the respective entity.

X. Ex-post evaluation

- 10.01 To accomplish the objectives of the initial, periodic and ex-post evaluations of the Program, as referred to in Clause A.2.(a)(ii), (iii) and (iv) of Appendix III, at least the following must be evaluated:
- (a) Analytical description and time spent in the process of identification, preparation, presentation, evaluation and approval of the projects of the Program. This analysis shall be based on a documented follow-up of the successive stages in the presentation and evaluation of projects by COFAPyS. The main problems identified in the preparation of the projects by the sub-borrowing entities and the measures taken by COFAPyS to overcome them shall be highlighted;
 - (b) Statistics on the projects identified, according to the stage of preparation, evaluation and execution, by categories, of projects and type of sub-borrowing entities. Data shall be included on budgeted and actual costs for investments and for operation and maintenance; actual coverage ratios; population benefitted by the project and community totals;
 - (c) The impact on the sub-borrowers of the Operational Improvement Project financed by the Program. Improvements in the administration of the services, personnel and financial resources, tariff rates, billing and collections, cost recovery and other aspects envisaged in that project shall be measured and evaluated;
 - (d) The impact on COFAPyS of the Institutional Strengthening component of the Program. In particular, the impact on improvements in promotion, evaluation and project supervision, financial management capabilities, administrative and logistical systems, the capacity to evaluate environmental impacts, and the results of staff training, and other aspects envisaged in said component shall be measured and evaluated; and

- (e) The evolution of the tariff rates for water supply and sewerage services and of the financial situation of the sub-borrowing entities of the Program.

XI. COFAPyS Action Plan

- 11.01 The Action Plan referred to in Clause 8(c)(vii) of Appendix I and Clause 7(c)(vii) of Appendix II shall include the following operational goals:

<u>Years of Execution</u>	<u>Disbursements IDB-IBRD</u> Millons of US\$	<u>Maximum level of</u> <u>Administrative</u> <u>Expenditures of the</u> <u>COFAPyS Executing Unit</u> Millons of US\$
1	4.0	1.3
2	5.0	1.3
3	21.0	1.3
4	42.0	1.4
5	50.0	1.4
6	62.0	1.4
7	16.0	1.4

- 11.02 The maximum level of arrearages in the loan portfolio at the end of each fiscal year shall be 5%.

SECTORAL POLICY DOCUMENT

BUREAU FOR WATER RESOURCES
[SECRETARIA DE RECURSOS HIDRICOS]
1988

The sanitation policies of the national government are aimed at:

1. Strengthening the current decentralized federal system of supplying sanitation services by:
 - a) Improving the performance of current suppliers, whether they be public companies (provincial or municipal) or private ones so that their service can become self-financing and effective on both a quantitative as well as a qualitative basis.
 - b) Helping to set up new services in areas not currently being serviced that draw upon community resources and those of the private sector and that contribute to consumer involvement.
2. Favoring the rational use and conservation of water resources by not undertaking projects that have negative impact on the environment and by avoiding operating systems that contaminate the environment.
3. Encouraging current service suppliers to organize into registered companies that ensure autonomy, effectiveness, and efficiency in the provision of services.
4. Encouraging the adoption of standardized and functional technical specifications to be used in the design of systems, drinking water and treatment plants, and measurement and user systems.
5. Directing investments administered by the provincial or municipal bodies toward less socioeconomically developed areas, promoting, whenever possible, private sector participation especially in the provision of services.
6. Promoting investments in border areas under the Federal Government in order to ensure human settlements, in accordance with national policies.
7. Favoring the organization of quality control systems that involve users and workers in management.
8. In view of the current economic conditions, giving priority to investments that are labor intensive at the local level and completed within a short time frame in order to maximize the use of scarce capital resources.

9. Taking the utmost advantage of existing investments by reconditioning, expanding, or altering existing systems prior to undertaking new projects.
10. Promoting the technological development in the sector, the use of appropriate technology, and the adoption of modern operating techniques in order to ensure greater levels of effectiveness and to contribute to the improvement in the quality of community life.
11. Promoting the training of the workforce in the sector in order to improve the institutions and foster individual development, coordinating the activities with agencies responsible in the subject matter.
12. Setting up a decentralized planning system, centrally coordinated and regionally based, in order to become more responsive to local needs.
13. Promoting commercial systems that measure consumption and charge rates on the basis of meter-registered volume in order to further goals of fairness, financial self-sufficiency, and effectiveness.
14. Giving institutional support to COFAPyS in its role as the sole technical-financial agency responsible for resource management in relation to domestic and foreign loans and technical supervision of sector policies, by virtue of its being the only institutional environment in which all the provincial jurisdictions are represented at the federal level.
15. Encouraging private sector activities that use venture capital to invest or become involved in the sector through the appropriate legal mechanisms and/or international or domestic credits.
16. Promoting the control of water pollution, regardless of the source, through studies, designs, and investments aimed at overcoming the problem.

NATIONAL WATER SUPPLY

AND SEWERAGE PROGRAM

FIRST STAGE

DRAFT CREDIT REGULATIONS

JANUARY 1991

A. DEFINITIONS

The following definitions are given for the purposes of these Regulations and their annexes:

1. COFAPyS

Federal Water Supply and Sanitation Council [Consejo Federal de Agua Potable y Saneamiento].

2. IDB

Inter-American Development Bank.

3. IBRD

International Bank for Reconstruction and Development

4. Loan Contracts

Loan Contract-AR, signed by IDB and Argentina on

Loan Contract-AR, signed by IBRD and Argentina on

5. Program

The array of activities of an institutional, financial, economic, technical, and environmental nature, and all other types of related activities associated with the "National Program to Optimize, Refurbish, and Expand Water Supply and Sewerage Services, Stage I," which is financed in part by loans from IDB and IBRD and the support of users, provincial and/or municipal companies.

6. Lendable Program Resources

Those financial Program resources originating from IDB and IBRD Loans.

7. Subborrower

Legal entity or provincial and/or municipal agencies that supply drinking water and/or sewerage services at the municipal and/or provincial level and that receive funds charged against Program resources.

8. Project

The entire range of activities to be undertaken by the Subborrower with financing from Program resources.

9. Subproject

Specific activities that are an integrated part of a project financed with Program resources.

10. Project Cost

The total cost of a project, including escalation (foreseeable cost increases) and contingencies, except for those costs specifically noted in these Regulations.

11. Fundable Cost of the Project

This consists of all those costs accruing from the execution of the project and/or its preparation and implementation, except for taxes, rates or charges, as specified in these Regulations.

12. Subloan Contract

Legal instrument by which the award, from COFAPyS to a Subborrower, of a loan charged against Program resources is formally recognized.

B. CREDIT REGULATIONS

I. PURPOSE

- 1.01 The purpose of these Regulations is to establish the terms and conditions that will govern the credits awarded by COFAPyS to finance the undertaking of works and the purchase of goods and services carried out by the operating service companies at the municipal and provincial level under the National Program to Optimize, Refurbish, and Expand Water Supply and Sewerage Services, Stage I, which is partially financed with resources from Loan-AR, awarded by the Inter-American Development Bank and Loan-AR, awarded by the International Bank for Reconstruction and Development.

II. BASIC OBJECTIVE AND GOALS

- 2.01 Within the framework of the Sectoral Policy set forth by the national government, the basic objective of the Program is the operational improvement of the companies that provide services at the municipal and provincial levels (which shall hereinafter be referred to as 'companies'). The goal is to attain hygienically safe drinking water and sewerage services, including the refurbishment, optimization, and expansion of these services in such a way as to make them cost-effective and yield a reasonable economic profit.

III. GENERAL PLAN

PROGRAM RESOURCES

- 3.01 The program resources, which total the equivalent of US\$250 million, will consist of funds from IDB loans in the amount of US\$100 million, an IBRD loan in the same amount, and will be accompanied by counterpart resources, furnished by the companies, the provincial and municipal governments, the beneficiaries of these services, and other sources of funding, which altogether will represent the equivalent of US\$50 million.
- 3.02 Projects for the following purposes may be financed with Program resources:
- a) Improve company operations - Type "A" Projects;
 - b) Refurbish and optimize water supply and sewerage systems - Type "B" Projects;
 - c) Expansion of existing water supply and sewerage works and construction of new works - Type "C" Projects;
 - d) Preparation of studies and projects related to any of the previous items - Type "D" Projects.

ELIGIBILITY CONDITIONS FOR THE COMPANIES

A. GENERAL CONDITIONS

3.03 Those companies that fulfill the following legal, institutional, and financial conditions will be eligible to obtain subloans under the Program for all types of projects.

a) Legal Conditions - The Company must have the legal capacity to sign a subloan agreement.

b) Institutional Conditions - The companies providing services must have full administrative and financial authority in order to be able to take on the subloan obligations under the contract, and to operate the systems in a business-like manner that permits efficient provision of services to its customers. The companies should have full authority to:

i) take on the subloan contract obligation;

ii) manage without constraints all assets and liabilities;

iii) manage the customers portfolio, including the ability to set rates, apply such corrective measures as cutting off water service and taking legal action to receive payment for accounts receivable;

iv) set up and maintain in appropriate operation a net-worth type of financial accounting system;

v) manage their personnel (select, hire, set salaries, promote, and dismiss);

c) Financial Conditions - The subborrowers, at the time the subloan is approved, must have sufficient income to cover the costs of administration, operations, and maintenance. Furthermore, they must submit a financial plan that demonstrates: (a) that they can make at least 70% of the required local counterpart contribution from funds generated by the subborrower's operations or from user payments; and (b) that they can generate additional revenue to finance a portion of their respective investment plans, in accordance with Annex E.

B. SPECIAL CONDITIONS

3.04 Every company will be eligible for a subloan that allows execution of Type A projects of technical assistance for Operational Improvement, including: (a) institutional development, (b) commercial improvement, (c) operational improvement, first part, and (d) training, and also Type D study projects. For these study projects, the company need not meet the conditions set forth in paragraphs 3.03(b) and (c), although it must present a plan in

which are described the goals that are proposed for financial and institutional areas and a schedule for their adoption.

- 3.05 All Type B and C projects must be accompanied by Type A projects, to improve operations of facilities and existing services in such a way that the companies can increase their operational efficiency, provide services at low cost, and develop the financial capacity to contribute to the funding of investment programs. These projects will include at least the elements listed below and a schedule for their adoption:
- a) a plan to measure consumption of at least 30 % of the users, who altogether represent at least 50% of total consumption;
 - b) the design and adoption of a rate scale based on measured consumption;
 - c) a plan to improve the billing and collection systems with specific goals for setting rates, collection, and billing; and
 - d) a plan to improve the operation and maintenance systems, including the adoption of budgets based on tasks and management indicators (e.g., routine maintenance, emergency repairs, refurbishment, replacement) as well as appropriate resource allocation for these purposes (labor, equipment, materials, and supplies).
- 3.06 The components and goals for improvement of operations of existing facilities will be reflected in the subloan contracts. The goals for a new subloan must be equal or superior to those for the previous one.
- 3.07 When the companies must obtain approval from provincial or municipal authorities in order to set rates, the guarantee agreements entered into with these agencies must establish their commitment to approve the adjustments requested in order to ensure required income-generating capacity. In order to be eligible for a new subloan, a company must be in compliance with all of the clauses of the previous subloan contract.

GENERAL CRITERIA FOR PROJECT EVALUATION AND APPROVAL

- 3.08 The funding of a project depends on the fulfillment of the general evaluation criteria as specified in the Annexes A, D, E, F, and G to these Regulations.

FUNDABLE CATEGORIES

- 3.09 Program resources may be used for subloans to finance the works and equipment and service purchases of the National Program to Optimize, Refurbish, and Expand Water Supply and Sewerage Services, Stage I.

IV. PROJECT OPERATIONS

GUARANTEES

- 4.01 Debt service on both the subloans and the local contribution will be guarantied by the provincial or municipal governments, whichever is appropriate. To back up their guarantees, the provinces or municipalities, must pledge to COFAPyS the rights to their share of revenues collected by the national government as established under pertinent laws.
- 4.02 In order for a provincial government to qualify as a guarantor or provider of local counterpart financing to fund a project, it must satisfy the eligibility requirements set forth in the Financial Reorganization and Provincial Economic Development Program.

DENOMINATION OF SUBLOANS

- 4.03 The subloans must be in dollars and will be payable in equivalent australs, which will be paid in their constant value as determined by the fluctuations in the official Austral-US Dollar exchange rate.

INTEREST RATES

- 4.04 Users of subloans will be charged, for interest, the annual interest rate or rates that, while in agreement with legislation and policies on interest rates established by the national government, are compatible with what is set forth in the IDB and IBRD loan contracts for this kind of financing. During the duration of the Program, every six months COFAPyS, for its part, and IDB and IBRD, for theirs, should review the interest rates charged for subloans. The purpose of these revisions is to keep the interest rate of the Program up to a level that guaranties that the operating expenses of COFAPyS will be covered. The annual interest rate on subloans will be the sum of the interest charged on IDB and IBRD loans, plus an intermediary margin of two percentage points.

ADDITIONAL RATE COVERING EXCHANGE RATE RISK

- 4.05 In addition to the interest rate indicated in the preceding paragraph, the subborrowers should be charged a two percentage point annual rate in order to cover prospective exchange rate differences that might come about, given that the IDB Loan and the IBRD Loan must be repaid by COFAPyS on the basis of the composition of the basket of currencies in which the resources were received. The aforementioned resources will come from the Monetary Control Fund, the management of which must be undertaken as specified in the pertinent Regulations.

CEILING ON SUBLOANS AND INDEBTEDNESS

- 4.06 The discretionary limit of this operation has been set at the equivalent of US\$5 million. Unless the IDB and/or the IBRD make it known that they have no objection, subloans from Program resources may not be awarded: (a) if they total more than the equivalent of US\$20 million, or (b) if they total more than the accumulated total equivalent of US\$35 million, when added to the debt balance on previous subloans to the same subborrower awarded with resources from this Program and credits received under programs previously financed with IDB and/or IBRD loans.

COMMISSIONS

- 4.07 The resources commitment fee, may not exceed an annual 1.25% of the non-reimbursable amount of the credit. In addition, a one-time fee will be charged for auditing and monitoring, which will not exceed 1% of the subloan amount.

LOAN TERM AND GRACE PERIOD

(a) Depreciation

- 4.08 The depreciation periods, including the grace periods for the credits, will extend as long as 16 years, to be counted starting as of the effective date of the subloan, with payment first being made six months after the scheduled date for the final disbursement.

These periods will vary according to the kind of subproject as detailed below:

- a) Operational improvement: up to 12 years;
- b) Refurbishment: up to 12 years;
- c) Expansion: up to 16 years;
- d) Studies: up to 6 years.

SPECIAL CONDITIONS ON SUBLOANS

- 4.09 The awarded subloans charged against Program resources may not exceed the following percentages of the total costs for the project in question:

- a) Operational Improvement Projects - 90%
- b) Refurbishment Projects - 80%
- c) Expansion and New Works Projects - 60%
- d) Study Projects, including the studies included in Type A Projects - 100%

RESOURCE PLACEMENT

- 4.10 Program resources may be used for investment in urban areas having populations of over 15,000 inhabitants.

RESTRICTIONS ON THE USE OF PROGRAM RESOURCES

- 4.11 The subborrower may not include the following items as part of the cost of a project to be funded with Program resources:

- a) General and administrative expenditures.
- b) Purchase of lands or real estate already built upon.
- c) Pay-off of debts, dividend payments, or recouping investments already made.
- d) Purchase of stocks, commercial rights, and other bearer securities.
- e) Recurring labor costs.
- f) In-kind payments of the company.
- g) Assets from previous investments.
- h) Purchase of used machinery and equipment.
- i) Purchase, construction, or expansion of housing.

The subborrower should present appropriate documentation that permits the verification of the eligible payments for the execution of the project to be financed with Program resources.

V. PREPARATION, ANALYSIS, AND APPROVAL OF REQUESTS FOR SUBLOANS

- 5.01 For the purpose of establishing their feasibility, all subloan requests must be submitted by COFAPyS to an analysis of their technical, socioeconomic, financial, institutional, environmental, and legal merits.

This analysis of the projects will verify their correct adherence to the criteria detailed in Annexes A, D, E, F, and G.

- 5.02 To take effect, a subloan contract must have been signed by the relevant parties according to the models for the following legal instruments that appear as Annexes H, I, and J to these Regulations:

- a) Agreement Between COFAPyS and Provincial Government.
- b) Agreement Between COFAPyS and Subborrower.
- c) Subloan Agreement.

VI. SUBLOAN CONDITIONS

GENERAL CONDITIONS

6.01 The subloan agreement referred to above in paragraph 5.02(c) must include, inter alia, the following stipulations:

- a) The right of COFAPyS, the IDB, and the IBRD to examine the properties, sites, works, and construction jobs of the given project.
- b) The commitment that the goods and services financed with the subloan will be used exclusively in the execution of the given project.
- c) The obligation to furnish financial statements and all other information that COFAPyS, the IDB, and the IBRD may reasonably request of the subborrower with regard to the project and its financial situation.
- d) The right to suspend subloan disbursements should the subborrower not fulfill its contractual obligations.
- e) The commitment to take all necessary action to ensure that the contracting for construction and equipment, as well as the purchase of goods for the project, be done at a reasonable cost, which will generally be the lowest market price, taking into account quality, efficiency, and such other factors that may be relevant and in accordance with Annex B. The procedure described in Annex C to these Regulations will be followed in the contracting of studies and projects.
- f) The commitment to take out and hold insurance, when appropriate, at the customary amounts, on goods in order to guaranty the subloan against risks.
- g) Prior acceptance that the agreement for the given subloan, with all the rights and prerogatives extended to COFAPyS, may be ceded to IDB or IBRD.
- h) The obligation that the works executed under the project will be managed, operated, and maintained according to generally accepted technical standards and in accordance with IDB and IBRD policies; and that to this effect, the project companies will allocate annually in their respective budgets a sufficient line for their maintenance.

- i) Should it prove necessary, the lender and/or guarantor is committed to taking the necessary measures so that the rates charged for public services will meet the conditions specified in these Regulations.
- j) The commitment to keep appropriate accounting records that allow an accurate reading of the status of the financial condition and of the results, origin, and allocation of projects funds according to the accounting plan that will have been agreed upon with COFAPyS prior to undertaking operations.
- k) The commitment to abide by the stipulations of these Regulations and the conditions under which COFAPyS has approved the subloan.
- l) The commitment to present periodic information that COFAPyS may reasonably demand in order to ascertain how the execution of the project is progressing and the fulfillment of the clauses of the relevant subloan agreements.
- m) The commitment to gather and present on a regular basis information that is required for a prospective a posteriori project evaluation, according to the guidelines indicated in Annex D to these Regulations.
- n) The necessary precautions on the part of the subborrowers to ensure:
 - i) that the revenues charged for services provided to their customers is sufficient to cover, at a minimum, the costs of management, operation, and maintenance and that they will generate sufficient resources to provide for debt service and part of their investment program.
 - ii) that they will adopt the project components enumerated in paragraph 3.04.
- o) The necessary precautions to ensure that the resources that accompany the awarded credit are made available in a timely fashion in order to allow the complete execution of the project for which the credit was granted.

VII. GENERAL PROVISIONS

- 7.01 The subloan resources from the IBRD Loan may only be used to pay for goods and services originating in IBRD member countries, Switzerland, and Taiwan, China. Subloan funds from the IDB Loan may only go toward the purchase of goods and services originating in IDB member countries.
- 7.02 The subborrower who is in default for over 100 days in the payment of its obligations emanating from a subloan awarded with the

resources from this or other IDB or IBRD financed programs, will not be eligible to receive additional subloans with the resources from this Program, or to continue to receive disbursements so long as this situation persists. In the event that the Province is the guarantor, the restrictions will apply as well to all institutions and municipalities for which it is the guarantor.

- 7.03 That COFAPyS has received a request will not obligate it to extend any loan, which will be decided once the appropriate analysis is made of the request.
- 7.04 No subborrower may transfer the debt acquired in using Program resources unless first authorized by COPAFyS with the agreement of the IDB and the IBRD.
- 7.05 The subborrower will undertake to deliver the information needed for the evaluation of the results of the program.

VIII. CONDITIONS FOR CALLING IN LOANS

- 8.01 Notwithstanding the provisions included in other sections of these Regulations, subloans may be considered callable should any of the following circumstances take place.
 - a) Should it be proven that the information supplied by the borrower when completing the application for the subloan was false;
 - b) Should the subborrower oppose the auditing of the investments or goods given as collateral or of any fact capable of diminishing their worth or compromising their ownership;
 - c) Should the subborrower fail to make either full or partial payment on one of the repayment installments and/or interest payments specified in the subloan agreement by the dates on which it is due;
 - d) In all cases where the subborrower fails to comply with the contract for the subloan financed with funds from the program or if said subborrower should fail to live up to the provisions of these Regulations or those of the respective credit resolutions.

IX. AMENDMENT OF THE REGULATIONS

- 9.01 COFAPyS may suggest to the IDB and the IBRD that these Regulations be amended so as to adapt them to new circumstances or conditions that may come about during the execution of the Program as one means to ensure that its objectives are accomplished. The amendments will take effect once they have been examined and approved by the IDB and the IBRD.

ANNEXES

- A. Project Evaluation Guidelines.
- B. Bidding Procedures for Contracts on Works and Equipment Purchases (IDB and IBRD).
- C. Consultant Selection Procedures.
- D. Guidelines for a posteriori Evaluations.
- E. Rate Regulations.
- F. Institutional - Financial Evaluations.
- G. Methodology for Socio-Economic Analysis.
- H. Model Agreement Between COFAPyS and Province.
- I. Model Agreement Between COFAPyS and Executor.
- J. Model Subloan Agreement.

PROJECT EVALUATION GUIDELINES

I. Background

- 1.1 These guidelines have been prepared so that the design of Subprojects under the Program are consistent with the policies and priorities established by the Government in order to strengthen the sector. Such projects should help develop strong regional and municipal companies that can provide adequate water supply and sewerage services at minimum cost.
- 1.2 A project is the sum of one or more components of these three main categories: (a) operational improvement, including institutional development; (b) refurbishment of existing infrastructure; and (c) construction of new facilities. These categories are listed in descending order of priority. In any case, the composition of a project should be tailored to the specific needs of each company.
- 1.3 The analysis of a given project should establish the priority of the proposed components, its consistency with sector policies, and its contribution to improving the delivery of such services. This analysis also seeks to ensure that the project or its components do not adversely affect the environment and that their benefits are equal to or greater than their costs.
- 1.4 In order to perform this analysis in a systematic and effective way several steps should be followed. First, it is necessary to assess, at least in overall terms, the organization in charge of executing the project and operating the services, the effectiveness of its commercial system, its operations, and how qualified its staff is in the performance of its tasks in providing appropriate services. Secondly, it is necessary to evaluate, in general terms, the whole water supply and sewerage system and the existing and future demand for these services. Feasible options to remove institutional and physical constraints can be explored, compared and selected, and the project components can thus be developed. The end result is an investment and action plan designed to improve the performance of the company and its capacity to meet future demand at minimum cost. Finally, an environmental assessment and a cost-benefit analysis is prepared to ensure that the proposed works meet acceptable standards of environmental protection and minimum net benefit requirements.

II. Operational Improvement Projects

- 2.1 All programs directed at improving the efficiency of a water supply and sewerage service company should be justified on the basis of a general assessment of its organization and main organizational units, the effectiveness of its commercial and accounting system and its operations, and the training needs of its staff. On this basis, programs to improve operations can be designed to meet specific needs. A list of the main components of these projects, namely institutional development, commercialization, training

plans, operational improvements, including the main activities and expected outcomes, is presented in Section VIII.

III. Environmental Assessment

3.1 All subprojects will be screened to determine their potential environmental impact, the seriousness thereof, and the proposed activities to prevent or mitigate any adverse effects and ensure that the subproject is environmentally sound and sustainable. Most projects are likely to require an environmental impact assessment. Each assessment will include the following:

- a) an analysis of its policies and legal and administrative framework;
- b) a detailed description of the project and of the most important environmental conditions;
- c) an analysis of positive and negative effects likely to result from the project components;
- d) an analysis of options to mitigate any adverse effects and the costs and benefits of proposed remedial actions;
- e) a plan to reduce potentially adverse environmental effects to acceptable levels, costs of the plan (capital and recurrent) and potential institutional and training costs; and
- f) a control and monitoring plan regarding environmental effects and performance.

IV. Demand Analysis

4.1 The evaluation of a municipal water supply and sewerage system should start with an analysis of existing coverage levels and the type of service provided as well as per capita and aggregate consumption. In the demand analysis the following aspects should be assessed in detail:

- a) Existing coverage levels and type of service provided (total population, population served, number of household connections, community standpipes, septic tanks, etc.);
- b) Water consumption (based on household connections), preferably broken down by main users (domestic, commercial, industrial, and official);

Metered consumption.

Estimated unmetered consumption.

c) Water production;

Metered production;

Estimated unmetered production;

d) Estimates of unaccounted-for water (UFW), which is defined as the difference between production and metered consumption. (When consumption is not metered this factor cannot be ascertained with an acceptable degree of accuracy).

- 4.2 The analysis of historical production/UFW/demand should cover data from the previous two to five years. Production/UFW/demand projections should be based on the projected growth of house connections or service accounts and take into consideration and effects of metered consumption, plans to reduce UFW, improvement in commercial practices, and possible effects of the price elasticity of demands. Projections should be made on a yearly basis for the first 5 years and then at 5-year intervals for a maximum of 20 years. Estimates of sanitary sewerage flow demand should also be made on the basis of the number of connections to the sewer system and reasonable assumptions on consumptive use and infiltration flows.

V. Refurbishment Programs

- 5.1 The evaluation of a water supply and sewerage system begins with an estimate of the main components of the system (main physical dimensions, materials, condition, reliability, and capacity). Major activities and expected results are described in paragraph 12. Major components include: 1/

a) Water Supply

Intake facilities
Transmission pipelines
Treatment plants
Storage tanks
Distribution network
Pumping stations

b) Sewerage System

Collection pipe system
Collectors and interceptors
Pumping stations
Outfalls
Treatment plants

1/ This list is indicative and should be modified in accordance with the specific requirements of a given project.

- 5.2 This evaluation provides the bases to assess the feasibility of refurbishing the system components to bring them up to their optimal capacity at a cost usually lower than the one required to construct a new facility.

VI. Optimal Expansion of System Components

- 6.1 In determining the optimum expansion plan (i.e., the least costly course of action), the following features should be taken into account:
- a) Timing of investments. All investment works should be built or expanded as late as possible, as determined by the demand projection and the existing capacity of the component under analysis.
 - b) Facilities should be sized to minimize idle capacity. Several models are available to determine the optimum size and the sequencing of investments.
- 6.2 One model often used to determine the optimum size of water and sewerage works is based on the observation that these works present economies of scale and assume a linear demand growth. Based on a discount rate of 12% and average economy of scale factors, the following design periods are recommended: 1/

	<u>Years</u>
Intake works	20
Deep wells	10
Transmission pipelines	15
Distribution system	15
Water treatment plants	10
Storage tanks	10
Pumping stations, public works	20
Equipment	10
Sewerage pipe systems	20
Sewerage treatment plants	10

- 6.3 Design periods greater than those indicated or for components not shown should be justified by a detailed analysis. Financial constraints may justify the use of shorter design periods.

VII. Follow-Up and Monitoring

- 7.1 Unit costs and tangible control indicators, which are easily observable throughout the duration of a project, should be developed for the main investment components of a subloan. A list of such controls and unit cost indicators appears at the end of

1/ Cost functions can be expressed as $C(\$) = k.Q^a$ where $C(\$)$ represents the investment cost; k , a constant; Q , capacity; and a , an economy of scale factor.

this Annex. These indicators should be used as control factors on a regular basis throughout the duration of a project in order that all the investments yield the results anticipated and that these investments will continue to be cost-effective. The unit cost indicators also fulfill the purpose of creating a data bank of costs, which will be used to develop better cost estimates for future projects or to help in identifying similar projects that could be reproduced.

VIII. Operational Improvement. Type a Project 1/

8.1 Institutional development

a) Accounting Systems Subproject

Objectives: Computerized system that meets legal and commercial requirements.

Activities

1. Assessment of legal, commercial, and cost accounting requirements.
2. Design of accounting systems to meet these requirements, including accounting forms, information flows, and manuals.
3. Design of inventory and fixed asset systems.

Outcome

1. Integrated accounting system that interfaces efficiently with the commercial, inventory, personnel management and budget system.
2. Accounting system implementation and manual production.
3. Assessment and costing of computer software needs.

b) Organizational Structure Subproject

Objective: To improve the organization of the company to make it more responsive to customer needs.

Activities

1. Assessment of decentralization (provincial companies) imperatives and organizational needs.
2. Definition of roles and responsibilities.

1/ The main subprojects, activities, and results listed should be considered as indicative. Each project must be adapted to the specific needs of the company.

3. Preparation of job descriptions.
4. Assessment of staff and training needs.
5. Assessment of equipment needs.

Outcome

1. Organizational changes proposed
2. Job descriptions.
3. Cost estimates of training and equipment needs.
4. Develop monitoring indicators to evaluate the efficiency of operations and the major departments.

c) Planning System Subproject

Objective Strengthening financial and physical planning capacity.

Activities

1. Assess basic data bank needs for appropriate planning and identify departments responsible for producing such data.
2. Ascertain reporting and information requirements to and from the planning department.
3. Assess minimum staff and equipment needs for the department.

Outcome

1. Reference terms for the planning department.
2. Training needs in this area.
3. Formats for reporting to and from the planning department.

8.2 Commercial System

a) Customer Survey Subproject

Objective: Update or create customer survey and develop procedures to keep it current.

Activities

1. Locate and produce appropriately scaled street maps to plan and monitor the user survey.
2. Design of survey forms on which to collect information:

- a) Type and coverage of service (water, sewerage) and whether it is public or private.
 - b) Number of houses and buildings served by house connections or other means. Number of service accounts 1/
 - c) Identification.
 - d) Number of persons living in a service account dwelling.
 - e) Number of service accounts per house connections and classification of the service accounts.
 - f) Physical characteristics of the house connections such as pipe material, diameter, type of meter, meter box, and condition.
3. Check the survey information against that provided by the census in order to detect unregistered or illegal connections and make the necessary corrections. The information on unregistered accounts should be sent to the appropriate department for collection, if appropriate, of any payments due.
 4. Review existing procedures, open and close service accounts, ensure that the customer survey is kept current, and recommend changes needed to avoid any loss of information.
 5. Provide the census data, drawings, and new information to the commercial system and to operations. This will provide the basis to keep the billing and collection systems current and to improve the operation of the distribution system.

Expected Outcome

1. Updated connection system plans.
2. Computerized information on all connections and accounts.
3. List of all unregistered accounts.
4. Assessment of the coverage level and types of service.
5. Recommendations to keep user survey current.

1/ A distinction is made between a service account and a household connection. A household connection can serve one or more service accounts.

b) Billing and Collection Subproject

Objective: Computerized system that allows continuous updating and control and produces timely information on customers, consumption, billing, and accounts receivable.

Activities

1. Review of the existing system to detect deficiencies both in software and hardware systems in order to read consumption meters and billing and payment collection done in a timely fashion.
2. Assessment of the existing computer and meter-reading facilities.
3. Review of monitoring and control procedures, including the handling of consumer complaints.
4. Update or design of the system.
5. Review of legislation that affects collection of overdue accounts from users.

Expected Outcome

1. Recommendations to avoid repetition of existing problems.
2. Recommendations to reduce time and cost of meter reading, billing, and collection.
3. Implementation of new system. The new system should be run concurrently with the existing system for a six month period to allow detection of problems and prevent loss of information. The new system should generate statistical information on consumption, revenues, and accounts receivable. It should interface with the operations, planning, accounting and finance departments.
4. If new computer equipment or other equipment is required, its main characteristics should be defined.
5. Detailed costing of proposed new equipment.
6. Design of control systems.

c) Consumption Metering Subproject

Objective: To meter those 30% of consumers that account for at least 50% of total consumption. New rate structure.

Activities

1. Identification of principal consumers by category and areas to be measured.
2. Assessment of the number and type of meters and cost effectiveness of proposed meter reading equipment.
3. Analysis of the regulations and procedures that affect the installation and ownership of the meter (entity or user).
4. Design of public education campaigns to educate consumers and minimize resistance against meter use.
5. Review and update the existing rate structure to make it more efficient and equitable when meters are introduced.

Outcome

1. Bidding documents for the purchase of meters and related equipment and for pipes and accessories for their installation.
2. Cost estimates for the proposed metering plan and public education campaign.
3. Detailed calculations of the financial impact of the proposed rate structure.
4. Design of metering rounds, frequency of reading, control systems, and monitoring indicators.
5. Cost estimates of meter reading.

8.3 Training Subproject

Objective: Identification of training needs and design of training program to be undertaken on a continuous basis in order to improve company efficiency.

Activities

1. Assessment of training needs in cooperation with staff representatives.
2. Identification of entities that can provide training.
3. Calculate of training costs.
4. Coordination with institutional development programs to ensure minimum training needs for designated positions.

Outcome

1. Identification of training priorities and training plans for the next three years.
2. Costing of training needs and the design of a financial plan to support training needs.
3. Implement monitoring indicators that will help assess the cost effectiveness of the training program.

8.4 Operational Improvement

a) Survey of Distribution and Collection Systems Subproject

Activities

1. Location of all pipes, valves, and accessories.
2. Determination of their lengths, diameters, materials, age, and condition.
3. Assessment of maintenance practices.
4. Selective sampling of pipes to determine inside and outside conditions.
5. Determination of pipe gradients, capacity and infiltration rates (sewerage systems).

Outcome

1. Detailed plans of the system.
2. Inventory of pipes and accessories by material, diameter, and age.
3. Fixed asset evaluation. Total cost and accumulated depreciation based on replacement costs and average age.
4. Recommendations on keeping information current.

b) Physical Plant Assessment Subproject

Objective: Determine the capacity and condition of the existing system, actions to optimize it and to improve the quality of operations and maintenance.

Activities

1. Assessment of: catchment works and raw water quality; water quality and seasonal flow variations; capacity and condition of intake structures; metering facilities.

2. Treatment plants: capacity and condition of processing units; effects of raw water quality on processing units; quality of treated water and laboratory facilities; metering facilities; updating of plans; equipment; lists and specifications.
3. Pipeline channels: length, diameter, materials and condition of pipes, valves and accessories, pipe gradients, pressures, and roughness coefficient, metering facilities.
4. Pumping stations: type and capacity of pumps and of power equipment, effectiveness of main equipment, flow and water level controls, metering equipment, list of equipment and specifications.
5. Distribution systems: hydraulic balance, unaccounted-for water, length, diameter, materials and condition of pipes, valves and accessories, flow and pressure measurements to ensure capacity, leak detection surveys, analysis of pipe breaks and soil conditions, computer model of system.
6. Sewerage Collection System: length, diameter, gradient, and condition of pipes, hydraulic balance and flow measurements to ascertain infiltration and consumptive use flows, drainage areas leading to collectors.
7. Sewage treatment: characterization of sewage flows and wastewater quality, effect of discharge on receiving water bodies, evaluation of treatment needs, unit process, capacity and condition, evaluation of equipment efficiency, metering and laboratory facilities.

Outcome

1. Overall assessment of facility and recommendations to optimize its capacity, increase efficiency, and reduce costs.
2. Detailed plans and lists of existing structures and equipment.
3. Detailed plans and specifications of works and equipment of the proposed optimization.
4. Recommendations to improve operations and maintenance, including proposals for formulating budgets for routine operations and maintenance, to be done in terms of tasks and monitorable indicators (routine maintenance, emergency repairs, refurbishment, and replacement), as well as in terms of resource inputs (labor, equipment, materials, and supplies).
5. Detailed cost estimates of proposed works.
6. Recommendations to improve design and construction practices to reduce capital and operating costs.
7. Bidding documents for works and equipment.

<u>SUGGESTED UNIT COSTS AND INDICATORS</u>		
<u>Project Component</u>	<u>Unit cost Parameter</u>	<u>Monitoring Indicator</u>
Intake works	\$/m ³ per sec.	% I.P. 1/
Transmission pipes	\$/km-diam.	% I.P.
Treatment plants	\$/m ³ per sec.	% I.P.
Storage tanks	\$/m ³	% I.P.
Distribution network	\$/s.a. 2/; \$/km	% I.P.
Pumping stations	\$/hp	% I.P.
Sewerage collection systems	\$/h.c. 3/	% I.P.
Collectors and interceptors	\$/km-diam.	% I.P.
Pumping stations	\$/hp	% I.P.
Outfalls	\$/km-diam.	% I.P.
Sewage treatment plants	\$/m ³ per sec	% I.P.
<u>Operational Improvement Programs</u>		
Network survey	\$/km; \$/h.c.	kms.
Commercial systems	\$/h.c.	s.a.
Customer survey	\$/s.a.	e.p. 4/
Metering programs	\$/meter	met/year
Accounting systems	\$/s.a.	e.p.
Training programs	\$/employee payroll 5/	
Strengthening programs	\$/s.a.	e.p
1/ Investment profile.		
2/ Service Account (as a measure of company size).		
3/ Household connection.		
4/ Execution plan as per contract.		
5/ Training days offered per employee per year.		

ANNEX B

TENDER PROCEDURES

(National Water and Sewerage Program - First Stage)

I. APPLICABILITY

- 1.01 This procedure shall be used by the Executing Agency 1/ in all procurement of goods and contracting of construction and other services for the Project (Program) whenever the value of such goods or services exceeds the equivalent of two hundred thousand United States Dollars (US\$200,000) and provided such Agency is part of the public sector. Included in the public sector are corporations and other entities in which government participation exceeds 50 percent of their capital.
- 1.02 The Executing Agency may apply, in addition to the provisions of this procedure, formal requirements or procedural details prescribed under local law, when their application does not contravene basic bidding guarantees or relevant Bank policy. 2/

II. GENERAL RULES

A. Public International Bidding

- 2.01 The system of public international bidding shall be used whenever the acquisition of goods or execution of services is to be partially or totally financed with foreign exchange from the financing and its cost exceeds the equivalent of two hundred thousand United States Dollars (US\$200,000).

1/ For purposes of this procedure, the term Executing Agency may also refer to the Borrower whenever the latter is in charge of bidding.

2/ Because this procedure is uniformly employed by the borrowing countries, where bidding legislation varies from country to country in both form and detail, the rules and procedures established herein, set forth the general guidelines of the bidding process, its basic guarantees (such as publicity, equality, competition, formality, confidentiality, and free access) as well as the relevant policies of the Bank. For this reason, local laws may supplement the provisions of this procedure in regard to certain practices or procedural details, such as the membership of bidding boards or technical committees, formalities for registration of firms, periods for the award or evaluation of bids, formal requirements of the minutes of the meeting to publically open bids, and so forth.

- 2.02 When foreign exchange from the financing is used, the procedures and specific requirements for the bidding or other form of purchase or contracting shall permit the unrestricted participation of goods and services, including those related to any mode of transport, from member countries of the Bank. Consequently, no conditions that would limit or restrict the offer of goods or the participation of contractors from such countries may be imposed through such procedures or specific requirements.

B. Public Bidding that may be Restricted Locally

- 2.03 The acquisition of goods or execution of services to be totally or partially financed with local currency from the Financing, or with local counterpart funds whose total exceeds the equivalent of two hundred thousand United States Dollars (US\$200,000), shall be accomplished through public bidding which may be limited to the national economy.

C. Other Procedures for Execution of Services or Procurement of Goods

- 2.04 Whenever the procurement of goods or the execution of services is financed exclusively by resources other than those of the financing or local counterpart funds 3/, the Executing Agency may follow procedures agreed upon with the supplier of such resources, provided that such procedures are tailored to the technical requirements of the Project (Program) and guarantee that both the cost of the goods or services and the financial terms and conditions governing the resources are deemed reasonable by the Bank. The Bank may request that the Executing Agency provide it with information on the applicable procedure and the results obtained therefrom.

D. Procedures Applicable to Bids of US\$200,000 or Less

- 2.05 The procurement of goods or execution of services for amounts less than or equal to the equivalent of two hundred thousand United States Dollars (US\$200,000), shall be governed in principle by the provisions of local law. Insofar as possible, the Executing Agency shall establish procedures permitting the participation of several bidders and give appropriate consideration to economy, efficiency, and price. Whenever foreign exchange from the financing is to be utilized, the procedures employed shall permit, in addition, the participation of bidders for goods and services from the Bank's member countries.

3/ Such as commercial banks, suppliers, and other international financial institutions.

E. Participants and Eligible Goods

- 2.06 Goods and services to be procured for the Project (Program) that are to be financed by proceeds from the loan, must originate in the Bank's member countries. The following rules shall be followed in determining such origin:

1. Bidding on Works

- 2.07 Only firms from the Bank's member countries may bid on works. To verify the nationality of the bidding firm, the Executing Agency must use the following criteria:

- (a) That the firm be incorporated or operating pursuant to the legal provisions of the eligible country in which it has its principal place of business;
- (b) That the firm have its principal place of business located in an eligible country;
- (c) That the firm be more than 50% beneficially owned by a firm or firms in one or more eligible countries and/or by citizens or bona fide residents of such eligible countries;
- (d) That the firm be an integral part of the economy of the eligible country where located;
- (e) That there be no arrangement whereby any substantial part of the net profits or other tangible benefits of the firm will accrue or be paid to persons not citizens or bona fide residents of eligible countries; and
- (f) That not less than 80% of all persons who will perform services under the contract in the country where the construction is to be carried out, whether employed directly by the contractor or by a subcontractor, be citizens of an eligible country. For purposes of the computation, with respect to a firm from a country other than the site of the construction, citizens or permanent residents of the country where the construction is to be carried out will not be counted.
- (g) The foregoing criteria apply to each member of a joint venture or consortium (a collaborative effort of two or more firms) and to every firm which is proposed to subcontract part of the work.

The requirements set forth in this Section, must be communicated to interested parties, who shall provide the Executing Agency with the information necessary for verification of their nationalities on the prequalification, registration and bid forms.

2. Bidding on the Procurement of Goods

2.08 Only goods which originate in the member countries of the Bank may be procured. The country of origin of a good shall be:

- (a) the country in which the material or equipment has been mined, grown, produced, manufactured or processed; and
- (b) the country in which, through manufacturing, processing or assembly, another commercially recognized article results which differs substantially in its basic characteristics, purpose or utility from any of its imported components. The nationality or country of origin of the firm that produces or sells the goods or equipment shall not be relevant for determining their origin.

F. National and Regional Margins of Preference for Bidding on the Procurement of Goods

2.09 The Executing Agency may apply the following margins of preference in public international bidding on the procurement of goods.

1. National Margin of Preference

2.10 Where suppliers in the country of the Executing Agency participate in public bidding, such local suppliers of goods may be entitled to a national margin of preference which is provided to them, utilizing the following criteria:

- (a) Goods shall be considered to be of local origin if the cost of the local materials, labor and services used to produce the item constitutes not less than 40% of the cost of the finished product;
- (b) In comparing local and foreign offers, the bid or offered price of goods of local origin shall be the delivered price at the Project (or Program) site, with deductions for: (i) import duties paid on significant raw materials or manufactured components, and (ii) local sales, consumption and value-added taxes incorporated in the cost of the item or items being offered. Proof of the amounts to be deducted under (i) and (ii) shall be established by the local bidder. The foreign bid or offered price shall be the CIF price (excluding import duties, consular fees and port taxes) to which will be added port handling charges and any local transportation from the port or frontier to the Program site;
- (c) The conversion of currencies to provide price comparisons shall be made on the basis of the conversion rate utilized by the Bank itself in its loan contracts; and
- (d) In adjudicating bids, a 15% margin of preference or the actual import duty, whichever is the lesser, may be added by the

borrower to the CIF price of the foreign offers expressed in their local currency equivalent.

2. Regional Margin of Preference

(a) For purposes of this Contract, the Bank recognizes the following regional or subregional integration agreements: (i) Central American Common Market; (ii) Caribbean Community; (iii) Cartagena Agreement, and (iv) Latin American Integration Association. If the country where the Executing Agency is located has signed more than one integration agreement, either the subregional margin of preference or the regional margin may apply depending on the country of origin of the article to be procured.

(b) Where suppliers of a country (other than the country of the Executing Agency) that is a party to an integration agreement, to which the country of the Executing Agency is also a party, participate in such bidding, such suppliers of goods are entitled to a regional margin of preference utilizing the following criteria:

- (i) Goods shall be considered to be of regional origin if they originate in countries that are parties to an integration agreement to which the borrower is also a party and comply with the standards governing origin and other matters relating to trade liberalization programs established in the respective agreements;
- (ii) The local value added is not less than that stipulated for the national margin of preference; and
- (iii) In comparing foreign offers, the borrower may add to the price offered for goods originating in countries not parties to the respective integration agreement, either 15% or the difference between the import duty applicable to such goods when they originate in countries not parties to the integration agreement and that which is applicable to those goods when they originate in countries which are parties to the agreement, whichever is lower.

III. PUBLIC INTERNATIONAL BIDDING

A. Prequalification. Registration of Bidders

1. Applicability. General Rule

3.01 As a general rule, in bidding conducted for the execution of services, the Executing Agency shall use a system of prequalification or registration of bidders. The Executing Agency may also use this system in bidding conducted for the procurement of goods if deemed appropriate. In the case of works for amounts

estimated not to exceed the equivalent of US\$200,000, the Executing Agency and the Bank may agree to waive this requirement.

3.02 Two-Envelope Procedure. Unless prohibited by the laws of the respective country, the Bank and the Executing Agency may agree to a procedure of prequalification or registration simultaneous with the submission of bids whenever, in the judgment of the Executing Agency and the Bank, circumstances so dictate. By means of this procedure, which must be clearly established in the bidding documents, every bidder shall submit, at the time the bids are opened, two envelopes containing the following:

- (a) Envelope 1 - information on the financial, legal and technical qualifications of the firms, such as: financial solvency, general and specific experience, key personnel and machinery available for the project, contracts fulfilled, ongoing contracts, current obligations and litigation.
- (b) Envelope 2 - the bid itself, with the respective price quotation.
- (c) At the opening of bids, which shall take place in a public ceremony at the set day and time, Envelopes No. 1 shall be opened and verified whether the bidders have included all documents required by the bidding specifications. If the envelopes do not contain the required documentation, the fact will be recorded in the minutes along with a description of the missing or incomplete information, and Envelope No. 2 shall be returned to the bidders unopened. Upon completing these procedures the first ceremony shall be adjourned, and Envelopes No. 2 of bidders that have presented all the required information shall remain sealed. Based on the information presented in Envelope No. 1, prequalification of bidders shall take place within the periods set forth in the bidding documents to evaluate the financial, legal and technical capacity of the firms. Once the prequalification has been completed and approved by the Bank, the second public ceremony shall take place at the date, time and place set in the bidding documents. At this act, Envelopes No. 2 shall be returned unopened to the firms not prequalified. Once the representatives of the firms that did not prequalify have withdrawn, Envelopes No. 2 of the firms that did prequalify shall be opened, the price of each offer shall be read aloud, and a record of the prices and main points of the tenders shall be made in the minutes.
- (d) The final evaluation of the proposals and the award shall be made within the time period set forth in the bidding documents, and once the Bank has given its consent to the proceedings.

2. Registration of Bidders

- 3.03 No conditions that would impede or deter the participation of foreign companies or violate the principle of bidder equality shall be established in the procedures for registration or prequalification of bidders. Records shall be opened frequently, to update information on registered firms or to add new firms, and whenever bidding is held with resources of this Program.

3. Term for Prequalification

- 3.04 The Executing Agency shall conclude the prequalification within a term compatible with the timetable of investments mutually agreed upon by the Executing Agency and the Bank.

4. Content and Publicity of the Invitation to Bid

a. Prior Approval of the Bidding Documents by the Bank

- 3.05 The bidding documents, including the public notices and bidder prequalification or registration forms, as the case may be, shall be mutually agreed upon by the Executing Agency and the Bank prior to the publication of the call for registration of prospective bidders. The bidding documents shall comply with the provisions of paragraph B.3 herein.

b. Content of the Public Notice

- 3.06 The public notice of prequalification or registration of prospective bidders shall include, as a minimum, the following information:
- (a) General description of the Program and of the work which is the subject of the bidding, its site and its principal characteristics. In the case of bidding on materials, their description and distinguishing characteristics, if any;
 - (b) The method proposed for prequalification;
 - (c) Approximate dates of the invitations to bid, opening of tenders, commencement of the services which are the subject of the bidding, and completion of construction;
 - (d) The fact that the Program is being partially financed by the Bank and that the procurement of goods or contracting for services covered by said Financing shall be subject to the provisions of this Contract;
 - (e) The place, time and date on which firms may obtain the prequalification or registration forms agreed upon by the Executing Agency and the Bank, as well as their cost; and
 - (f) Any other requirements to prequalify and be able for bids, or be able to participate in public bidding.

c. Publicity

- (a) Newspapers and Trade Journals. The public notice of prequalification or registration or the invitation to bid, when prequalification has not taken place, shall be published in at least one of the most widely circulated newspapers in the country on at least three separate occasions. There must be a space of at least three calendar days between each of the three public notices. In the case of bidding for works for amounts estimated to be above the equivalent of US\$1,000,000 or for the acquisition of goods for amounts estimated to be above the equivalent of US\$200,000, the public notice of prequalification, registration and submission of bids, when applicable, shall be published in two of the following publications:
- (a) well-known technical magazine;
 - (b) the United Nations' journal "Development Business";
 - (c) large circulation daily newspaper; or
 - (d) trade publication of wide international circulation.
- (b) Embassies. The Executing Agency shall deliver copies of the notices of prequalification, registration or submission of bids, as the case may be, to the embassies or, if there are none, to the consulates of each of the Bank's member countries on the same date they are delivered to the press for publication.

5. Content of the Prequalification or Registration Form

- 3.07 The prequalification or registration form, as the case may be, shall contain, inter alia, the following data:
- (a) Legal background on the creation, juridical nature and nationality of the bidding firm. A copy of the firm's by-laws and statutes shall be attached. The information on the nationality of the firm shall comply with Chapter II, paragraph E 2.07 herein 4/;
 - (b) Technical background of the firm;
 - (c) Financial condition of the firm;

4/ In the rare instances when prequalification is conducted on bidding for the procurement of goods, the information to which reference is made in this subparagraph (a) must include information on the origin of the goods, rather than nationality of the firm, pursuant to Chapter II, E 2.08.

- (d) Available staff and equipment;
- (e) Experience in the construction, manufacture and installation of goods or services similar to those which are the subject of the bidding;
- (f) Work under way or present obligations assumed by the firm;
- (g) Evidence that the firm has sufficient staff and equipment to satisfactorily carry out the services envisaged in the Project (Program) and an indication of where such staff and equipment are located; and
- (h) Description, in broad terms, of how the firm would execute the services.

6. Deadline for Delivery of the Forms

- 3.08 Interested parties shall have at least 45 calendar days, from the final publication of the notice, to file prequalification or registration forms. This term may be reduced to 30 days if an invitation for bids is restricted to the national economy.

7. Selection of Prequalified Firms

a. Qualified Firms

- 3.09 Only those firms that have demonstrated the necessary technical, financial, legal, and administrative qualifications to carry out the services, in accordance with existing laws in the respective country and the norms established herein, may be prequalified or entered on the register of bidders. Forms exhibiting obvious defects, errors or omissions may be allowed, provided that such defects, errors or omissions do not affect substantive matters and, if corrected, do not alter the principle of bidder equality.

b. Technical Report

- 3.10 The Executing Agency shall prepare a technical report on firms that filed for prequalification, indicating which were declared prequalified or duly qualified in the registry of projects and which were not, together with the grounds for such action. The report shall be sent to the Bank promptly for its approval or rejection.

c. Notification of Results

- 3.11 Once the Bank approves the technical report, all participating firms shall be notified of the results simultaneously.

d. Later Disqualification

- 3.12 Once prequalified, a firm may not be disqualified from bidding unless prequalification or registration was based on incorrect information filed by the firm or unless compelling circumstances that would justify such a decision occur after the date of prequalification or registration.

e. Duration of Eligibility

- 3.13 If one year has elapsed since prequalification or registration, and an invitation has not been issued, the Executing Agency shall issue a new call for prequalification or registration so that prospective new bidders may be admitted and those firms already prequalified or registered may update the information they provided originally. The new call shall meet the prerequisites established herein.

f. Absence of Prospective Bidders

- (a) If fewer than two prospective bidders were prequalified or registered in the first call, a second call shall be made, following the same procedure, unless the Bank authorizes private bidding on the terms set forth in the following subparagraph or authorizes the hiring of the sole successful bidder; and
 - (b) If after the second call, two or more firms fail to qualify, the prequalification may be declared null and void, and with the prior approval of the Bank, private bidding may be conducted with at least three firms being invited to bid, including the firm prequalified previously if there was one.
- 3.14 Prequalification for several invitations to bid
- (a) The Executing Agency may reach an agreement with the Bank to hold a single prequalification of contractors for several invitations to bid for the construction of a number of works of the same kind which, owing to their location or other factors acceptable to the Bank, could not be accomplished through a single invitation to bid.
 - (b) Contractors thus prequalified shall be able to participate, if so established in the bidding documents, in one or more of the invitations to bid scheduled. The Executing Agency may request that the bidders update, in each invitation to bid, any information which may have changed since prequalification, and in particular may require proof that the executing capacity of each contractor continues to be in line with the requirements of the bidding documents.
 - (c) The period of validity of the prequalifications for a number of invitations to bid shall not exceed one year.

B. Bidding

1. Invitation to Bid

a. When Prequalification Took Place

- 3.15 If prequalification has taken place, the Executing Agency shall send or deliver invitations to bid to only those firms that were prequalified. Prior to sending or delivering such invitations, the Executing Agency shall transmit to the Bank, for its approval, the text of the invitation to bid, together with the bidding documents if they were not transmitted earlier. At this stage, notices need not be published, and the embassies need not be advised as is stipulated in paragraph A 4(c) above.

b. Without Prequalification

- 3.16 In the absence of prequalification, the invitation to bid shall be publicized as set forth in paragraph A 4(c) herein. The bidding documents shall clearly specify the minimum prerequisites which would qualify bidders to carry out the services or supply the goods involved. For this purpose, the documents shall include a questionnaire similar in content to the form specified in paragraph 3.07 of this Chapter, which is to be filled out by interested parties and delivered by them along with their respective offers.

2. Notices of the Call to Bid and Invitations to Bid

- 3.17 Calls to bid published in the press or invitations to bid delivered or forwarded to prequalified firms must specify, at a minimum, the following information:
- (a) Description of the Program, purpose of the bidding and source of funds to cover the cost of the procurement of goods or services;
 - (b) The fact that the Program shall be partially financed by the Bank and that the procurement of goods or contracting of services payable from said financing shall be subject to the provisions of the loan contract entered into with the Bank;
 - (c) General description of the equipment, machinery and materials required, as well as of the services, the volume or quantity of work, its principal parts and deadline for its completion;
 - (d) The office or place, date and time at which the bidding documents, including the bidding guidelines, plans, specifications, and draft contracts may be obtained;
 - (e) The office where the bids are to be delivered and the authority responsible for their approval and award; and

- (f) The place, date and time at which the bids will be opened in the presence of the bidders or their representatives.

3. Bidding Documents

a. Bank Approval

- 3.18 The bidding documents, including inter alia instructions to bidders, conditions of contract, plans and specifications, if any, and the draft contract, shall be approved by the Bank prior to their release to interested parties.

b. Clarity of the Documents

- 3.19 The bidding documents prepared by the Executing Agency must be clear and coherent. Particular care must be taken to ensure that the goods and services to be supplied are described with sufficient clarity and in sufficient detail. The cost of such documents must be reasonable.

c. Free Access to the Executing Agency

- 3.20 The Executing Agency shall be available, once the bidding documents have been collected by bidders and up to the time the bids are opened, to answer questions or clarify the bid documents for bidders. These inquiries shall be answered promptly by the Executing Agency, and clarifications, if any, made available to the other interested parties and the Bank.

d. Standards of Quality

- 3.21 If particular standards with which equipment or materials must comply are cited, the specifications should state that goods meeting other authoritative standards, which ensure an equal or higher quality than the standards mentioned, will also be accepted.

e. Specifications for Equipment: Brand Names

- 3.22 Descriptions contained in specifications should not prescribe brand names, catalogue numbers, or types of equipment of a specific manufacturer unless it has been determined that this is necessary to ensure inclusion of certain essential design, performance or construction features. In such a case, the reference should be followed by the words "or equivalent," and a measure to determine the "equivalence" included. The specifications should permit offers of alternate equipment, articles or materials which have similar characteristics and provide equal performance and quality to those specified. In special cases, with previous approval of the Bank, specifications may require that a proprietary item be supplied.

f. Currency Clause

- 3.23 The bidding documents should state the currency or currencies to be used in payment, taking into account the provisions of this Contract. Whenever expenditures in both local currency and foreign currency are involved, the bidding documents should require that the amounts of these expenditures be detailed separately in the proposal.

g. Bid Bonds

- 3.24 Bid bonds or other tender guarantees should not be set so high 5/ or their validity stretched out over long periods, as to discourage suitable bidders, from tendering.

- (a) Bid bonds shall be returned to the succesful bidder once the contract is executed;
- (b) To the second- and third-place bidders, within a term of no more than three months from the date of the award or upon execution of the contract, if the latter occurs prior to such deadline. Nevertheless, if such bidders indicate lack of interest, the bond shall be returned within five days following the award;
- (c) To other bidders within five days following the award.

h. Performance Guarantees

- 3.25 Specifications for construction works should require performance bonds or other surety to guarantee that the work will be carried on to completion. Even though the amount of the bond will vary with the type and magnitude of the work, it should be defined in the bidding documents and be sufficient to afford the Executing Agency adequate protection. The amount of the bond should be sufficient to ensure completion of the work, at no increase in expense to the Executing Agency, in case of default by the contractor in the performance of the work. The life of the bond or surety should extend sufficiently beyond completion of the contract to cover a reasonable warranty period. If necessary, performance bonds or sureties may be required in connection with contracts for supply of equipment. Such measures may consist of withholding a percentage of the total payment to guarantee performance.

5/ Some bidding practices limit the amount of the bid bonds (tender guarantees) to 1 percent of the price of the contract. Others recommend that the Executing Agency set a fixed amount in cash for all bidders instead of requiring the bidder to base his guarantee on a given percentage of the value of his bid. This is to avoid undue publicity of the price of each tender prior to the opening of the bids, should the amount of the guarantee or bid bond become public knowledge.

4. Deadlines for Submission of Bids

a. Normal Term

- 3.26 The normal deadline for filing offers in international public bidding shall be not less than 45 calendar days from the date of the invitation to bid or the date of availability of bidding documents, whichever is later.

b. Term for Large Civil Works

- 3.27 Where large civil works are involved, a minimum of 90 calendar days shall be allowed contractors to prepare their bids.

c. Deadline for Filing of Domestic Bids

- 3.28 When the bidding is limited to the national economy, the Executing Agency may reduce the deadline for filing offers to a period of up to 30 calendar days.

5. Confidentiality of Bid and Prequalification Documents

- 3.29 The officers in charge of receiving the envelopes containing prequalification or registration forms or tenders, shall verify that such envelopes are delivered by the tenderer properly sealed. These envelopes shall be kept in a safe place until opened and recorded. Once opened, no copies shall be taken of these documents. Except as may be required by law, information relating to the examination, tabulation, clarification and evaluation of bids and recommendations concerning awards may be communicated only to such staff members of the executing agency as are officially concerned with the procedures, after the public opening of bids and before the announcement of the award of contract to the successful bidder.

6. Modification or Extension of the Bidding Documents

- 3.30 Any modification or extension of the bidding guidelines, specifications, or the filing date must first be approved by the Bank and communicated to all interested parties who are in possession of the bidding documents. In the event that such modification or extension is substantial, in the opinion of the Executing Agency, or the Bank, there must be an interval of at least 30 calendar days between the date of notice to interested parties and the date bids are opened.

7. Consultations should not Modify the Bidding Documents

- 3.31 Consultations on the interpretation of bidding documents addressed to the Executing Agency by interested parties may not be used to modify or expand the bidding guidelines and specifications. Consultations and replies thereto shall in no case cause a suspension of the term for presentation of bids.

8. Single Bid

- 3.32 When only a single bid is received in response to an invitation to bid, the Board may not award the contract without the prior consent of the Bank.

9. Opening of Bids

- 3.33 Offers shall be submitted in writing in sealed envelopes. They must be signed by the legal representatives of the bidders and comply with the prerequisites set forth in the bidding documents. They shall be opened in public on the scheduled date and hour. Representatives of the bidders and of the Bank may attend the bid opening and shall be entitled to inspect the bids. Bids received after the filing date shall be returned unopened. The names of the bidders, the price of each bid, the term and amount of guarantees, and any substantial change submitted separately, before the deadline but after the principal bid is submitted, shall be read aloud. All of the above shall be recorded in the proceedings, which shall be signed by the representative of the Executing Agency and by any bidders present who wish to do so.

10. Clarification of Bids

- 3.34 The Executing Agency may request clarifications from the bidders with respect to their tenders. Clarifications requested or given shall not alter the essence of the offer or its price, nor shall they violate the principle of bidder equality.

11. Analysis and Comparison of Bids

a. Purpose

- 3.35 Bids shall be analyzed and evaluated to determine whether they comply with the terms and conditions stipulated in the bidding documents, and the value of each bid shall be fixed for the purpose of awarding the winning bid.

b. Lowest Evaluated Bid

- 3.36 In addition to the bid price, adjusted to correct arithmetical errors, the Executing Agency may also consider other relevant factors in determining the lowest bid:

- (a) These factors preferably should be expressed in monetary terms or, as a minimum, given a relative weight according to criteria specified in the bidding documents. No factors, including their assigned value, may be used in bid evaluation that are not set forth in the bidding documents. The amount of escalation for price adjustments, if any, included in the bids, should not be taken into consideration; and

- (b) The currency or currencies in which the price offered in each bid would be paid by the Executing Agency if that bid were accepted, should be valued in terms of a single currency selected by the Executing Agency for comparison of all bids and stated in the bidding documents. The rates of exchange to be used in such valuation should be the selling rates published by an official source, and applicable to similar transactions on the day bids are opened or at such later date (30 or 60 days after bid opening) as shall be specified in the call for bids.

c. Rejection of Bids

- 3.37 The Executing Agency shall reject all bids that do not comply with the bidding documents. It may, however, allow bids with obvious defects, errors or omissions, provided such defects do not involve substantive matters nor alter the principle of bidder equality. The Executing Agency may also, after consultation with the Bank, reject all bids where no bid meets the intent of the specifications, or where there is evidence of lack of competition and/or collusion. The Executing Agency may also reject all bids if the low bids exceed the official estimate by amounts justifying such action. In such cases, new bids should be requested from at least all who were invited to submit bids in the first instance and a reasonable amount of time should be allowed for the submission of the new bids. In the absence of a 100 percent performance bond, individual bids may be rejected in cases where the particular bid is so much lower than the official estimate, that it is reasonable to conclude that the bidder will not be able to complete the works or supply the product, within the specified time at the price offered.

12. Bid Evaluation Report

- 3.38 The Executing Agency shall prepare a detailed report on the analysis and comparison of bids, describing precisely the reasons for selection of the lowest evaluated bid. (The report shall be submitted to the Board with recommendations for the decision of the Board.) The report, as approved by the Board, shall be submitted to the Bank for consideration prior to the contract award. If the Bank determines that the proposed award is not consistent with the terms of this procedure, it will promptly inform the Executing Agency of its determination and state the reasons therefore, and the contract will not be eligible for financing by the Bank unless the Bank's objections are addressed. The Bank may cancel an amount of the Financing which, in the Bank's reasonable opinion, represents the amount of such ineligible expenditures.

13. Award of Contract

a. Bank Approval

- 3.39 The award shall be made to the bidder whose bid has been determined to be the lowest evaluated bid, in conformity with the bidding documents, once the Bank has approved the corresponding notice of award.

b. Notification of Award and Signature of the Contract

- 3.40 Within three working days from the date of the award, the Executing Agency shall notify all bidders of the award, at the addresses they have provided. It shall promptly send to the Bank, for its approval, a copy of the draft contract for signature by the successful bidder. The contract to be signed shall not modify the winning bid or the terms and conditions stipulated in the bidding documents. Once the Bank approves the draft contract, it shall be signed. The Executing Agency shall promptly send a copy of the signed contract to the Bank.

14. Modification of the Award

- 3.41 If for any reason the successful bidder does not sign the contract within the period set for that purpose, the Executing Agency may award it, without a new invitation to bid, to the next lowest bidder in the order in which its bid was evaluated.

15. Bidding Declared Null and Void

a. Report to the Bank

- 3.42 Whenever the Executing Agency has reasonable grounds for declaring the bidding null and void, it shall request prior approval of the Bank for such action by sending it a complete report including the reasons and grounds for proposing such a measure.

b. Effects of the Declaration

- 3.43 Once the bidding is declared null and void, the Executing Agency shall issue a second invitation to bid using the provisions set forth in this procedure. If the second bidding is declared null and void, the Executing Agency and the Bank shall agree on the procedure to be followed for the procurement involved.

IV. DUE PROCESS

- 4.01 Local regulations applicable to bidding under this Procedure must guarantee the legal protection of bidders, establishing the right of administrative and judicial review.
- 4.02 The Executing Agency shall not impose conditions which would impede, restrict or increase the cost of presentation of protests by

suppliers and contractors participating in public bidding for the acquisition of goods or execution of works with resources of the Program.

- 4.03 The Executing Agency shall notify the Bank promptly of any protest or claim lodged in writing by the participating firms and of any responses to such protests or claims.

V. NONOBSERVANCE OF THIS PROCEDURE

- 5.01 The Bank reserves the right not to finance any award in which, in its opinion, there has been noncompliance with the provisions set forth in these procedures.

ANNEX C

MODEL FOR CONTRACTS AND
TECHNICAL COOPERATION AGREEMENTS

ANNEX 1/

SELECTION AND CONTRACTING OF CONSULTING
FIRMS AND/OR INDIVIDUAL EXPERTS

In the selection and contracting of consulting firms, specialized institutions and/or individual experts (hereinafter referred to without distinction as "Consultants") necessary for the execution of the (Project) (Program), the following shall be applicable:

I. DEFINITIONS

The following definitions are established:

- 1.01 A consulting firm is any legally constituted association, composed primarily of professional personnel, for the purpose of offering consulting services, technical advice, expert opinions, and professional services of other kinds.
- 1.02 A specialized institution is a non-profit organization such as a university, foundation, autonomous or semiautonomous organization or an international organization which offer consulting services. For the purpose of this Annex, the same rules shall apply to specialized institutions as to consulting firms.
- 1.03 An individual expert is any professional or technician specialized in some form of science, art or craft.
- 1.04 A Beneficiary is any recipient of a subloan or credit made with the resources of the Program. 2/
- 1.05 An intermediary financial institution (hereinafter referred to as "IFI") is a credit institution which, in certain global loans granted by the Bank, relends the resources of the Program. 2/

1/ This annex shall be used for all operations in which special advisory assistance shall be required, whether in respect to preinvestment, technical assistance, or supervision, in conformity with the applicable provision of the normative documents.

2/ This section shall be included only in operations in which beneficiaries or IFI are to contract the Consultants directly.

II. CONFLICTS OF INTEREST

- 2.01 The resources of the Bank shall not be used to contract Consultants from the country of the Borrower if: (i) they are part of the regular or temporary staff of the State or of the institution which receives the Financing 3/, or if such institutions are to be the beneficiaries of the services to be provided by the experts; or (ii) they have pertained to such entities within the six months prior to one of the following dates: (a) that of the presentation of the application; or (b) that of the selection of the individual expert, unless the Bank agrees to reduce that period.
- 2.02 A fully-qualified professional services firm which is a subsidiary or affiliate of a construction contractor, equipment supplier or holding company normally will be considered acceptable only if it agrees in writing to limit its role to the provision of professional consulting services and agrees in the contract to disqualify itself and its associates from any construction work, material or equipment supply or financial participation in the same (Program) (Project).

III. ELIGIBILITY AND NATIONALITY REQUIREMENTS

- 3.01 The (Borrower) 4/ (Executing Agency) (IFI) (Beneficiary) shall not establish in the implementation of the procedures set forth in this Annex, provisions or conditions which may restrict or impede the participation of Consultants from member countries of the Bank.
- 3.02 Only Consultants who are nationals of countries that are members of the Bank may be contracted. To determine the nationality of a consulting firm the following criteria shall be considered:
- (a) The country in which the firm is duly established or legally organized.
 - (b) The country in which the firm maintains its principal place of business.
 - (c) The nationality of any firms or the citizenship or the bona fide residency of individuals possessing ownership, with the right to participate in profits, of more than 50% of the consulting firm, as established by the certification of a duly authorized officer of such firm.
 - (d) The existence of arrangements whereby a substantial portion of the profits or other tangible benefits of the firm accrues to firms or individuals of a given nationality.

3/ In Technical Cooperation Agreements, the appropriate term shall be used (Contribution, Credit, etc.)

4/ In Technical Cooperation Agreements, the appropriate term shall be used ("Beneficiary", etc.)

- (e) A determination by the Bank that the firm constitutes an integral part of the economy of a country, as evidenced by bona fide residency in the country of a substantial portion of the executive, professional and technical personnel of the firm, and that the firm has available in the country the operating equipment or other elements necessary to provide the services to be contracted.
- 3.03 The nationality requirements established by the Bank shall also be applicable to firms proposed to provide part of the respective services in joint venture with or under sub-contract to a qualified consulting firm which itself meets the nationality requirements.
- 3.04 The nationality of an individual expert shall be established by means of the individual's passport or other official document of identity. The Bank, however, may allow exceptions to this rule in those cases in which the individual expert, not being eligible by reason of nationality: (i) has established his domicile in an eligible country, is legally entitled to work there (as other than an international civil servant) and has no known intention of returning to his country of origin in the immediate future; or (ii) has established permanent domicile in an eligible country and has resided therein for at least five years.

IV. PROFESSIONAL QUALIFICATIONS

- 4.01 An analysis of the professional qualifications of a consulting firm for a specific project will take cognizance of the firm's: (i) experience and that of its principals in providing successful consulting services for projects of a comparable size, complexity and technical specialty as those of the task involved; (ii) assigned number of professionally qualified personnel; (iii) previous experience in the region and in foreign areas; (iv) language capability; (v) financial capacity; (vi) present work load; (vii) ability to organize sufficient personnel to do the work within the required time; (viii) high ethical and professional reputation, and (ix) position being completely free from any potential conflict of interest.

V. PROCEDURES FOR SELECTION AND CONTRACTING

A. Selection and Contracting of Consulting Firms

- 5.01 In the selection and contracting of consulting firms:
- ((a) Prior to the selection of the firm, the (Borrower) (Executing Agency) shall submit the following for the agreement of the Bank:) 5/
- ((a) Prior to the selection of the firm, the (IFI) (Beneficiary) (Executing Agency) shall submit the following for the approval of the

5/ This alternative shall be used when the Borrower or the Executing Agency will directly contract the consulting firm.

(Borrower) (Executing Agency) (Beneficiary), which in turn shall require the agreement of the Bank:) 6/

(i) The procedure to be used in the selection and contracting of the firm, including:

(A) The role of the Executing Agency Staff or the Selection Committee designated to:

1. review and approve documents;
2. select a short list of firms;
3. determine the order of merit of the short listed firms; and
4. approve the firm finally selected.

The entity contracting the Consultants shall furnish the Bank with the names and positions of the people it chooses to participate in the preselection and selection processes.

(B) The specific points system to be used in preselecting the firms. This system shall include, as a minimum, the following aspects:

1. general background of the firm;
2. similar work done;
3. prior experience in the country where services are to be rendered, or in similar countries;
4. general knowledge of local language; and
5. the utilization of local consultants.

(C) The specific point system to be used as selection criteria. This system shall include at least the following factors:

1. qualifications and experience of personnel to be assigned;
2. evaluation methodology (where applicable);
3. proposed method of implementation;
4. execution schedule;
5. language proficiency; and
6. management support systems to assure quality control during execution of the consulting services (regular reports, budget controls, etc.).

(D) The specific local laws, taxation requirements and procedures which may be relevant to the selection and contracting of the consultant firm.

6/ This alternative shall be used when the intermediary agency or Beneficiary will contract the consulting firm.

- (E) If it is estimated that the cost of the services will exceed two hundred thousand United States dollars (US\$200,000) or its equivalent, calculated in accordance with the provision of Article 3.05(a) of the General Conditions, 7/ the selection and contracting shall be advertised in the "Development Business" of the United Nations and in the national press. These announcements should state the intention of contracting professional consulting services along with a brief description of the services required and inviting interested firms and consortia to apply and to furnish detailed information regarding their technical ability, prior experience with similar work, etc. within 30 days of the date of publication. This announcement should also advise interested firms and consortia of the requirement of maintaining an updated DACON registration form with the Bank and of submitting a copy of this form to the contracting entity with their statement of interest. A copy of the announcements shall be sent to each embassy of the member countries of the Bank accredited in the country. Clippings of these advertisements shall be sent to the Bank specifying the date and the name of the publication in which they have appeared;
- (ii) The terms of reference (specifications) describing the work to be done by the firm, together with an estimate of the cost; and
- (iii) A list of at least three and no more than six firms from which proposals for the work would be invited.
- (b) Once the Bank has approved the foregoing requirements, the approved firms shall be invited to present proposals in conformity with the procedures and terms of reference approved. The approved firms shall be informed regarding the specific selection procedure and evaluation criteria adopted, specific local laws, taxation requirements and procedures relevant to the selection of consulting firms as well as the names of the other firms invited to present proposals.
- (c) In the invitations to present proposals the use of one or the other of the following procedures shall be specified, as appropriate:
- (i) If the first procedure is utilized, a single sealed envelope including only the technical proposal, without a price quotation, shall be used. The (Borrower) (Executing Agency) (IFI) (Beneficiary) shall examine the proposals received and establish their order of merit. If the complexity of the case so requires, the (Borrower) (Executing Agency) (IFI) (Beneficiary) may resort, with the prior approval of the Bank

7/ In the case of Technical Cooperation Agreements, the pertinent Section of the Agreement shall be quoted.

and at its own expense, to the use of consulting services to review the proposals and provide technical and expert advice in establishing the order of merit.

Once an order of merit has been established among the firms, the firm listed as first shall be invited to negotiate a contract. During these negotiations the details of the terms of reference shall be reviewed completely to assure full and mutual understanding with the firm; the contractual and legal requirements of the agreement shall be reviewed; and finally, detailed costs shall be developed. If agreement cannot be reached with the firm on the terms of the contract, it shall be notified in writing that its proposal has been rejected and negotiations shall be initiated with the second firm and so on until a satisfactory agreement has been reached;

- (ii) If the second procedure is utilized, two sealed envelopes shall be used for presenting proposals, the first containing the technical proposal exclusive of costs and the second containing the proposed costs for the services.

The (Borrower) (Executing Agency) (IFI) (Beneficiary) shall analyze the technical proposal and establish their order of merit. Contract negotiations shall commence with the firm offering the best technical proposal. The second envelope presented by this firm shall be opened in the presence of one or more of its representatives and shall be utilized in the contract negotiations. All the second envelopes presented by the other firms shall remain sealed and, if an agreement is reached with the first firm, they shall be returned unopened to the respective firms. If an agreement on the terms of the contract is not reached with the first firm, it shall be notified in writing of its rejection and negotiations shall be initiated with the second firm and so on until a satisfactory agreement is reached.

- (iii) Inability to agree on detailed costs or compensation for services or a judgment on the part of the (Borrower) (Executing Agency) (IFI) (Beneficiary) that such costs or compensation are inappropriate or excessive, shall be sufficient cause for the rejection of the proposal and for the initiation of negotiations with the firm which follows in the order of merit. Once a firm has been rejected it shall not be recalled for further negotiations on such contract.
- (d) Before initiating negotiations with a firm based on the order of merit, the (Beneficiary) (Borrower) (Executing Agency) (IFI) shall provide the Bank with a copy of the report summarizing the evaluation of technical proposals submitted by the short listed firms identified in Section 5.01(a)(iii) of this Annex.
- ((e) The final draft of the contract negotiated with the consulting firm shall be submitted for the approval of the Bank by the (Borrower)

(Executing Agency) before the contract is signed. A true copy of the text, as signed, shall be promptly sent to the Bank.) 8/

- ((e) The final draft of the contract negotiated with the consulting firm shall be submitted by the (Beneficiary) (Executing Agency) (IFI) for the approval of the (Borrower) (Executing Agency) (Beneficiary), which in turn shall require the agreement of the Bank before it is signed. A true copy of the text as signed shall be promptly sent to the Bank.) 9/

B. Selection and Contracting of Individual Experts

5.02 In the case of the selection and contracting of individual experts:

- ((a) Before the selection of the experts, the (Borrower) (Executing Agency) shall submit the following for the consideration of the Bank:) 10/

- ((a) Before the selection of the experts, the (IFI) (Beneficiary) (Executing Agency) shall submit the following for the approval of the (Borrower) (Executing Agency) (Beneficiary), which in turn shall require the agreement of the Bank:) 11/

(i) The selection procedure;

(ii) the terms of reference (specifications) and the schedule of the services to be performed in the respective study;

(iii) the names of the experts tentatively selected, setting forth in detail their nationality, domicile, background, professional experience and knowledge of languages; and

(iv) the form of contract to be used in retaining the experts.

- (b) Once the (Borrower) (Beneficiary) (Executing Agency) and the Bank have approved the foregoing requirements, the (Borrower) (Executing Agency) (Beneficiary) (IFI) shall proceed to contract the experts. The contract to be entered into with each of them shall be consistent with the form of contract which the Bank and the (Borrower) (Beneficiary) (Executing Agency) shall have agreed upon. A true copy of the signed text of each contract shall be sent promptly to the Bank.

8/ This alternative shall be used when the Borrower or Executing Agency will directly contract the firm.

9/ This alternative shall be used when the IFI or a beneficiary will contract the firm.

10/ This alternative shall be used when the Borrower or the Executing Agency will directly contract the expert.

11/ This alternative shall be used when the IFI or a beneficiary will contract the expert.

- 5.03 Notwithstanding paragraphs 5.01 and 5.02 above and at the request of the (Borrower) (Executing Agency), the Bank may assist in the selection and contracting of the Consultants as well as in drafting the pertinent contracts. It is understood however, that the final negotiation and signing of such contracts, under terms and conditions acceptable to the Bank, shall be the sole responsibility of the (Borrower) (Executing Agency) (IFI) (Beneficiary) and that the Bank assumes no commitment on this matter.

VI. CURRENCIES OF PAYMENT TO CONSULTANTS

- 6.01 The following provisions are established with respect to the currencies with which the Consultants shall be paid: 12/

- (a) Payments to Consulting Firms: Contracts entered into with consulting firms shall reflect one of the following formulations, as the case may be:

- (i) If the consulting firm is domiciled in the country in which it is to perform the services, its compensation shall be paid exclusively in the currency of that country, except for expenses incurred in foreign exchange for foreign travel or per diem expenses abroad which shall be reimbursed in dollars, or its equivalent in other currencies that form part of the Financing 13/, except that of the country wherein the study is made;
- (ii) if the consulting firm is not domiciled in the country in which it is to perform the services, the highest possible percentage of its compensation shall be paid in the currency of such country and the rest in dollars or the equivalent in other currencies that form part of the Financing, except that of such country, with the understanding that the part corresponding to per diem expenses shall be paid in the currency of the country or countries in which the respective services are to be performed. In the event that the percentage to be paid in the currency of the country in which the services are to be performed is less than 30% of the total compensation of the consulting firm, a complete and detailed justification shall be submitted (to the Bank for its examination and comments) 14/ (to the (Borrower)

12/ Technical Cooperations financed with certain funds may establish other forms of payment to Consultants, such as payment in only one currency (e.g. Yen). In such cases, Paragraph VI should be modified to reflect such forms of payment.

13/ In Technical Cooperation Agreements, the appropriate term shall be used (Contribution, Credit, etc.)

14/ This form shall be used when the Borrower or the Executing Agency will directly contract the Consultants.

(Beneficiary) (Executing Agency), which in turn shall submit it to the Bank for its examination and comments); 15/

- (iii) in the case of a consortium composed of firms domiciled in the respective country and firms not domiciled therein, the part of the compensation which corresponds to each of the members shall be paid in accordance with paragraphs (i) and (ii) above, as pertinent; and
- (iv) the provisions of Article 3.05(a) of the General Conditions 16/ shall apply with respect to the rate of exchange.

(b) Payments to Individual Experts:

- (i) If the expert is domiciled in the country in which his/her services are to be performed, his/her honoraria shall be paid exclusively in the currency of that country;
- (ii) if the expert is not domiciled in the country in which his/her services are to be performed and is hired to work for less than six months, his/her honoraria and per diem shall be paid totally in United States of America dollars;
- (iii) if the expert is not domiciled in the country in which his/her services are to be performed and is hired to work six or more months, his/her honoraria and post adjustment shall be paid in the following manner: (1) 40% in the currency of that country; and (2) 60% in United States of America dollars. Per diem, installation and change of residence allowances and withholding of compensation when applicable, shall also be paid in United States of America dollars;
- (iv) fixed lump sum compensation for services, including honoraria, transportation tickets and per diem, may be paid in United States of America dollars; and
- (v) the provisions of Article 3.05(a) of the General Conditions shall apply with respect to the rate of exchange. 17/

VII. RECOMMENDATIONS OF CONSULTANTS

- 7.01 It is understood that the opinions and recommendations of the Consultants obligate neither the (Borrower) (Executing Agency) (Beneficiary) (IFI) nor

15/ This form shall be used when the IFI or beneficiaries will contract the Consultants.

16/ In the case of the Technical Cooperation Agreements, the pertinent Section of the Agreement shall be quoted.

17/ In the case of the Technical Cooperation Agreements, the pertinent Section of the Agreement shall be quoted.

the Bank, and that they reserve the right to put forward such observations or exceptions as they deem appropriate.

VIII. SCOPE OF COMMITMENT OF THE BANK

- 8.01 It is agreed that the Bank assumes no commitment to finance all or part of any program or project which, directly or indirectly, might result from the services performed by the Consultants.

IX. SPECIAL CONDITIONS AND REQUIREMENTS

- 9.01 The final payment for services to the Consultants shall be contingent upon prior acceptance by the (Borrower) (Beneficiary) (Executing Agency) and the Bank of the Consultant's final report. Such payment shall consist of not less than 10% of the total amount to be paid to the Consultants in the accordance with their respective contracts.

GUIDELINES FOR SUBSEQUENT EVALUATION OF
PROGRAM PROJECTS

1. In order to obtain the proper information for subsequent evaluation of the Program and the accomplishment of its proposed goals, it is recommended that the borrower, through the executor, supply the Bank with the information necessary for this purpose. Accordingly, the following must be presented:
 - a) An initial report 12 months after the loan becomes effective, which must include the methodology and compilation system for the data that is required to fulfill the objectives of the evaluation.
 - b) A periodic report, 18 months after the loan becomes effective and every year thereafter until the final disbursement is made, giving an account of how the evaluation is progressing, according to the methodology agreed upon with the Bank (as explained in the Initial Report). This report should include, inter alia, an analysis of the major problems detected in the course of the Program and the measures taken to correct them.
 - c) A final report, at the end of the first year following the last disbursement of Bank financing. This report must analyze the financial intermediation mechanism, identifying its problems and achievements, and evaluating the successes and failures of the representative sample of projects carried out by the subborrowers; with emphasis on technical, financial, institutional, economic and environmental considerations.
2. The following areas, at a minimum, must be evaluated in order to fulfill the objectives described.
 - a) An analytical description and a description of the time spent in the Process of Identifying, Preparing, Presenting, Assessing and Approving the projects in the Program. This analysis should be based on a documented tracking of the successive stages in the process whereby the projects are presented and assessed by COFAPyS. The emphasis must be on the main problems detected in the process whereby the subborrowers devise the projects and the measures taken by COFAPyS to correct those problems.
 - b) Statistics on the identified projects according to the statements of preparation, assessment, and execution, by category of project and type of subborrower. These statistics must also include data on budgeted costs and amounts spent for investments, operations and maintenance, on the percentage of coverage without the project, the population that benefits from the project and the total population of the community.

- c) The impact that the Institutional Strengthening Plan financed by the Program has had on COFAPyS. In particular, it must measure and evaluate the impact of the improvements on the promotion, evaluation, and supervision of projects, on the financial management capability, the administrative and logistical systems, the capacity for environmental impact assessments, and the results of the personnel training, and other features considered under the technical cooperation.
- d) The impact that the Institutional Strengthening financed by the Program has had on the subborrowers. This must measure and evaluate improvements in the management of services, personnel, financial resources, rates, billing and collections, recouping of costs, and other aspects planned as part of the technical assistance received.
- e) The changes in the rates charged for water supply and sewerage services and of the financial standing of the subborrowers in the Program.

RATE REGULATIONS

I. Rate Levels

In order to qualify for a loan for a type A(b), B, or C project, the subborrower shall demonstrate that, when the subloan is approved, its revenues from application of its rate structure are sufficient to cover, at a minimum, the costs of operations, maintenance, and administration (excluding depreciation). To be declared eligible for disbursements under the corresponding subloan, the subborrower shall further demonstrate it generates sufficient revenue, which may include contributions from customers, to cover the operating and maintenance expenses and the timely servicing of its debt and the local counterpart during the period of project execution.

The rates charged by the subborrowers should be high enough to produce sufficient revenue to cover operating expenses, including expenses in respect of administration, operations, maintenance, and depreciation. If, on application of the foregoing criteria, a subborrower fails to generate sufficient revenue to cover the timely servicing of all of its obligations and a portion of its investment plan, appropriate measures will be adopted, to include the possibility of raising rates, to achieve this objective. At least 10% of the annual investment plan shall be covered by the subborrower's revenues from customers. This proportion may be increased, at the discretion of COFAPyS, depending on the financial capacity of the subborrower.

COFAPyS may agree with the subborrowers to gradual rate adjustments or other measures during a period not to exceed four years in order to fulfil the goals stated in the preceding paragraph.

II. Fulfillment

The subloan contracts signed by COFAPyS and the companies must contain the clauses indicated above as well as the obligation to supply COFAPyS with periodic information on the compliance with these provisions. In the event of a failure to comply, IDB and IBRD must be duly informed so that they may coordinate the corresponding course of action, which may include calling in the appropriate balance.

METHODOLOGY FOR INSTITUTIONAL-FINANCIAL ANALYSIS

A. WITH REGARD TO THE SUBBORROWER

The following features will be analyzed:

- a) The legal-constitutional system; in particular its legal-constitutional nature and its regulatory basis for entering into commitments. In the case of decentralized agencies, their bylaws should be examined as should their powers and authorities.
- b) The regulations governing its revenues from the services it supplies; in other words, the rate system in effect in its area of jurisdiction.
- c) The technical-administrative structure, especially how its staff has evolved during the three years prior to the loan request.
- d) In the case of decentralized agencies, their composition, how their boards of directors are appointed and their powers and authorities, in accordance with the regulations governing them.
- e) The financial accounting system, the internal and/or external control and audit systems.
- f) The regulations that apply to the company with respect to technical assistance, reinforcement of operational units, supervision of consultants and/or contractors, coordination with other projects, and their powers and authority, modalities, and organizational relationship with the COFAPyS.
- g) The authority to manage and maintain the service and the regulatory framework of the services that are the operator's responsibility to provide.
- h) The subborrower's capacity to bill and collect for the service it renders.
- i) The bylaws of its staff and/or the labor agreements that apply to its staff.

B. METHODOLOGY FOR THE ANALYSIS

Special emphasis will be placed on the following in the financial analysis of the company:

a) Financial situation

- Analysis of the coverage of operating and maintenance expenditures.
- Source and use of funds during the last three fiscal periods. Foreign and Domestic sources.
- Liquidity - Statement of liquidity condition anticipated for the fiscal period under analysis, including resources and obligations.

b) Profits and losses form the operation

b.1 Budget performance in the last three years

- Structure of the resources
- Structure of the outlays
- Financing
- Debt service

b.2 Analysis of profits and losses in the last three fiscal periods

- Rate-based system of revenues
- Delinquency (an analysis of aging of accounts receivable and of the efficiency of collections)
- Outlays for operations and maintenance
- Operating profits and losses
- Profits and losses after deducting for financial costs

c) Financial projections

- The project and the financial system of the company
- A description of the institutional financial strategy
- Mechanism for harnessing resources
- The project rate structure
- Estimate of the rate levels needed to comply with the rate clauses
- Projected operating profits and losses (with and without project)
- Projected fund flows (with and without project)

1. The Subborrower

- Composition of the revenues
- Liquidity analysis
- Allocated resources
- Structure of expenditures
- Composition of expenses and investments
- Savings - investment - financing plan
- Analysis of the evolution of debt in the last three fiscal periods: short-term and long-term
- Criteria for allocating existing or new resources toward loan services payment
- Projection of income and expenditures
- Projection of allocated resources
- Impact of the loan service on the borrower's financial outlook.

2. The Guarantor

- a) Should the guarantor of the operation be the province or an agency thereof, the same analysis undertaken of the borrower will be required.
- b) In the case of an agency with a net worth accounting system, the following shall be taken into account:
 - Company performance:
 - . Earnings statement
 - . Fund flow statement
 - . Statements on financial condition
 - Analysis of the accounts that generate current income: delinquency, borrowers in arrears
 - Liquidity - statement of liquidity condition anticipated for the fiscal period under analysis and the trend thereof
 - Rate of return
 - Debt (short-term and long-term)

SOCIOECONOMIC ANALYSIS

A. General Characteristics

1. In order to ascertain the socioeconomic feasibility of the projects in the program, the methodology agreed upon with the Bank will be used. This must include the following: (a) an analysis for the selection of the alternative having the lowest economic cost; (b) once the proper scale of the proposed project has been established, the economic feasibility of the projects by means of a cost-benefit or cost-efficiency analysis in accordance with the following specifications; and (c) an analysis of the distributional effects using a representative sample of projects.
2. During the course of the Program, projects will be presented whose size and low cost would not justify the Bank's traditional methodology of cost-benefit economic evaluation. Thus, COFAPyS, with the help of a consulting economist will have to establish and compute efficiency ratios that can substitute for the economic analysis by measuring costs and benefits, as well as establish, for each type of project, the limits under which these indicators can be used in lieu of the conventional analysis. Until such time as COFAPyS presents the results of that undertaking to the Bank's satisfaction, the conventional economic analysis will continue to be used.

B. Scaling of the Projects

3. The project must be scaled on the basis of a diagnostic study and of a projection of the supply and demand balance of the system. In projecting demand, the rates considered will be those deemed necessary to comply with the Program requirements. To estimate capacity without the project, the gradual drop in the installed capacity caused by the deterioration or obsolescence of the existing installations and/or equipment will be taken into account.
4. Furthermore, using an appropriate simulation model, the different components of such systems, such as the water distribution system and the sewage collection systems and the treatment plants, will have to be optimized in the sense of minimizing costs and/or the idle capacity of the system.

C. Minimum Economic Cost Analysis

5. All possible technical alternatives for expanding the system will be studied so as to make certain that the solution chosen represents the minimum economic cost. In the case of alternatives having the same benefits and comparable useful life, the present value of the flows of investment, administrative, operations and maintenance costs set at shadow prices will be compared. For the alternative in which the useful life or the benefits differ, a

cost-benefit analysis will be done and the alternative with the highest Net Present Value will be chosen. In all cases, the cost-benefit flows must be set at shadow prices and a 12% discount rate will be used.

D. Cost-Benefit Analysis

6. In the cost-benefit evaluation, only the incremental costs and benefits generated by the project will be used, both of which will be set at shadow prices. The project costs will include the direct costs of investment, management and supervision of works, other concurrent expenditures of the project, and technical contingencies, as well as the administrative, and operating and maintenance costs that would accrue from the eventual execution of the project. Costs of finance charges, price escalation and depreciation will not be taken into consideration.
7. The nature of the benefits and the methods used to estimate them will in large measure depend on the objectives that the project is supposed to accomplish. The following are computation methods for some of the types of projects planned under the Program.

a) Projects of Institutional and Financial Improvement

No estimate of economic benefits need be made in the case of projects designed to give the service companies institutional and financial viability. Nonetheless, in these cases (for example, strengthening of organizations management, collections, and so on) care will be taken to ensure that the planned investments are reasonable in terms of the objectives sought.

b) Projects for Operational and Commercial Improvement

The benefits here will be determined by the savings in operating, maintenance and management costs and savings derived from the postponement of expansion allowed by improving physical operations and using financially self-sufficient rates instead.

c) Projects for Refurbishment, Expansion, and New Systems

Estimates of the benefits of such projects will take into consideration the higher demand that will be satisfied and the savings that accrue from having versus not having the project. The greater demand that will be satisfied will be determined by the willingness to pay of the beneficiaries. In the case of water supply projects, the SIMOP model developed by IDB can be used. This model is based on the results of a survey of direct beneficiaries whereby one can determine their demand curve. The benefits of the sewerage projects include, among others, improvements in the household connections, the interceptors

and collectors that may prevent urban contamination, and the environmental benefits of the sewage treatment. Such benefits will be measured by the willingness to pay (WTP) of the population of prospective beneficiaries. This can be determined by the contingent valuation method, which is based on the findings of a direct survey, in which the referendum technique is used among the potential beneficiaries of the project. Other benefits include the savings in resources (energy, materials, chemicals, labor, etc.) generated by the project, calculated at shadow prices.

8. To be considered eligible a project must correspond to the minimum cost alternative and have a 'TIRE' of no less than 12%.

E. Analysis of Payment Capacity

9. An analysis of the potential beneficiaries' capacity to pay will be made based on the rates and charges resulting from the project and the distribution of family income, obtained by means of a socioeconomic household survey. It must be made certain that the majority of the population, especially those in the low-income bracket, are in a position to pay for the service. Should a significant portion of the potential beneficiaries not be able to pay for the service, alternative solutions that would provide a modicum of service to satisfy the population's needs must be studied.

F. Distributional Impact Analysis

10. For projects financed by the Program for which cost-benefit analyses will be done, the coefficient of distributional impact (CDI) will be computed. The CDI measures the proportion of private benefits that will accrue to low-income groups as a percentage of the sum total of all benefits that accrue to the private sector. To make the computation, families whose annual per capita income is below 377,881 australes at May 1990 prices are considered low-income. This figure will be updated using the foodstuffs category of the consumer price index.
11. In the case of projects for which cost-efficiency analyses will be done, the percentage of low-income beneficiaries at the level agreed upon by the Bank and the Government of Argentina will be indicated.

AGREEMENT BETWEEN COFAPyS AND PROVINCIAL GOVERNMENT

--The present Agreement is hereby entered into by the first party, the Federal Water Supply and Sanitation Council, hereinafter "COFAPyS," represented here by its Chairman, Mr. _____, duly authorized by its Board of Directors, and the second party, the Government of the Province of _____, hereinafter "THE PROVINCE," represented here by its Governor, Mr. _____. The terms and conditions of this Agreement are set forth in the following clauses:

FIRST CLAUSE: Through its implementation of the National Water Supply and Sewerage Program, hereinafter "the Program," COFAPyS, an independent agency of the National Government, created under Law No. 23,615, shall allocate financial support in order to increase the efficiency of the companies in the country that supply water and sewerage services, improve the business practices, operations, and maintenance of the water supply and sewerage services, train personnel in the sector, optimize and/or refurbish those systems and equipment that may be found in poor operating condition, selectively expand the services and the capacity of those systems already in operation, and build new works within the geographical boundaries of THE PROVINCE. COFAPyS will also provide said companies, as part of the Program, with advisory assistance in sanitation engineering, and in business-related, financial, administrative, accounting, legal, and social matters.

SECOND CLAUSE: The parties will sign this same Agreement in order to fulfill, in the Province of _____, the objectives spelled out in the FIRST CLAUSE. Likewise, COFAPyS will have to sign one or more Companion Agreement(s) with _____, hereinafter the BORROWER, when it requests from COFAPyS financing charged against Program resources.

THIRD CLAUSE: The PROVINCE, through this same Agreement, is guarantor and sole disburser of each and every subloan that COFAPyS awards to the BORROWER, and which is charged against Program resources. This obligation includes the payment of installments on the principal, interest, commissions, and other fees, as specified in the respective Companion Agreement on Specific Loan Conditions. Thus, THE PROVINCE is obligated: i) to take action with regard to the BORROWER in the event it should fail to comply with those payments agreed to and with any other obligations specified in the Companion Agreements that said company may have signed with COFAPyS; ii) to make restitution to COFAPyS of the corresponding amounts, in the event that what is indicated in the preceding item does not result in positive action on the part of the BORROWER; (iii) to grant approval, should it become necessary and when legal provisions so require, to those rate structures that the BORROWER may justifiably propose.

COFAPyS reserves the right to suspend disbursements from those loans awarded and charged against the Program, whenever the obligations accepted by the BORROWER and/or THE PROVINCE may occur.

FOURTH CLAUSE: Mr. _____, in his capacity as BORROWER, is empowered, with the countersignature of the Minister of _____ of THE PROVINCE, to sign all those Companion Agreements that may be required to make effective the award of the loans that COFAPyS may grant and that are charged against the Program.

FIFTH CLAUSE: In those cases in which it may become necessary and as a consequence of that which is set out in the Companion Agreements with regard to the previous clause, THE PROVINCE is obligated to include in its corresponding budget of Revenues and Outlays, the corresponding items that are necessary in order for the BORROWER to carry out the project(s) to be financed by COFAPyS and charged against the Program.

SIXTH CLAUSE: THE PROVINCE pledges, in all those cases in which financing charged against Program resources has been received, that the BORROWER will fulfill exactly the provisions contained in the Program Credit Regulations and in the Companion Agreement(s) that has (or have) been signed. Furthermore, THE PROVINCE states it will accept, in all those cases in which the Program credit regulations contradict provisions contained in provincial legislation, that the regulations will prevail that are contained in the loan contracts for Program funding signed by the IDB and the IBRD and in the Program Credit Regulations.

SEVENTH CLAUSE: THE PROVINCE pledges, should it become necessary, to take whatever action may be required so that the BORROWER will be able: (i) to have full and effective discretion to operate its systems, its operations, its personnel, its facilities, its equipment, and its materials; (ii) to manage without active or passive restrictions; (iii) to enter into agreements, undertake legal actions, carry out rate adjustments, cut off service; and (iv) to have a net-worth accounting system that will operate in accordance with the generally accepted principles that regulate in this area.

EIGHTH CLAUSE: In the event that THE PROVINCE should fail to comply with the financial obligations accepted under this same Agreement, COFAPyS is officially empowered by this same agreement to require the Ministry of Economy to set aside the resources pertaining to THE PROVINCE as established by the Law No. 23548 (of Federal Sharing of Fiscal Resources) or by that which may be established in its stead by legal regulations and/or corresponding agreements, up to the total amount equivalent to the debt assumed by the BORROWER. For this purpose, THE PROVINCE, through this same Agreement, authorizes the aforementioned resource allocation on the basis of the debt statement that is presented to it by COFAPyS.

NINTH CLAUSE: The failure on the part of the parties to comply with the clauses contained in this same agreement will give the affected party the right of complaint, leading to the extinction of the Agreement at the time of notification; this, without prejudice to other legal consequences anticipated in this agreement or the right of the parties to undertake the legal actions granted to them by the regulations in effect.

TENTH CLAUSE: THE PROVINCE pledges to undertake, before the Legislative Branch of the Province, the steps necessary so that this same Agreement

be ratified under a Provincial Law; likewise, so that the implementation of the Resulting Plan be declared as of "Provincial Interest" in order for the authority to be consequently granted so that all the activities to be undertaken in fulfillment of the Plan become eligible for all the exemptions and benefits allowed under the Law of the Province.

ELEVENTH CLAUSE: This same Agreement will take effect and will be binding on the parties, upon the enactment of the legal instruments that are indicated in the TENTH Clause of this same Agreement. Only after the legal instruments referred to in the TENTH Clause are issued, may the Companion Agreements referred to in the FIFTH Clause of this same agreement be signed.

The parties establish the following special domiciles where any communications or notifications transmitted between themselves will be valid: COFAPyS at _____ Street in the Federal Capital and THE PROVINCE at _____ Street.

To show their agreement, the parties hereby sign two (2) identical copies of the same single draft, in the City of Buenos Aires on the _____ of the month of _____, 1991.

For THE PROVINCE

For COFAPyS

Governor

Chairman

COMPANION AGREEMENT BETWEEN
COFAPyS AND THE BORROWER

--Pursuant to the provisions of the Fifth Clause of the COFAPyS-Province Agreement entered into and effective as of the date _____ and approved by Provincial Law No. _____, this present Agreement is hereby entered into between the first party, the Federal Water Supply and Sanitation Council, hereinafter COFAPyS, represented here by _____, and the second party _____, hereinafter the BORROWER, represented here by its (Manager/Chairman/Director), _____, and this agreement is hereby regulated by the following clauses:

FIRST: The purpose of the present agreement is in line with the general objectives spelled out in the First Clause of the aforementioned COFAPyS-PROVINCE Agreement. The specific objectives, goals, description of activities, details of costs and other general features will be set forth in the Companion Agreement(s) on Specific Conditions of Loan(s) for each project to be undertaken by the Borrower.

SECOND: The BORROWER does hereby declare that it knows and accepts all the terms of the COFAPyS-PROVINCE Agreement mentioned in the preamble to this Agreement.

THIRD: The projects, including their additional costs, can be jointly financed with funds from: a) the loans that COFAPyS may grant for such purpose to the Borrower from its own resources that are part of the Program or that are from another source of available funding; b) the non-reimbursable contributions granted by THE PROVINCE; c) the loans that THE PROVINCE may award to the BORROWER; d) the contributions that the BORROWER may collect from other entities (the beneficiary communities, credit funds, municipalities, etc.); and e) the contributions generated by the operations of the BORROWER.

The proportion of each one of the mentioned contributions or loans may vary according to each particular type of project to be financed, as set forth in the Program Credit Regulations.

FOURTH: The BORROWER pledges to conduct the studies, do the contracting, administer the Program resources, and apply and evaluate constantly the results upon fulfillment of the objectives stated in the First Clause; all the while managing its operations in a prudent manner, using sound administrative, financial, environmentally safe, and engineering practices, under a competent and experienced management assisted by an appropriate and experienced staff.

FIFTH: In order to carry out each project to be financed with Program resources, the BORROWER undertakes to observe faithfully the rules contained in the corresponding Credit Regulations, which are part of this agreement and are referred to in the Sixth Clause of the aforementioned COFAPyS-PROVINCE Agreement.

SIXTH: COFAPyS agrees to furnish the funds approved for each program, punctually and directly, to the BORROWER, which in turn agrees to pay punctually and directly to COFAPyS installments for depreciation, interest and other fees resulting from the amounts received from the mentioned loan.

SEVENTH: The BORROWER pledges to open and keep a "Special Account" that is to be managed by its highest ranking officers and operated in accordance with the rules set forth in the Program Credit Regulations.

EIGHTH: The BORROWER pledges to keep in operation, so long as may be necessary and until the conclusion of financial operations with COFAPyS, the "Special Account" referred to in the previous Clause as well as a net-worth accounting system that must operate on the basis of generally accepted principles and through which it is possible to identify the investments and expenditures made with credit resources awarded by COFAPyS and charged against the PROGRAM, as well as the funding sources of the Project(s). Likewise, the BORROWER pledges to furnish COFAPyS with all of the information contained in these records that may be reasonably requested.

NINTH: The BORROWER pledges, whenever it is required, to invite bids on contracts for goods, works, services and consulting, in accordance with the regulations set forth in the Program Credit Regulations and their respective Annexes.

TENTH: The BORROWER commits itself to submitting its annual financial statements to auditing by independent public accountants.

ELEVENTH: The BORROWER pledges to furnish periodical and final information on the execution of each project financed under the Program; likewise, to allow free access to the works, offices, and records to the officials of COFAPyS and of the international financial agencies that take part in funding the relevant project.

TWELFTH: So that COFAPyS may make the resource disbursements referred to in item a) of the Third Clause, the BORROWER must show beforehand that it keeps deposits in the "Special Account" mentioned in the Seventh Clause of this same agreement of the counterpart contributions that THE PROVINCE or the BORROWER have the responsibility to make, when so required. Once

it has approved financing for a project to be funded under the Program and has ascertained the fulfillment of this condition, COFAPyS may proceed to make the respective disbursements for the certificates of additional work cost overruns that are presented to it by the BORROWER. COFAPyS can make advance disbursements of approved financing in those cases in which it is duly justified. For such a purpose the BORROWER must make an express request to COFAPyS.

THIRTEENTH: The BORROWER pledges to insure or have insurance on the imported goods that are financed under the Program, and it will take appropriate care so that they are duly covered under insurance policies against risks arising from their acquisition, shipment, and delivery to the sites where they are to be used or installed. The policies must specify that any payment corresponding to said insurance be made by the corresponding insurance company in a currency that can readily be used to replace or repair said goods.

FOURTEENTH: The BORROWER pledges to demonstrate to COFAPyS that, at the time in which it signs this same Agreement and during the execution of the project to be funded under the Program, it will have sufficient administrative and financial discretion to operate, under entirely business-like standards, the water supply and sewerage services that it furnishes. This discretion means that at a minimum the BORROWER will fulfill satisfactorily all of the requirements in this regard that are set forth in the Program Credit Regulations.

FIFTEENTH: Should the BORROWER fail to comply with the obligations taken on under this Agreement, or should in the judgement of COFAPyS there exist justifiable reasons to nullify and call in the loan awarded under the Program, COFAPyS will be entitled to suspend disbursements of the corresponding Loan.

SIXTEENTH: The failure to comply with the clauses of this same agreement by either of the parties to it, will give the other party the right to issue complaint, whereupon the agreement will expire at the moment that clear notification is made to the party in noncompliance, without prejudice to other legal consequences provided for in this Agreement or to the right of the parties to take legal action under the laws in force.

The parties establish the following special domiciles, where any communication or notification transmitted between them will be valid; to wit: COFAPyS, at _____ Street in the Federal Capital and the BORROWER at _____ Street.

In agreement, both parties sign two (2) identical copies of the same single draft, on the ____ day of the month of _____, 199__.

For COFAPyS

For the BORROWER

Chairman

.....

For THE PROVINCE

Minister of

COMPANION AGREEMENT ON
SPECIAL SUBLOAN CONDITIONS

--Pursuant to the provisions of the Fifth Clause of the COFAPyS-PROVINCE Agreement entered into on the date _____, and the COFAPyS-BORROWER Companion Agreement entered into on the date _____, the present companion agreement is hereby entered into by the first party, the Federal Water Supply and Sanitation Council, hereinafter COFAPyS, represented in this case by _____, and the second party, _____, hereinafter the BORROWER, represented here by its (Manager/Chairman/Director) _____. The provisions are as follows:

FIRST: The purpose of this same agreement is to make effective the loan awarded by COFAPyS for the funding of _____ (Description of the project and of the respective subprojects) in a single agreement with the specific objectives, goals, description of the activities, detail of costs, and any other specific characteristics indicated in Annex I to this same Agreement.

SECOND: In order to conduct the present Program, the BORROWER pledges to observe faithfully the rules set forth in the Program Credit Regulations included in the aforementioned COFAPyS-BORROWER Companion Agreement, the amendments thereto, and any other directive that COFAPyS may prepare to enable the subloan to operate in a better manner.

THIRD: The total cost for the execution of the Project referred to in the First Clause of this same Agreement is estimated in the amount of _____ AUSTRALS (Aust. _____) valued at _____ (the equivalent of _____ US\$) at the exchange rate of _____.

FOURTH: The total amount indicated in the previous clause will be financed as follows: _____% in the form of a loan awarded by COFAPyS with funds from the National Water Supply and Sewerage Service Program; _____% as a non-reimbursable contribution from the PROVINCE, and _____% as a direct contribution from the BORROWER.

It is understood that the amount of those percentages indicated will be covered in full by the parties, including cost overruns; the loan awarded by COFAPyS will acknowledge as much as ten percent (10%) in cost overruns expressed in United States dollars. If that amount is exceeded, the BORROWER pledges to pay in the funds necessary to fulfill satisfactorily the objectives of this same Agreement, with THE PROVINCE serving as underwriter and guarantor of this commitment.

FIFTH: (Clause on adjustment of principal and interest)

SIXTH: (Fees)

SEVENTH: (Depreciation Period and Due Dates).

EIGHTH: This same Companion Agreement on Special Conditions has been countersigned by the Minister of _____ of THE PROVINCE and so has full legal force, as set forth in the Fifth Clause of the aforementioned Agreement Between COFAPyS and THE PROVINCE.

NINTH: A failure on the part of either of the parties to comply with the terms of this same agreement will give the other party the right of complaint, whereupon it will expire once the noncomplying party has been clearly notified, without prejudice to the other legal consequences provided for in this Agreement and the right of the parties to take the legal action allowable under the laws in force.

The parties hereby establish the following domiciles where any communication or notification transmitted between them will be valid: COFAPyS at _____ Street in the Federal Capital, and the BORROWER at _____ Street.

Both parties do hereby sign two (2) identical copies of the same single draft in the city of Buenos Aires on this, the _____ day of the month of _____, 199_.

ANNEX I

**FROM THE COMPANION AGREEMENT
ON SPECIFIC SUBLOAN CONDITIONS**

This Annex should include, inter alia, the following:

An overall description of the project;

A detailed description of the respective projects;

A breakdown of costs and financing for each project;

A schedule of activities and deadlines for each project;

Among the subprojects must be included one for institutional development.

TERMS OF REFERENCE FOR THE
HIRING OF CONSULTANTS

CONSULTANT NO. 1 - TECHNICAL EVALUATION

I. INTRODUCTION

- 1.01 The organizations will present projects for evaluation by the COFAPyS, which may be for studies, designs and measures for improving the operation, the rehabilitation and optimization of existing installations, and enlargements and new works.
- 1.02 To execute the Program COFAPyS will need the ongoing collaboration of an expert in the technical evaluation of projects for a period of four years.

II. PURPOSES AND RESPONSIBILITIES

- 2.01 To assist COFAPyS in the technical aspects of implementing the Program.
- 2.02 In conjunction with COFAPyS, to assist the organizations in the preparation and selection of projects and subprojects to be presented for purposes of obtaining subloans.
- 2.03 To advise the technical units of COFAPyS and the organizations to be indicated by COFAPyS in engineering matters relating directly or indirectly to the activities under the Program.
- 2.04 Possibly to collaborate with COFAPyS in the preparation of a new application of the Banks for the development of a second stage of the Program.

III. ACTIVITIES

- 3.01 The definition and proposal to COFAPyS of frames of action for the definition of specific goals and aims within the Program's frame of application.
- 3.02 Definition of the type and characteristics of the projects to be accepted for financing under the Program.
- 3.03 Identification of the principal needs in the country for projects of the type and characteristics stated in the Program.

- 3.04 Examination of COFAPyS's technical regulations for the preparation and presentation of projects and the proposal of adaptations and modifications for projects of the type and characteristics to be financed.
- 3.05 Proposal to COFAPyS, and the application, of methodologies for the technical selection of projects that will make it possible to identify priority projects.
- 3.06 Visits to the provincial and municipal agencies that COFAPyS establishes and provision of the technical counseling needed to promote the preparation and implementation of projects.
- 3.07 Establishment of contacts, as indicated by COFAPyS, with other local and international agencies on matters relating directly or indirectly to the Program.
- 3.08 Collaboration in the programming and execution of COFAPyS's training activities and training of personnel designated by COFAPyS in tasks for the preparation and technical evaluation of projects of the type and characteristics included in the Program.
- 3.09 Collaboration with COFAPyS in the hiring and supervision of consultants and review of the work done by them.
- 3.10 Collaboration with COFAPyS in the evaluation of projects presented by the organizations for purposes of obtaining subloans.

IV. REQUIREMENTS AND QUALIFICATIONS

- 4.01 A senior engineer with graduate specialization in sanitary engineering.
- 4.02 At least fifteen years of experience in the design and/or implementation of drinking-water supply and/or sewer systems, five of them at the executive management level.
- 4.03 Working experience in more than one country, particularly in countries of Latin America.
- 4.04 Facility in writing reports and instructional texts.
- 4.05 A background of teaching in the field of sanitary engineering.
- 4.06 Must read, speak and write Spanish fluently. A command of other languages would be an advantage.

CONSULTANT NO. 2 - EVALUATION OF ENVIRONMENTAL IMPACT

I. INTRODUCTION

- 1.01 The organizations would present to COFAPyS projects for (a) operational improvement, (b) the rehabilitation and optimization of existing facilities, and (c) enlargements and new works.
- 1.02 To execute the Program COFAPyS will need the ongoing collaboration, for four years, of an expert to evaluate the environmental impact of the works to be built under the Program.

II. PURPOSES OF THE EVALUATION AND AREAS OF INTEREST

- 2.01 The main purpose of evaluating the environmental impact of the Program is the prevention, management and control of damage to the environment from the works and services of the borrower organizations.
- 2.02 The component of evaluation of the impact of projects under the Program has two basic areas of interest: the impact itself of the works and services under each program, and the capacity of the agencies with jurisdiction in the area of its influence to identify, assess and control such impacts.

III. FUNCTIONS OF THE CONSULTANT

- 3.01 To assist COFAPyS in evaluating the environmental impact of presented projects and the capacity of requesting organizations to prevent, manage and control them.
- 3.02 In conjunction with COFAPyS, to assist subborrowing organizations in preparation of the impact evaluation component of projects to be presented, and in training the personnel involved.
- 3.03 To advise COFAPyS and organizations indicated by it in matters relating to evaluation of the environmental impact of sanitation works and services.
- 3.04 To collaborate with COFAPyS in the preparation of a new application to the Banks for the development of a possible second stage of the Program.
- 3.05 To complete and keep current the regulations and indicators for environmental impact evaluations.

IV. ACTIVITIES

- 4.01 The Program calls for evaluation of the capacity of the Organizations to manage and control the impact of their works and services and the impact of the projects they present. The borrower

agencies will present the information for these purposes to COFAPyS for analysis and evaluation with the consultant's assistance.

- 4.02 That information must be such as to enable the consultant to analyze and evaluate the following aspects:

1. Evaluation of the Organization

- a) The environment and water resources in the area.
 - i) Current or envisaged situations of environmental degradation caused by the services provided by the Organization, especially on the water resources.
 - ii) Situations of pollution or conflict as to the availability and quality of water from sources other than the aforementioned, but located in the jurisdiction of the agency requesting the loan.
 - iii) Diagnosis and studies of and measures against those situations, and results obtained.
- b) Legal-institutional aspects.
 - i) Competence and jurisdiction of the organization for the preservation and improvement of the quality of the environment and its water resources.
 - ii) Legal situation in effect in the organization's area: laws, rules, regulations monitoring and control procedures, quality standards in effect, etc.
 - iii) Administrative structure and technical operating capacity of the agency to deal with the matters of reference (personnel and equipment).
 - iv) Policies, plans, programs, projects and other measures in effect or envisaged to provide for the control, management and recovery of the quality of the environment and the water resources, on the part of the requesting agency or of other institutions.

2. Evaluation of Works and Services

- a) Definition of the area of influence of the project (for example, the watershed) and description of its natural ecosystems, human settlements, and present use of the

physical space, with emphasis on the use of the water resources.

- b) Identification of the injurious environmental impacts of alternative works on individual elements, processes and structures of the environment. Prediction of evolution of impact over time in different parts of the area. The evaluation will include the impact of the "without the project" situation (absence of drinking water and/or sewer services).
- c) Identification and analysis of the views of the population affected by the envisaged impacts, and of the cultural components (practices and customs) in the region.
- d) Ranking of the impacts in absolute terms and relative to the benefits of the projected work, with a statement of the indicator criteria applied.
- e) Identification of alternatives for managing, counter-acting and controlling injurious impacts, including economic analyses and comparative techniques. Identification of the most promising alternative.
- f) Identification of possibilities for the reuse of by-products, wastes and effluents of the services, with a technical and economic analysis.
- g) Definition of a system for monitoring the works and processes of the project during construction, in full operation, and throughout its useful service life.

4.03 Regarding the scope of the evaluation, it will be endeavored to determine accurately the spatial dimensions of all probable impacts and their evolution over time, without omitting any part of the damages and benefits, or restricting or underestimating them. To this end, the evaluation will be broken down into the following components:

- 1. Works: all impacts will be considered that could be caused by all the works of the project - treatment and purification plants, distribution and collector systems, pumping plants, etc.
- 2. Processes: identification, prediction and assessment of all direct and indirect environmental changes that will be brought about by the processes of water purification and effluent treatment, including the products, by-products and wastes of those processes (sludges, precipitates, emissions, noises, final discharges, etc.) in the different receiving

milieus. This evaluation will also include processes generated by emergencies, for example, electric power cuts and the use of bypasses.

3. Areas of Influence: Determination of the area of influence of the impacts. In this analysis the basic unit will be the watershed, with its current and envisaged uses, but without disregarding the effects outside its borders.

4. Periods: The evaluation will be broken down into the scheduled periods of the project: construction of the work, early phases and full operation of the services and, lastly, the entire useful service life of the project.

4.04 The consultant will perform the stated functions in the form of reports, training seminars, the preparation of a Guide to the Evaluation of Environmental Impact, meetings and other procedures judged feasible and conducive to accomplishment of the stated purposes.

V. REQUIREMENTS AND QUALIFICATIONS

5.01 A university degree in environmental or similar area of engineering (ecology, agronomy, sanitary engineering, etc.) with graduate specialization at the master's level or higher.

5.02 Not less than 15 years of professional experience in environmental projects.

5.03 A fluent command of Spanish. Knowledge of other languages will be an advantage.

5.04 The consultant must be able to show proof of experience in:

1. Projects for evaluation of the environmental impact of infrastructural works and of sanitation in particular, at the international level.

2. Methodologies for the economic-social evaluation of projects for comprehensive impact calculations.

3. The framing of standards and indicators for evaluation of the environmental impact of sanitation works.

4. The identification and design of investment projects for international financing or development institutions.

CONSULTANT NO. 3 - BANKING-FINANCIAL ADMINISTRATION

I. INTRODUCTION

- 1.01 To date COFAPyS has been managing the country's rural drinking water supply program with administrative and financial methods different from those called for under the Global Credit Program.
- 1.02 The Executing Unit requires the collaboration of an expert in the financial administration of lending institutions for a period of two years.

II. PURPOSES AND RESPONSIBILITIES

- 2.01 To assist the Executing Unit in the financial-banking management of the Program.
- 2.02 To collaborate with COFAPyS in determining the organizational structure best suited to the management of this area, including the proposal of personnel in the numbers and of the qualifications required.
- 2.03 To train the personnel of the financial-banking management area.

III. ACTIVITIES

- 3.01 To work with the consultant hired by COFAPyS in Rural Aqueducts Stage V on the computerized accounting system in order to develop an integrated system that will properly show a) monthly balances, b) automatic calculations of equivalent dollar amounts, c) separate accounts and reserves for losses, and d) a mechanism for the separate calculation of profit and losses in foreign exchange.
- 3.02 To train the personnel and design a program for assessing the quality of the portfolio.
- 3.03 To establish accounting rules for reserves.
- 3.04 To work with the personnel in implementation of a system for the timely application of the provincial coparticipation system.
- 3.05 To establish a system for the control of provincial and municipal guarantees.
- 3.06 To establish a system of guarantees for organizations that do not have a provincial or municipal guarantee.
- 3.07 To design a system for the establishment of indexes for the quality of the program.

- 3.08 To devise a mechanism for the evaluation of liquidity requirements.
- 3.09 To manage the cash flow actively.
- 3.10 To devise a mechanism for giving effect to the exchange risk and the interest rate risk.
- 3.11 To work closely with COFAPyS in the activities for reorganization to enhance its efficiency.
- 3.12 To work closely with the consultant referred to in paragraph 3.01 to devise computer programs that will produce appropriate indicators whenever required.

IV. REQUIREMENTS AND QUALIFICATIONS

- 4.01 An institutional-financial analyst with not less than a master's degree.
- 4.02 At least 10 years of experience in lending institutions.
- 4.03 Working experience in more than one country.
- 4.04 The ability to read, speak and write Spanish fluently. A command of other languages would be an advantage.

CONSULTANT NO. 4 - COMMERCIAL-FINANCIAL AREA

I. INTRODUCTION

- 1.01 The organizations will present to COFAPyS applications for the execution of projects for (a) operational improvement, including the commercial area, (b) rehabilitation, and (c) enlargements and new works.
- 1.02 To execute this Program COFAPyS will require the ongoing collaboration, for a period of four years, of an expert in the area of the financial-commercial evaluation of public utilities.

II. PURPOSES AND RESPONSIBILITIES

- 2.01 To assist COFAPyS in the financial-commercial aspects of the operational improvement projects.
- 2.02 In conjunction with COFAPyS, to assist the organizations in the preparation and selection of operational improvement subprojects in the financial-commercial area for purposes of obtaining subloans.

III. ACTIVITIES

- 3.01 To determine the type and characteristics of operational improvement subprojects that will be accepted.
- 3.02 To analyze the technical standards of COFAPyS in the commercial area for the presentation of subprojects and devise the most appropriate methodologies and modifications.
- 3.03 To pay visits to the provincial and municipal agencies to provide the technical counseling needed to promote the preparation and implementation of subprojects in the commercial area.
- 3.04 To assist the organizations in preparing the terms of reference for the commissioning of studies on the subjects of interest to the Program.
- 3.05 To assist the organizations in the design of rate structures based on metered consumption so that they may become financially self-supporting.
- 3.06 To work with the organizations in areas relating to the roster of users for the framing and implementation of additional policies on services to users and invoicing and collection systems.
- 3.07 To identify the general improvements considered necessary to introduce in order to optimize the operation of the aforementioned

systems and to enhance the efficiency of those operations and the effectiveness of their results.

- 3.08 To assist the organizations in preparing the operational improvement projects presented for inclusion in the Program.
- 3.09 To propose to COFAPyS adaptations in or amendments of the internal regulations in response to needs that emerge during execution of the Program.
- 3.10 To evaluate, in the stated areas, the projects presented by the organizations for inclusion in the program.
- 3.11 To collaborate in the programming and execution of COFAPyS's training activities, and to train personnel designated by it in tasks relating to their areas of specialization.
- 3.12 To collaborate with COFAPyS in the hiring and supervision of consultants and the review of their work.
- 3.13 To work with the organizations on the design of information systems, including the software for them, for efficient monitoring and control.

IV. REQUIREMENTS AND QUALIFICATIONS

- 4.01 A financial analyst with at least a master's degree.
- 4.02 International experience in the preparation and implementation of operational improvement projects, especially in the commercial area, in public utilities of other countries.
- 4.03 The ability to read, speak and write Spanish fluently. A command of other languages would be an advantage.

CONSULTANT NO. 5 - SOCIOECONOMIC ANALYSIS

I. INTRODUCTION

- 1.01 The organizations will present for evaluation by COFAPyS projects that may include studies, designs and measures for operational improvement, the rehabilitation and optimization of existing facilities, and enlargements and new works.
- 1.02 To execute the Program COFAPyS will require the ongoing collaboration, for a period of four years, of an expert in the socioeconomic evaluation of projects.

II. PURPOSES AND RESPONSIBILITIES

- 2.01 To advise COFAPyS in the socioeconomic evaluation of drinking water supply and sewerage projects, including the performance of (a) economic least-cost analysis, (b) economic cost-benefit analysis, including calculation of the internal rate of economic return and net present value, (c) sensitivity analysis of responses to changes in parameters used, (d) analysis of the capacity of populations to pay for the services generated by a project, (e) analysis of the distributional impact of the project, and (f) an ex-post evaluation.
- 2.02 To advise COFAPyS in the performance of diagnoses, the preparation of plans and programs, and the determination of policies for the basic sanitation sector.
- 2.03 To train the economists assigned by COFAPyS as counterparts in the evaluation of projects under the Program with a view to enabling COFAPyS to perform future evaluations unaided.
- 2.04 To prepare complementary materials and conduct at least one course of about one week's duration per semester to disseminate the techniques of economic evaluation among the subborrowers of the Program and other organizations operating in the sanitation sector in Argentina.

III. ACTIVITIES

- 3.01 To determine the specific methodological aspects of the socioeconomic evaluations to be made of the different types of projects called for under the Program based on the general guidelines for analysis provided in the Credit Regulations.
- 3.02 To prepare a detailed methodological guide to the socioeconomic evaluation of projects, which must be approved by the banks before it is officially introduced, and to guide possible subborrowers under the Program in the preparation of such evaluations.

- 3.03 To determine the specific information requirements for each type of project envisaged under the program, and to guide possible subborrowers in the determination, collection, processing and analysis of the requisite data.
- 3.04 To review the socioeconomic aspects of projects presented to COFAPyS by possible subborrower organizations in order to ensure the validity and reliability of the data and the analysis done, and the economic feasibility of their projects. He must also prepare reports on the projects so reviewed to justify the approval of the subloans for them.
- 3.05 To estimate and review periodically the factors for the conversion of market and financial prices at efficiency prices for use in analyses of projects under the Program.
- 3.06 To establish and calculate efficiency indicators that can replace the traditional cost-benefit analysis and to establish limiting values for each type of project envisaged under the Program within which those indicators may be used.
- 3.07 To collaborate with possible subborrowers so that they will introduce into their projects the indicators needed for the ex-post evaluation to be made by COFAPyS on the basis of a representative sample of projects.

IV. REPORTS

- 4.01 The consultant must present (a) in the first quarter of each calendar year, a report (i) summarizing the activities carried out during the year and stating the accomplishments and the difficulties encountered in carrying them out, and (ii) describing the programming for the following year, and (b) other reports that the Banks may request.

V. DURATION AND PLACE

- 5.01 The consultancy will have a total duration of 48 months and be carried out entirely in Argentina.

VI. REQUIREMENTS AND QUALIFICATIONS

- 6.01 The consultant will be selected from among international experts native to member countries of the Bank who have pursued graduate studies in economics and can prove at least five years of experience in the evaluation of projects similar to those of the Program.
- 6.02 The consultant selected must also show (i) an ability to work effectively on multidisciplinary teams; (ii) familiarity with the application of quantitative methods, the tools of econometrics and

mathematical models to project evaluation, (iii) experience in the design of socioeconomic surveys and the selection and sizing of samples, and (iv) experience in the analysis of economic least-cost plans for the expansion of public utilities, especially in the area of drinking water supplies and sanitary sewerage.

BUDGET

4 consultants x 4 years x US\$119,280/year	US\$1,908,480
1 consultant x 2 years x US\$119,280/YEAR	<u>238,560</u>
Subtotal	
2,147,040	
4 seminars with 20 participants each	
x US\$1,500/participant	<u>120,000</u>
Subtotal	
120,000	
Contingencies 10%	<u>239,960</u>
Total	
US\$2,,500,000	