

**PROGRAM FOR SUSTAINABILITY
OF WATER SUPPLY AND SANITATION SERVICES
IN RURAL COMMUNITIES**

(ME-0150)

EXECUTIVE SUMMARY

BORROWER: Banco Nacional de Obras y Servicios Públicos (BANOBRAS)

GUARANTOR: United Mexican States

COORDINATOR: Comisión Nacional de Agua [National Water Commission] (CNA)

EXECUTING AGENCIES: The state water supply and sanitation commissions (CEAS) and municipal operating agencies (OAs)

AMOUNT AND SOURCE:

IDB, ordinary capital	US\$310 million
Local contribution:	US\$250 million
Total:	US\$560 million

FINANCIAL TERMS AND CONDITIONS:

Amortization period:	20 years
Disbursement period:	5 years
Interest rate:	variable
Inspection and supervision:	1% of the loan
Credit fee:	0.75%
Currency: (U.S. dollars)	Single Currency Facility

OBJECTIVES: The main objective of the program is to support the development process of the water supply and sanitation subsector in rural communities by: (a) applying standards that guarantee the quality of water supply and sanitation services; (b) strengthening the decentralization of responsibilities and financial resources; and (c) providing efficient services to marginalized segments of the rural population in a sustainable way, with active, organized community participation.

DESCRIPTION: The program comprises the following three subprograms to be executed over five years:

1. Institutional development (US\$23.1 million). Supports the implementation of decentralization processes nationwide by separating off and strengthening sector functions and improving institutional mechanisms in approximately 20

states and 200 municipalities (see paragraphs 2.3 to 2.5). The subprogram would finance:

- a. Diagnostic assessments of water and sanitation infrastructure and institutions.
- b. Designs to separate and strengthen sector functions, and implementation thereof at the state and municipal levels.
- c. Improving state and municipal mechanisms for funding the rehabilitation and expansion of water supply and sanitation systems.
- d. Federal, state, and municipal staff training in administrative, technical, operational, environmental, and social areas.
- e. Procurement of audiovisual, computer, water quality control, transportation, and office equipment.
- f. Preparation of teaching materials, guides, and manuals.
- g. Supervision, monitoring, and performance evaluation systems.

2. Community development support and community participation (US\$31.4 million). Supports rural communities in strengthening or creating community organizations in approximately 1,500 communities to operate and maintain rural water supply and sanitation services in a way that is sustainable, with the active participation of all groups benefiting from the projects (see paragraphs 2.6 and 2.7). With the funds allocated to this subprogram, the following activities would be financed:

- a. Participatory assessments of the existing situation, social reports, and promotion of active participation by all groups in the community, particularly women and indigenous groups.
- b. Strengthening or design and implementation of community organizations that will foster a sense of ownership and take responsibility for operating and maintaining the systems and paying the associated costs.
- c. Training courses on operation, maintenance, and administrative and financial management.
- d. Courses on health and environmental matters for target communities.
- e. Implementation by municipal and state institutions of technical assistance strategies to support community organizations.

3. Water supply and sanitation infrastructure (US\$329.1 million). Supports institutional development, community development support, and community participation processes, by building new works, rehabilitation and expansions to benefit a population of about 1.87 million and 1.29 million with water supply and sanitation, respectively (see paragraphs 2.8 to 2.10) in rural communities of up to 2,500 inhabitants. This subprogram would finance construction, rehabilitation, and expansion of:
 - a. Water supply systems in some 1,200 communities; and
 - b. Sanitation solutions in some 950 communities.

**ENVIRONMENTAL
AND SOCIAL REVIEW:**

Environmental and social criteria should be incorporated as soon as promotion and awareness campaigns get under way in the communities as well as in the planning, design, execution, operation, and maintenance of the water supply and sanitation systems. Nevertheless, no major environmental or social impacts are expected because of the nature of the systems which will help improve living conditions and public health in small rural communities. On the contrary, positive environmental and social effects will be generated by providing basic water supply and sanitation services to rural communities and by fostering effective participation by all groups involved in areas with the highest poverty index. Environmental and social procedures, included in the CESI/TRG recommendations, will be set out in the operations manual agreed upon with the IDB. The environmental and social viability review is contained in paragraphs 4.2 to 4.9.

RISKS:

The program faces certain risks that are inherent in restructuring this sector in rural areas. They include:

1. Failure to achieve the objectives of decentralization and devolution of responsibilities to states, municipalities, and communities. Nevertheless, the commitment demonstrated by the Government of Mexico in laying down policy directives in the Program for a New Federalism, together with the high priority it attaches to this operation, are clear signs of its interest in seeing this process through until it has been consolidated.
2. Uncertainty as to state, municipal, and community participation, which could translate into less

utilization of funds and lesser targets than those contemplated. Nonetheless, the program is designed in such a way that it must be implemented with participatory techniques initiated in the communities themselves. That, plus the highly positive reactions discernible during the seven preparatory workshops, suggest that demand will be both adequate and effective.

BENEFITS:

With program execution, a degree of institutional development, community development support, and community participation will be encouraged and hopefully attained that will make it possible: (a) to create favorable conditions for sustainability and social equality in the provision of water supply and sanitation services in rural areas (approximately 20 states and 200 municipalities will have responsibilities and functions transferred to them to cover rural areas); and (b) to improve quality of life and public health in communities that still have unacceptable levels of poverty (approximately 1.87 million and 1.29 million rural residents will benefit from water supply and sanitation works, respectively).

**COMPATIBILITY
WITH THE SECTOR
STRATEGY IN RURAL
AREAS:**

The operation is in keeping with the policy directives and programming principles contained in the National Water Commission's strategy paper of May 19, 1997. This paper in turn, is compatible with: (a) the Program for a New Federalism, published in the Official Gazette of the Federation on August 6, 1997; (b) the decentralization, social development, and regional development policies established in the 1995-2000 National Development Plan; and (c) the federal government's 1995-2000 water program.

The strategy proposed by the Inter-American Development Bank envisages, among other things, promoting equitable growth to assist in the economic and social transition that Mexico is undergoing. The operation would contribute to equitable growth because it includes steps to increase the size of the population covered by water supply and sanitation services in rural areas that, historically, (a) has been characterized by high and very high levels of poverty; and (b) has faced significant lags in the delivery of these services.

This operation - the first to support modernization of the water supply and sanitation sector in rural areas - is in line with IDB policy in respect of public services, and with its principal objectives,

in that it aims to: (a) enhance economic efficiency in the supply of services by selecting viable water supply and sanitation systems on the basis of criteria applied ex ante and verified ex post in such a way as to allow for any necessary adjustments; (b) achieve long-term financial sustainability; (c) guarantee the quality of services by actively involving the community in management and the municipal and state authorities in the provision of technical assistance, application of standards, performance monitoring and control; (d) make services more readily available for the poorest segments of the population; and (e) encourage the achievement of broader national objectives, particularly those related to improving public health conditions and protecting the environment.

**TARGETING
LOW-INCOME
GROUPS:**

The program qualifies as a poverty-targeted investment (PTI) on the basis of geographical location (document GN-1964-3). The beneficiaries live in rural communities with poverty indexes below the national average (see paragraph 4.16). National Population Council (CONAPO) data for 1995 show that: (a) 75% of Mexico's population living in poverty was concentrated in rural areas; and (b) 17% of the total population, 63% of the rural population, and 95% of the indigenous communities had high and very high poverty indexes. Since this is a PTI program, the Government of Mexico has requested additional financing over and above the matrix of up to 10% of the total cost of the program.

**PROCUREMENT OF
GOODS AND
SERVICES:**

The procurement of goods and services will be governed by the IDB's procurement procedures and, in all aspects not at variance with them, the National Procurement and Public Works Act. Execution of the program will require consulting and supervisory services, as well as the acquisition and installation of equipment, and contracts for the construction of works. Contracts for works involving amounts over US\$5 million and procurement of goods and related services worth more than US\$350,000 will be subject to international competitive bidding. For the selection of consulting firms, international bids will be required for amounts exceeding US\$200,000. The IDB will carry out ex post evaluations in accordance with procedures currently in force, when the bidding and contracts involve amounts below the aforementioned ceilings and when individual experts are hired for amounts below US\$100,000.

**RECOGNITION OF
EXPENSES:**

It is proposed that up to the equivalent of US\$6.1 million from the local contribution and US\$6.1 million from the loan proceeds be recognized to cover expenses incurred in the five states of the pilot program in 1998. Normal IDB procedures will be used to verify that criteria and procedures substantially similar to those established in the loan contract were followed (see paragraph 3.34).

**EXCEPTIONS TO
BANK POLICY:**

1. It is proposed that the price of the bid be considered a factor in evaluation for up to 30% in consulting contracts for amounts below US\$200,000 since they will involve consulting services on subjects that are not particularly complex (see paragraph 3.31).
2. It is proposed that authorization be given for a group of water supply and sanitation system works to be executed on force account for up to a cumulative total equivalent to US\$12 million, to be funded in equal parts by the loan and the local contribution. The works would involve isolated and remote systems which would not be attractive to contractors, and the cost per locality would be no more than the equivalent of US\$50,000 (see paragraph 3.35).

**SPECIAL
CONTRACTUAL
CONDITIONS:**

Conditions precedent to the first disbursement of the loan:

1. Presentation to the IDB of the funds transfer agreement between the borrower and the guarantor.
2. Entry into force of the operations manual and its annex on procedures previously agreed upon with the IDB (see paragraph 3.9), together with evidence that at least two states have qualified for the program based on the respective criteria (see paragraph 3.13).

Conditions during execution of the program

1. The states will be individually eligible for inclusion in the program when they show evidence of the following: a coordination agreement signed by the federal government, represented by the Ministry of the Environment, Natural Resources, and Fisheries (SEMARNAP), acting through the National Water Commission (CNA), and by the state concerned, in the person of its representative. The states will have access to program resources when the execution and technical agreements signed by the federal

government and the state express commitments: (a) to provide the local resources required to execute the program in that state; and (b) for the first year, to set up a unit to support rural community development (see paragraph 3.14). A state will no longer be eligible if it has been unable to have the rural community development support unit in operation in the course of the 12 months following the signature of the execution and technical annexes.

2. The communities will be ranked by the municipalities, with assistance from the municipal planning and development committees (COPLADEMUN) or their equivalent, taking into account the criteria established in the operations manual and summarized in paragraph 3.16.
3. Water supply and sanitation studies, designs, and infrastructure may be financed under the program if the conditions set forth in the operations manual and summarized in paragraph 3.17 have been fulfilled.
4. The service needs of the communities will be addressed by the program under the following modalities: (a) water supply; (b) sanitation; and (c) water supply and sanitation. The program's timing of execution in the various cases is detailed in the operations manual. In the case of modalities (a) and (c), the timing of works in rural communities and the budget context require considering that works be executed over two budget years for each locality, with program monitoring in cycles of 12 to 18 months (see paragraphs 3.10 to 3.12).
5. The borrower, the coordinator, and the IDB will conduct annual operational and technical reviews to evaluate, *inter alia*, the extent to which the objectives of the program have been achieved, measured against the agreed indicators. The first of these reviews will take place 18 months from the signature of the loan contract. The second would be a more far-reaching mid-term review (see paragraphs 3.25 and 3.26).
6. In the first 30 months following the signature of the loan contract, the measures agreed upon by the borrower, the coordinating agency, and the IDB will be implemented based on the findings of a survey contracted to produce a diagnostic assessment and make recommendations at the national level on ways to improve the existing

mechanism for funding water supply and sanitation systems' rehabilitation and expansion (see paragraph 3.39).

I. FRAME OF REFERENCE

A. Water supply and sanitation systems in rural areas

- 1.1 One of the principal challenges facing Mexico is how to fight poverty and the dearth of basic services such as water supply and sanitation in rural areas. Rural communities, of which there were over 154,000 in 1995, were grouped under 2,403 municipalities and had a total population of around 26.2 million. 1/
- 1.2 National Population Council figures (CONAPO, 1995) show that: (a) 75% of the population living in poverty is concentrated in rural areas; and (b) 17% of the total population, 63% of the rural population, and 95% of the indigenous communities had high and very high poverty indexes. 2/
- 1.3 The CONAPO figures also show that: (a) only 13.7 million inhabitants of rural areas (52%) had water supply services (basic networks with public faucets and household connections); and (b) barely 5.5 million (21%) had sanitation systems (latrines, septic tanks, and small sewage collection systems). Insufficient financial resources and the lack of adequate water supply and sanitation services in rural areas has been and remains one of the negative factors affecting the health and quality of life of the inhabitants.

B. Status of the sector

- 1.4 Planning and programming of investments, enforcement of standards, and verification of compliance with the Water Law are functions performed by the National Water Commission (CNA), with only modest state and municipal support.
- 1.5 The regulatory function has been exercised in various ways, including by contract. The institutions responsible for this area have been the CNA, the state water supply and sanitation commissions (CEAS), other similar state entities and municipal bodies. Regulation still overlaps with the delivery of services to

1/ Rural communities are those with fewer than 2,500 inhabitants, and account for 29% of Mexico's total population.

2/ CONAPO defines poverty indexes on the basis of seven variables: basic education (percentage of the population that is illiterate), housing conditions (without water and electricity, earth floor), overcrowding (number of persons per room), and level of income (percentage of the population earning less than two minimum wages).

some extent and the system could be improved: (a) in economic terms, based on costs and rates; and (b) socially and environmentally, in terms of quality of service and conservation of water resources.

1.6 According to Article 115 of the constitutional reform of 1983, it is up to the municipalities to provide these services. In rural areas they have only partially fulfilled this function, given the large number of localities and the operational and financial restrictions they face in several jurisdictions. At the community level, moreover, operation and maintenance of the systems has been inadequate and only limited efforts have been made to recover costs through utility rates. Under these circumstances the CNA has assumed responsibilities at the federal and state level related to the provision of services such as the design, construction, operation, and maintenance of water supply and sanitation infrastructure.

1.7 A review of the status of the sector shows that: (a) the water supply and sanitation sector has lacked a clear and separate definition of such basic functions as planning, standardization, regulation, and the provision of services; and (b) steps have to be taken to tackle the backlog that has accumulated in the provision of water supply and sanitation in rural areas and the sharp increases in demand.

C. Institutions involved in this sector

1.8 Several federal, state, and municipal entities, as well as community organizations at the local level and other public and private bodies have played a role in the development of the water supply and sanitation sector in rural areas. The main responsibilities performed by these entities, community organizations, and other bodies are:

1. Federal, state, and municipal entities

1.9 At the federal level: (i) The Ministry of Finance (SHCP), which authorizes the allocation of funds to programs and projects through annual budgets; (ii) the Ministry of the Environment, Natural Resources, and Fisheries (SEMARNAP), which ensures the inclusion of environmental control and protection criteria; (iii) the Ministry for Social Development (CYTOSOL), which is concerned with providing infrastructure and basic services for vulnerable sectors; (iv) the Ministry of Health (SS), which is responsible for the prevention and control of conditions that could affect potable water quality, proper disposal of liquid waste, and public health; (v) the National Water Commission (CNA), which has authority to enforce standards and regulations; and (vi) Banco Nacional de Obras y

Servicios Públicos (BANOBRA), which was appointed by the federal government to act as a financial agent and to sign loan contracts with international organizations.

- 1.10 At the state level: (i) state planning and development committees (COPLADEs) with subcommittees for water supply and sewerage. They are responsible for programming investments and determining annual budget levels; (ii) regulation and monitoring committees (CORESEs), established under coordination agreements for monitoring the execution of projects that foster decentralization; (iii) state agencies (SAs) in 28 of the 31 Mexican states, which have varying names, structures, and functions 3/ and which have to some extent shared planning functions with the COPLADEs, acted as standard enforcement agencies with CNA delegations; and have had supervisory, training, and service delivery functions in urban areas under agreements made with the municipalities.
- 1.11 At the municipal level: (i) municipal planning and development committees (COPLADEMUNs), which receive requests from communities and submit them to state agencies; (ii) operating agencies (OAs), which administer, run, and maintain water supply and sanitation services and, in some municipalities, have their own assets; and (iii) municipal departments with varying names and structures which have functions similar to those of the operating agencies, when the latter do not exist. 4/

2. Community organizations

- 1.12 Communities have developed various forms of organization in rural areas, especially user committees and water boards. These committees and boards are supposed to be responsible for managing water supply and sanitation systems at the local level by delegation of the municipality to which they belong. Communities may also convene assemblies as a form of participation in majority-based decision-making. Traditionally, these assemblies have been a forum for discussing and analyzing problems, defining

3/ Known as State Water Supply and Sanitation Commissions (CEAS) in seven states; as the State Water and Sanitation Council in one state; as State Water and Sewerage Commissions (CEAA) in 14 states; Central Water and Sanitation Boards (JCAS), or Central Water Supply and Sewerage Boards (JCAA), in three states; as Water Supply and Sewerage Service Systems (SSAA) in two states; and, in one state, as the State Water Institute (IEA). The states of Baja California, Morelos, and Tlaxcala do not have state agencies.

4/ Municipal Water Supply and Sewerage Committees or Boards (CMAA or JMAA); Water Supply and Sanitation or Water Supply and Sewerage Systems (SAPS or SAPA); and Municipal Public Works Divisions (DOPM).

priorities, and determining the role to be played by the community in solutions designed to attain collective satisfaction and benefits.

3. Other public and private agencies

- 1.13 The main ones are: (a) the National Ecology Institute (INE), which has responsibilities and interests related to projects' compliance with environmental regulations; and (b) the private sector, which acts in rural areas through nongovernmental organizations (NGOs), consultancy firms, and local contractors carrying out studies, designs, construction, and technical supervision.

D. Institutional performance, community development support, and community participation

- 1.14 This analysis is derived in part from a logical framework workshop and six other workshops that were held in Mexico City and five states 5/ for the purpose of defining concepts and structuring the operation.
- 1.15 At the federal and state level, the CNA has been providing funds to improve the supply of services by consolidating the autonomy and technical capacity of the operating agencies through the water supply and sanitation in urban areas program. Only in the past two years has the CNA begun to expand these activities from urban to rural areas through its Rural Programs and Social Participation Unit and the Office of Water Supply and Sanitation Systems in Rural Areas.
- 1.16 At the municipal level, more attention has been paid to urban areas. Whenever this took the form of working through adequately structured operating agencies enjoying a fair amount of autonomy, the results were professional and led to both user confidence and some degree of effectiveness in the provision of services. Nevertheless, the progress achieved so far has not yet had a sufficient impact in terms of a satisfactory supply of services in rural areas. Whenever the service was run by a municipal office whose organization, functions, and degree of autonomy were subject to decisions made on three-year political mandates, management normally faced: (a) difficulty in consolidating any medium-term planning; (b) deficiencies in accounting systems that have made it difficult to break down collection of water supply and sanitation fees; and (c) discontinuities due to changes in personnel.

5/ Baja California, Colima, Guanajuato, Oaxaca, and Veracruz.

- 1.17 At the local level, the various types of community organizations have not yet been used in an efficient manner to operate and maintain rural water supply and sanitation services or to recover the costs involved. More could also be done to enhance community involvement in the entire project cycle, thereby strengthening its sense of ownership and responsibility for management.
- 1.18 Some of the factors bearing on the way institutions have performed in rural areas are: (a) scanty participation in programming and insufficient coordination among the federal, state, municipal, and local authorities; (b) the application of standardized policies and criteria that are not completely uniform; 6/ (c) the lack of systematic procedures governing technical assistance and community training; and (d) a marked tendency to build water supply and sanitation works with only scant regard for financial, social, and environmental considerations, which would have helped make service delivery more sustainable.
- 1.19 These considerations lead to the conclusion that, in order to modernize the water supply and sanitation sector and cater efficiently to the needs of people in rural areas, it would be particularly important to implement a process of structural changes designed to help: (a) decentralize and restore both functions and funds to states, municipalities, and local authorities; (b) establish mechanisms for systematizing the transfer of funds; and (c) provide efficient water supply and sanitation services by implementing technically viable least-cost solutions that are financially, socially, and environmentally sustainable.
- 1.20 This process would contribute to institutional development, the purpose of which would be to separate, strengthen, and consolidate: (a) the planning functions at the state, municipal, and local levels; (b) enforcement of standards at the federal and state levels; (c) the regulatory function at the federal, state, and municipal levels; (d) the function of delivering services at the municipal and local level through private sector involvement; and (e) community development support, community participation, technical assistance, and training, at the local level.
- 1.21 The communities, moreover, would have to be empowered to: (a) participate in planning; (b) receive training and in turn will bring about changes in behavior; and (c) take responsibility for operating and maintaining water supply and sanitation systems and paying the related costs.

6/ With regard to the transfer of funds, eligibility of states and municipalities, ranking of communities, and selection of projects.

E. Changes of an institutional nature, in community development support, and in community participation

- 1.22 Given the variety of institutional arrangements encountered in this sector and the constraints under which it has labored in its efforts to support community development and involve communities in the different states, municipalities, and localities, the table below provides a summarized overview of the current situation and expected adjustments. This overall view served to formulate and design a pilot program for institutional development, community development support, and community participation in the states of Baja California, Colima, Guanajuato, Oaxaca, and Veracruz. Similar findings, which are summarized in individual tables in the program's technical files, were obtained at workshops held in each of the five states involved in the pilot program. The states were selected after a process open to all 31 states. The five states mentioned above were interested not just in participating in the initial round of consultations and discussions but also in a possible operation involving adjustments to existing ways of providing water supply and sanitation services in rural areas through: (a) institutional development; (b) community development support and community participation; and (c) once progress had been achieved in these two major areas, construction of water supply and sanitation infrastructure.
- 1.23 The adjustments are rated, on the basis of the importance of the functional role of the institutions, community organizations, users, and the private sector, as nonexistent or minor, moderate, and significant. These adjustments would be those described in the sequence illustrated in the following table, whose general approach is summarized as follows: (a) the state and municipal levels with their planning and development councils and the local level with the communities, through their respective municipal jurisdictions, would significantly augment their role in the planning functions to become instruments of participatory management; (b) the CNA would play a significant role in fulfilling the standards enforcement and regulatory functions, while its service delivery functions would diminish significantly; and (c) the role of the municipal and local levels and the private sector would increase significantly with regard to service delivery functions, with operating agencies, community organizations, consulting groups, and contractors.

1. Planning: (a) *Strategic planning*: would be maintained on a moderate scale at the federal and municipal levels and increased significantly at the state level with the CNA at federal level, the state water supply and sanitation councils at the state level, the planning and development councils at the state and municipal levels (COPLADEs and COPLADEMUNs), and the water supply and sewerage committees or similar bodies at the municipal level; (b) *Programming*: would diminish slightly at the federal level while increasing and being shared significantly at the state and municipal levels with the active participation of local community organizations; (c) *Institutional coordination*: would be maintained on a moderate scale at the federal level and increased significantly at the state and municipal levels; (d) *Investment contribution*: would be maintained on a significant scale at the federal level, increased and shared significantly at the state and municipal levels, and increased moderately at the local level bearing in mind that the overall allocation of federal funds to the states, municipalities, and local authorities would be made by the CNA, in accordance with effective demand and the commitments to contribute to investment financing made by those states, municipalities, and local authorities; and (e) *Monitoring and evaluation*: would increase significantly at the federal, state, municipal and local levels, with participation by the CNA at the federal level, by the CEASs and CORESEs at the state level, by operating agencies at the municipal level, and by users themselves, as the civil society beneficiaries.
2. Enforcement of standards: *Control and verification of fulfillment of standards*: would be functions maintained to a significant degree under CNA responsibility, at the federal level, and decentralized through its regional and state branch offices.
3. Regulatory function: (a) *Quality control*: would be increased significantly at the federal and state levels, and moderately at the municipal level; and (b) *Control of economic aspects*: would be maintained on a moderate scale at the federal and state levels, and increased significantly at the municipal level.
4. Service delivery: (a), (b), and (c) *Preparation of studies and projects, and construction*: would diminish moderately at the state level of the CEAS and equivalent commissions, while increasing significantly at the municipal and local operating agency levels, with significant private sector involvement; (d) *Technical supervision*: would be maintained on a significant scale at the state level through the CEAS and equivalent commissions, and increased significantly at the

municipal and operating agency levels, with significant private sector involvement; (e) and (f) *Operation and maintenance*: would diminish at the state level, be maintained on a moderate scale at the municipal level, increase significantly at the local level as community organizations take on more responsibilities, and increase moderately at the user level; (g) and (h) *Rehabilitation and expansions*: would be maintained on a moderate scale at the state level, increase significantly at the municipal level – in each case enhancing or creating the conditions for private sector participation –, and increase moderately by the local level, using community organizations; (i) *Setting of fees (rates)*: would increase significantly at the municipal and local levels; (j) *Payment of quotas (rates)*: would diminish moderately at the municipal level and increase significantly at the local level.

5. Support activities: (a) *Training*: would increase significantly at the federal, state, and municipal levels with private sector participation; (b) *Community development support*: would be maintained on a moderate scale through CNA's regional and state branch offices, and increase significantly at the state level of the CEAS and equivalent commissions and in municipal agencies, with private sector participation; (c) *Technical assistance*: would increase significantly at the federal, state, and municipal levels, and moderately at the private sector level.

F. Evaluations of water supply and sanitation services

- 1.24 The evaluations carried out have afforded a sense of the communities' interest in water supply and sanitation services as well as insight into the existing capacity to operate and maintain them. The indication is that in some cases the services have: (a) only won partial acceptance by the community, with a loss of the feeling of ownership and responsibility for managing them; (b) revealed a discrepancy between technical considerations and the socioeconomic characteristics and operating capacity of a given locality, as in the case of under-utilized sewerage systems; (c) neglected viable minimum solutions for liquid waste disposal; and (d) in some cases, involved technology that failed to optimize either the initial investment or operating and maintenance costs. As a result, collection of rates has been inefficient and the systems have deteriorated prematurely, leading to more frequent repairs and overhauls ^{1/} at a cost the community could not afford. The situation was exacerbated by restrictions faced by the

^{1/} According to a 1995 CNA evaluation, 25% of the systems in rural areas suffered from weaknesses in design, construction, operation, and maintenance.

municipal and state authorities in providing access to technical assistance and funding for local communities easily and efficiently.

- 1.25 Based on the findings of the evaluations and the lessons learned, future studies and designs would be guided by the particular characteristics of each locality, its socioeconomic circumstances, and the interests of its inhabitants. Field studies prior to the drawing up of projects, such as capacity of sources, water quality, profile of bodies of water receiving effluents, determination of water resource uses, topography, geotechnics, as prescribed in CNA project design manuals, will also help define the needs of rural communities and prospective investment, operation, and maintenance costs. They will make it possible to correct inefficiencies in time, to carry out the above-mentioned repairs and overhauls, to start evaluating possible environmental and social impacts 8/, and to apply the regulations and procedures set by the National Ecology Institute (INE).
- 1.26 The operation would include funds for preparing studies and designs, as well as the installation of water supply and sanitation infrastructure. These resources would be used as soon as there is evidence of a trend toward consolidating progress in institutional development, community development support, and community participation. All this will facilitate construction of infrastructure and thus increase the percentage of the population served in rural areas. The construction of water supply and sanitation works using appropriate technology would be accompanied by promotion and community awareness campaigns, health and environmental education, technical assistance, and performance monitoring and control activities.

G. Results expected from the operation

- 1.27 The operation is designed to contribute to the modernization of the sector in rural areas, enhancing institutional development, community development support, community participation, and the sustainable and socially equitable provision of water supply and sanitation services. During the implementation that would begin in the states of Baja California, Colima, Guanajuato, Oaxaca, and Veracruz (one-year pilot period) and would continue in the remaining states (five-year execution period), approximately 20 states and 200 municipalities would have responsibilities and functions transferred to them to cover rural areas. In general, a

8/ Preparation of a project profile, assessment of impacts at the appropriate level, and procurement of an environmental resolution from the INE for subsequent follow-up by the Federal Environmental Protection Bureau (PROFEPA).

typical process for a state and its municipalities would be a one-year startup and initial development phase and a consolidation phase that could take from one to two years.

- 1.28 The modernization envisaged in the New Federalism approach favors decentralization of responsibilities and resources in an effort to strengthen the operational and financial capacity of the entities delivering service and of local governments to address water supply and sanitation needs in rural areas effectively. This operation is designed to achieve: (a) financial sustainability, taking into account the social and cultural characteristics of each community, its organization, sense of ownership, technology that is both appropriate and affordable for users, the capacity to operate and maintain water supply and sanitation systems, and the willingness and ability to pay operation and maintenance costs; (b) environmental and social feasibility, bearing in mind the availability of water resources in the volumes and quality required, protection and conservation to prevent negative impacts, education of the community regarding health and hygiene, gender balance and improvement of living condition in rural areas; and (c) a socially equitable environment achieved through participatory planning that is responsive to the interests of the community, and distributes the benefits of water supply and sanitation services to all groups in rural areas.

H. Sector strategy in rural areas

- 1.29 The operation is consistent with the guidelines contained in the strategy document put out by the National Water Commission on May 19, 1997. That strategy document, in turn, is compatible with: (a) the decentralization, social development, and regional development policies established in the 1995-2000 National Development Plan and the New Federalism Program, published in the Official Gazette on August 6, 1997; and (b) the federal government's 1995-2000 Water Program.
- 1.30 The National Development Plan proposes, in keeping with the overall modernization effort and the New Federalism Program, to strengthen states and municipalities by: (a) fostering decentralization and regional development; (b) recognizing the proper political autonomy and spheres of competence enjoyed by the three levels of government; (c) attaching priority to the governmental authorities closest to the communities; and (d) implementing plans and programs that meet the needs voiced by the rural population and aimed at reducing poverty.
- 1.31 The federal government's Water Program seeks to contribute to sector modernization efforts in rural areas so as to improve

services for disadvantaged groups by raising the percentage of the population with access to water supply and sanitation facilities.

- 1.32 The Inter-American Development Bank's strategy envisages, furthermore, promoting equitable growth to assist in the economic and social transition that Mexico is undergoing. The operation would contribute to equitable growth because it includes steps to improve living conditions and health in rural areas that, historically, have been highly, and often extremely, disadvantaged.
- 1.33 This operation - the first to support modernization of the water supply and sanitation sector in rural areas - is in line with IDB policy in respect of public services and with the Bank's priorities and principal objectives. Indeed, the operation is expected to:
 - a. enhance economic efficiency in the supply of services by defining the eligibility, type, and size of water supply and sanitation systems on the basis of criteria applied ex ante and verified ex post in such a way as to allow for any necessary adjustments;
 - b. achieve long-term financial sustainability through mechanisms that would contribute to the availability of funding to cover, in each of the systems, the costs involved in: (i) operation and maintenance; and (ii) future investments in rehabilitation and expansion;
 - c. guarantee the quality of services through the active participation of: (i) the community in planning, designing, and construction of systems, as well as in managing operations and maintenance; and (ii) municipal and state authorities in the provision of technical assistance, enforcement of standards, periodic performance monitoring and control;
 - d. make services more readily available to the poorest segments of the population, in accordance with their needs, capacity, and willingness to assume the responsibilities that go with them;
 - e. encourage the achievement of broader national objectives, particularly those related to improving public health conditions and protection of the environment.
- 1.34 In short, under the above-mentioned strategy and the IDB's public utilities policy, the operation would support modernization of the water supply and sanitation sector in rural areas within a framework that is financially sustainable, environmentally sound, and socially equitable.

I. The experience of the IDB and of other institutions

1. In urban centers

- 1.35 Over the past two decades, the IDB helped finance water supply and sewerage projects in major cities: Mexico City, Monterrey, and Tijuana. In addition it cofinanced: (a) the national water and sewerage program for the other cities and urban centers with the World Bank; and (b) with Japan's Overseas Economic Cooperation Fund, the Valley of Mexico sanitation program which aims to solve drainage and waste water contamination problems in the metropolitan area, as well as to enhance the efficiency of the operating agencies.
- 1.36 The following lessons were learned in the course of IDB involvement with this sector in urban centers: (a) operations must be designed in the context of sustainable mechanisms; (b) realistic targets should be set within the period of execution of the projects to facilitate gradual enhancement of technical, operational, and commercial efficiency in the supply of services; (c) the substantial investments required by projects in this sector and the difficulty of raising local counterpart funds means that parallel sources of financing must be tapped, in addition to IDB sources; (d) particular attention should be paid to the scaling of operations and participation by the private sector; and (e) decentralization and private sector participation have proved to be important factors in the development of the sector, so that IDB activities should continue to back these initiatives.

2. In periurban and rural areas

- 1.37 In November 1994, the IDB approved a US\$500 million loan for a municipal development program. The objectives were: (a) to finance projects based on community participation; and (b) to support the institutional strengthening of medium-sized and small municipalities in order to improve their financial situation and efficiency in providing public services. Funds were channeled through municipal governments for the execution of small projects in several sectors: streets, communication routes, electricity, schools, water supply and sanitation.
- 1.38 A recent evaluation points out factors that helped in executing the program and could prove useful in drawing up similar programs: (a) active participation of the community in project selection, which ensured that projects matched its immediate needs; (b) the community's contribution to the local counterpart for execution of the public works, which encouraged participation by the beneficiaries from very early on; (c) participation by

municipalities and states in the form of administrative, financial, and technical support for construction of the public works, which facilitated project execution.

II. THE PROGRAM

A. Objective

- 2.1 The main objective of the program is to support the water supply and sanitation subsector's development process in rural communities by: (a) applying standards that guarantee service quality; (b) strengthening the decentralization of responsibilities and financial resources; and (c) providing efficient services to the marginalized rural population through sustainable mechanisms, with active, organized community participation.

B. Description

- 2.2 To accomplish this objective, the program would comprise the following three subprograms to be executed over five years.

1. Institutional development (US\$23.1 million)

- 2.3 This subprogram aims to support the implementation of decentralization processes at the national level, by separating and strengthening sector functions and improving institutional mechanisms. It is estimated that approximately 20 states and 200 municipalities will participate in this subprogram, taking the water supply and sanitation sector in rural areas as the guiding principle. It will start with the conclusion of coordination agreements, complete with execution and technical annexes, between the federal government, represented by the Ministry of the Environment, Natural Resources, and Fisheries (SEMARNAP) acting through the National Water Commission (CNA), and the corresponding state, through its representative, for the transfer of responsibilities and funds. Furthermore, the rights and obligations governing relations between states and municipalities, and between municipalities and the communities where applicable, will be spelled out in equivalent agreements or legal instruments.
- 2.4 The institutions involved in decentralization of responsibilities and financial resources would be: (a) federal, state, and municipal in the sector planning area; (b) federal and state, in the case of enforcement of standards and regulations; (c) state, municipal, and local, in the service delivery area; (d) state and municipal, in major repairs and expansions of rural systems; (e) federal, state, and municipal, in technical supervision, monitoring, and evaluation of program results; and (f) state and municipal, in technical assistance to community organizations.

- 2.5 The funds for this subprogram would be used to finance: (a) diagnostic assessments of the institutions involved and of water supply and sanitation infrastructure; (b) designs to separate and strengthen sectoral functions and implementation thereof at the state and municipal levels; (c) improvement of state and municipal funding mechanisms for water supply and sanitation system rehabilitation and expansion; (d) training at the federal, state, and municipal levels in the administrative, technical, operational, environmental, and social areas; (e) procurement of audiovisual, computer, water quality control, transportation, and office equipment; (f) preparation of teaching materials, guides, and manuals; and (g) technical supervision, monitoring, and performance evaluation systems.

2. Community development support and community participation
(US\$31.4 million)

- 2.6 This subprogram aims to support the strengthening or establishment of community organizations in some 1,500 rural localities to operate and maintain water supply and sanitation services on a sustainable basis with an adequate level of quality, and the active participation of all groups receiving benefits in educational programs on water use and water resource protection.

- 2.7 The subprogram would finance the following activities: (a) participatory assessments of the existing situation, social reports, and promotion of active participation by all groups in the community, particularly women and indigenous groups; (b) strengthening or design and implementation of community organizations, to encourage a sense of ownership and to take responsibility for operating and maintaining the systems and paying the associated costs; (c) training courses on operation, maintenance, and administrative and financial management, including the use and distribution of audiovisual material, guides, and manuals; (d) courses for target communities on health and environmental matters, including participatory techniques to heighten public consciousness about the culture of water supply, basic sanitation, hygiene, and changes in behavior; and (e) implementation by municipal and state institutions of technical assistance strategies to support community organizations.

3. Water supply and sanitation infrastructure (US\$329.1 million)

- 2.8 In support of the processes of institutional development, community development support, and community participation, under this program new works will be built and water supply and sanitation systems will be rehabilitated and expanded in marginalized rural communities of up to 2,500 inhabitants. It is estimated that a total population of 1.87 million and 1.29 million rural inhabitants

could benefit from the water supply and sanitary infrastructure works, respectively.

- 2.9 The subprogram would finance: (a) water supply systems in approximately 1,200 communities; and (b) approximately 400,000 sanitation solutions in approximately 950 communities.
- 2.10 The following should be available to begin construction: (a) feasibility studies and designs that comply with the other environmental, economic, social, technical, and health considerations agreed upon with the IDB and that include collection from reliable sources in terms of volume and quality, water purification and distribution systems, and, at the very least, excreta disposal systems: (i) using appropriate technologies; (ii) that are compatible with the socioeconomic characteristics and interests of the communities; and (iii) that take an integrated approach to water supply and sanitation services; (b) environmental and social impact assessments or studies, together with measures to mitigate such impacts and costs; (c) annual budget allocations and local counterpart funds; and (d) a formal commitment by the community to operate and maintain the systems and to cover the respective costs, through payment of a fee (rates).

C. Cost of the program

- 2.11 The estimated cost of the program is US\$560 million equivalent. The following table breaks this total down by investment category and subcategory, as well as by source of financing.

(In US\$ thousands)				
Investment category	IDB-OC	Local contribution	Total	%
Engineering and administration	24,697	24,697	49,394	8.8
Water supply	16,870	16,870	33,740	6.0
Sanitation	7,827	7,827	15,654	2.8
Direct costs	192,779	190,779	383,558	68.5
Institutional development (a)	12,539	10,539	23,078	4.1
Community development support and community participation	15,711	15,711	31,422	5.6
Infrastructure works	164,529	164,529	329,058	58.8
Water	112,558	112,558	225,116	40.2
Sanitation	51,971	51,971	103,942	18.6
Unallocated	36,984	30,924	67,908	12.1
Contingencies	24,234	20,174	44,408	7.9
Price escalation	12,750	10,750	23,500	4.2
Financial costs	55,540	3,600	59,140	10.6
Interest	52,440	0	52,440	9.4
Credit fee	0	3,600	3,600	0.6
Inspection and supervision	3,100	0	3,100	0.6
Totals	310,000	250,000	560,000	100
Percentages	55.4	44.6	100	

(a) With resources from the loan, 100% of the cost of training will be financed under the institutional development subprogram.

- 2.12 Under the "Engineering and administration" category, the resources will be used to finance studies, designs, and technical supervision of works for this program as well as studies and designs for future investments.
- 2.13 In estimating the cost of the program, the costs of the pilot program for five states were taken into account to establish the scope and benchmarks. The average costs, which are within acceptable ranges, are: (a) for institutional development 9/, US\$150,000 per state and US\$100,000 per municipality; (b) for community development support and community participation 10/, US\$20,000 per locality; (c) for water supply and sanitation

9/ Includes as main activities to be financed, those described in paragraph 2.5.

10/ Includes as main activities to be financed, those described in paragraph 2.7.

infrastructure 11/ (amounts include both systems), US\$1,000 per family served.

- 2.14 The operation would form part of the federal government's 1995-2000 water program. Execution of that program in rural areas would require an investment of US\$1.8 billion, according to CNA estimates.

D. Program financing

- 2.15 The Bank would finance US\$310 million from ordinary capital under the Single Currency Facility, according to the Mexican government's request. The proposed terms are: (a) amortization over 20 years; (b) disbursement over five years; (c) five years' grace period; (d) variable interest rate; (e) credit fee, 0.75%; and (f) inspection and supervision, 1.0%.
- 2.16 The local contribution, totaling the equivalent of US\$250 million, would be covered in the case of states and municipalities out of revenue-sharing budget allocations, while in the case of the communities, it would depend on their economic capacity and would not have to be all in money.

11/ Includes financing of the new works, rehabilitation and expansion indicated in paragraph 2.9 involving: (a) in water supply, intake works, pipelines, purification system, storage tanks, and distribution networks for public faucets and/or household connections; and (b) in sanitation, latrines, septic tanks, and wherever required and feasible, small sewerage collection systems with environmental and sanitary final disposal solutions.

III. PROGRAM EXECUTION

A. Borrower and guarantor

- 3.1 The borrower would be Banco Nacional de Obras y Servicios Públicos (BANOBRAS) and the guarantor would be the federal government. The parties would sign the loan contract and the guarantee contract, respectively. BANOBRAS, by federal government appointment, would be answerable to the IDB for commitments deriving from the contract, and one of its functions would be to process disbursements on presentation of the documents proving authorized expenses. BANOBRAS has been an IDB borrower in numerous projects and is governed by its charter of January 28, 1986.

B. Overall coordinator

- 3.2 The National Water Commission (CNA) would be the coordinating agency for the project. Its principal functions would be: (a) to determine which states are eligible and assign financial resources to them annually; (b) to draw up the execution and technical annexes of the coordination agreements; (c) to develop and implement dissemination workshops and training schedules in the states and municipalities; and (d) to monitor progress and disseminate information on progress in achieving the program's objectives.

C. Program executing agencies

- 3.3 The states and municipalities eligible for program funds would be executing agencies through their respective administrative, technical, and operational units. Their main functions would be: (a) to schedule annual activities and investments and to ascertain the outcome of the previous year's program; (b) to prioritize localities and verify that the projects fulfill the conditions mentioned in paragraph 3.17; (c) to contract out project design and execution; (d) to coordinate program execution at the federal and local levels; and (e) to take part in implementing training plans and performance monitoring and control. In exceptional cases and with prior consent from the Bank, the contracting for works design, execution, and supervision may be carried out by the coordinating agency, in the capacity of tendering and contracting agent, subject to the executing agency's request.
- 3.4 State and municipal authorities will participate through State Water Supply and Sanitation Commissions (CEAS) or equivalent bodies, state and municipal Planning and Development Committees (COPLADEs and COPLADEMUNs), or their equivalent, and operating agencies.

- a. The CEAS or equivalent agencies will execute the program at the request of the municipalities when there are no operating agencies (OAs) or municipal units with sufficient capacity and they will be in charge of: (i) promoting, publicizing, and executing the program; and (ii) strengthening both the institutions responsible for servicing rural areas and coordination mechanisms between civil society and the various levels of government.
 - b. The COPLADEs, with their special water supply and sanitation subcommittees (SEAPAs) and COPLADEMUNs, are responsible for planning, analyzing, and approving investment proposals put forward by the municipalities. They will also have to monitor the use made of funds and evaluate results. The SEAPAs will coordinate, draw up, and approve the annual operating program (AOP) for training, preparing studies and designs, procurement, construction, rehabilitation, and expansion of water supply and sanitation systems.
- 3.5 The municipal authorities would also be responsible for: (a) planning water supply and sanitation services with the communities; (b) processing and assigning priorities to requests made by the communities; (c) community development support services; (d) supporting the following activities: (i) technical, social, and environmental feasibility studies; (ii) project design; (iii) construction of new works and system rehabilitation and expansion; and (iv) corrective maintenance of the systems; and (e) exercising technical and financial supervision of works execution and monitoring the quality of water supply and sanitation services. The OAs and public works divisions or departments would provide technical assistance to the communities throughout the project cycle.
- 3.6 The communities would participate through their assemblies and some type of community organization. The communities will present their requests for water supply and sanitation to the municipalities and their involvement in the whole process would be coordinated and agreed upon with state and municipal authorities in (a) identification, definition, and preparation of the projects; (b) execution and monitoring of the works; (c) operation and maintenance of the systems; and (d) payments to cover the respective costs.
- D. Execution modality
- 3.7 The program would be executed in accordance with the requirements, guidelines, and procedures established in the prospective loan contract; the coordination agreements between the federal government and each of the states; the agreements or legal

instruments signed by the states and municipalities, and by the latter and local governments; and the operations manual with its annex on procedures.

1. The coordination agreement and other agreements

- 3.8 The coordination agreement, with its execution and technical annexes, is the means by which the commitments between the federal government and each of the states taking part in the program would be legalized. The coordination agreement is the legal regulatory instrument in force indefinitely that the Ministry of the Environment, Natural Resources, and Fisheries (SEMARNAP), acting through the CNA, signs with state governments in order to foster federalism through decentralization of programs. The execution annex is an operating instrument, valid for one year, stemming from the coordination agreement. It describes: the purpose of the program, actions to be taken, participants, resources, federal and state contributions and execution modalities, as well as the commitments and responsibilities of the parties. The technical annex is also an operating instrument valid for one year. It stipulates: requirements to be eligible for inclusion in the program, *modi operandi*, targets, evaluation indicators, amounts, responsibilities, and material and financial execution schedules. The other agreements and legal instruments establish: (a) the terms and conditions agreed on by the borrower and the guarantor in respect of the transfer of funds; and (b) the rights and obligations governing relations between states and municipalities, and between municipalities and communities, during the execution of the program.

2. Operations manual and the annex on procedures


- 3.9 The program will be executed in accordance with the operations manual and the annex on procedures agreed upon by the IDB and the Mexican authorities. This manual and its annex describe and specify: the objectives, subprograms, components, the rights and duties of participants, guidelines for execution, criteria governing eligibility and priorities, how to define and quantify the variables used to determine levels of marginalization, authorization of the use of funds, flow of funds, procurement of goods and services, supervision, year-end accounting, audits, and performance control. Application of the operations manual with its annex on procedures the texts of which will have been previously agreed upon with the IDB, together with evidence that at least one state has been declared eligible based on the established criteria, conditions precedent to the first disbursement under the loan.

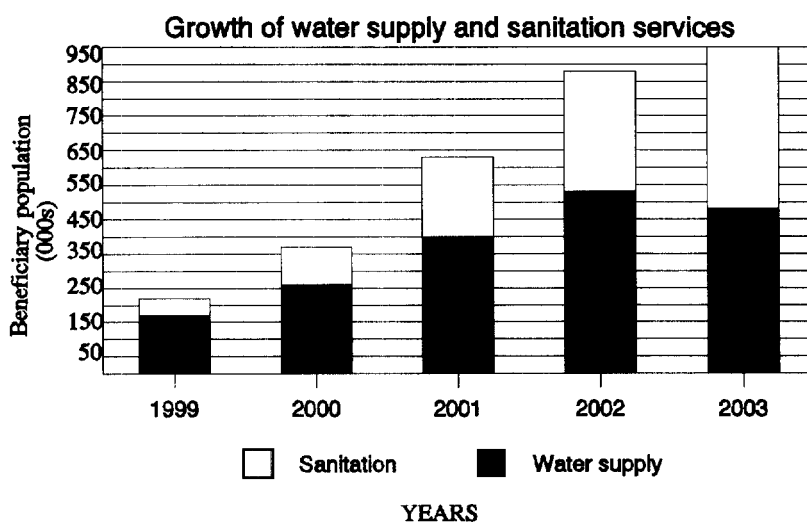
3. Establishment of operating cycles

- 3.10 The nature of the infrastructure development activities, as described in the following paragraphs, makes it necessary to use 12- to 18-month operating cycles and requires resources from two budget years per operating cycle. There would be four operating cycles in the five-year execution period. They would begin with the identification and assessment of effective demand until the conclusion of the water supply and sanitation works. The communities' needs will be addressed under one of three modalities: water supply, sanitation, and water supply and sanitation.
- 3.11 The timing of the main activities, by operating cycle, will involve an initial period and two periods connected to the budget years:
- a. During the initial period: (i) effective demand for services will be reviewed; (ii) the budget for the first year of the cycle will be prepared; (iii) negotiations with the states to anticipate resource availability will begin; and (iv) Congress approves the budget for the first year of the cycle.
 - b. During the first budget year: (i) the contributions are ratified with the states and the technical and execution annexes are formalized; (ii) campaigns on the rational and efficient use of water supply services and the respective infrastructure are conducted; (iii) in sanitation, surveys and diagnostic assessments are conducted, together with awareness campaigns, the construction of one or more demonstration projects, at least at the school, community center, and health post, if there is one in the vicinity; and (iv) at the end of the year, a similar process to the one described for the initial period is conducted, in order to formulate the budget for the following year.
 - c. During the second budget year: (i) the contributions are ratified with the states and the technical and execution annexes are formalized for year two; and (ii) the sanitation infrastructure is completed in accordance with agreed targets.
- 3.12 The expected results are as follows:
- a. At the micro level, the goal is for each community, by the end of the program, to have sanitation facilities in at least 50% of the dwellings that have water supply services. Given that this operation needs an initial learning and behavior adjustment period for the target population, it is also expected that in the first operating cycle (1999-2000) at least 30% of the dwellings that have water supply services will

benefit from sanitation works. It is estimated that the percentages could be higher than 50% beginning in the second operating cycle (2000-2001).

- b. At the macro level, it is estimated that almost 70% of the population provided with water supply services will also benefit from environmentally acceptable sanitation solutions, as shown below:

BENEFICIARY POPULATION (per year)						
ITEM	1999	2000	2001	2002	2003	BENEFICIARY POPULATION (Total)
Water supply	165,122	257,834	396,668	527,238	479,307	1,875,964
Sanitation	47,178	109,084	231,390	407,411	479,307	1,299,267
% sanitation	28.57%	42.31%	58.33%	77.27%	100%	69.26%
 Operating cycles						



4. Criteria governing eligibility and priorities

- 3.13 Individual states will qualify for inclusion in the program when they present: a coordination agreement signed by the federal government, represented by SEMARNAP, acting through the CNA, and by the state concerned, through its representative.
- 3.14 The states will have access to program resources when the execution and technical annexes signed by the federal government and the respective state express the following commitments: (a) to provide local resources as required for execution of the program in that state; and (b) for the first year, to set up a unit to support rural community development.
- 3.15 A state will no longer be eligible for investments in infrastructure works if it has been unable to have the unit to support the communities in operation in accordance with the guidelines established in the program, in the course of one year.
- 3.16 The communities will be ranked by the municipalities, with the assistance of the COPLADEMUNs, or equivalent bodies, based on the following criteria applied in the following order: (a) very high or high levels of poverty; (b) request for sanitation services by the communities that received water supply services under the program; (c) earlier or repeated requests for works on the part of the community; and (d) indigenous communities. 12/
- 3.17 Water supply and sanitation studies, designs, and infrastructure may be financed under the program if the following conditions have been fulfilled 13/:
- a. Environmental aspects: classification of projects in one of three groups, according to the degree of environmental impact they might generate, following a methodology previously agreed upon by the borrower, through the CNA, and the Bank, and preparation of an environmental brief that has to be endorsed by the INE if a project is to qualify; and, upon request, environmental impact assessments that have been approved.

12/ Communities in which at least 40% of the population speaks an indigenous language.

13/ Fulfillment of these conditions will be verified ex ante by the executing agencies and ex post by the IDB, through its Country Office in Mexico, with the exception of international calls for bids and the first of the calls for bids in the first two states that participate.

- b. Economic aspects: (i) a commitment by the community to contribute, if applicable, to the investment in ways that are not exclusively monetary and take part in operation and maintenance and cover the costs thereof; and (ii) a commitment by the executing agency to propose the project for which the investment cost within the values specified in the operations manual for the various types of water supply and sanitation projects.
- c. Social aspects: preparation of a social feasibility report based on a diagnostic assessment in which the community and its representatives have participated, and the creation of a community organization by decision of the assembly.
- d. Technical and health aspects: the projects involving new works, rehabilitation and expansion must be formulated in a context of sustainability: (i) water supply projects must have reliable water sources in terms of both volume and quality for the system in question; and (ii) the sanitation projects must include excreta disposal solutions as a minimum.

5. Programming and preliminary annual budgeting

- 3.18 Programming will take a bottom-to-top approach whereby the community submits a request and the municipality: (a) checks the request within COPLADEMUN and (b) strengthens community participation to identify possible sources of water and supply systems, sanitation solutions, and community involvement in management. On the basis of the results of these activities, municipal authorities and the state, with help from the CEAS, will draw up an annual works and activities program and determine the source of funds to be used. Annual programming and budgeting will be based on investment proposals put forward by the CEASs and approved by the Water Supply and Sewerage Subcommittees of the COPLADEs, in which the municipalities play an active part. A preliminary programming and budgeting plan will be sent to the CNA's regional and state managers by deadlines established by the Ministry of Finance (SHCP).
- 3.19 The federal government will finance 50% of the cost of the three subprograms and the states the remaining 50%. The latter's contribution will be comprised of state, municipal, and, where applicable, local funds. The community contribution may be in cash or kind (labor and local materials), but above all accompanied by direct community participation in the operation and maintenance of water supply and sanitation infrastructure and the payment of the respective costs.

6. Final makeup of the annual program

- 3.20 Funds will be distributed to the states based on the investment proposals and the budget assigned to the program. The CNA will centralize distribution of the funds to the participating states and will inform state governments in a letter via the regional and state managers, that the investments would be subject to the availability of federal budget outlays for the corresponding period. Taking the preliminary budget into account, the state finance departments will notify the CEAS of the amounts allocated, so that the COPLADE can proceed to rank activities and works in terms of priorities and determine the final makeup of the annual budget.

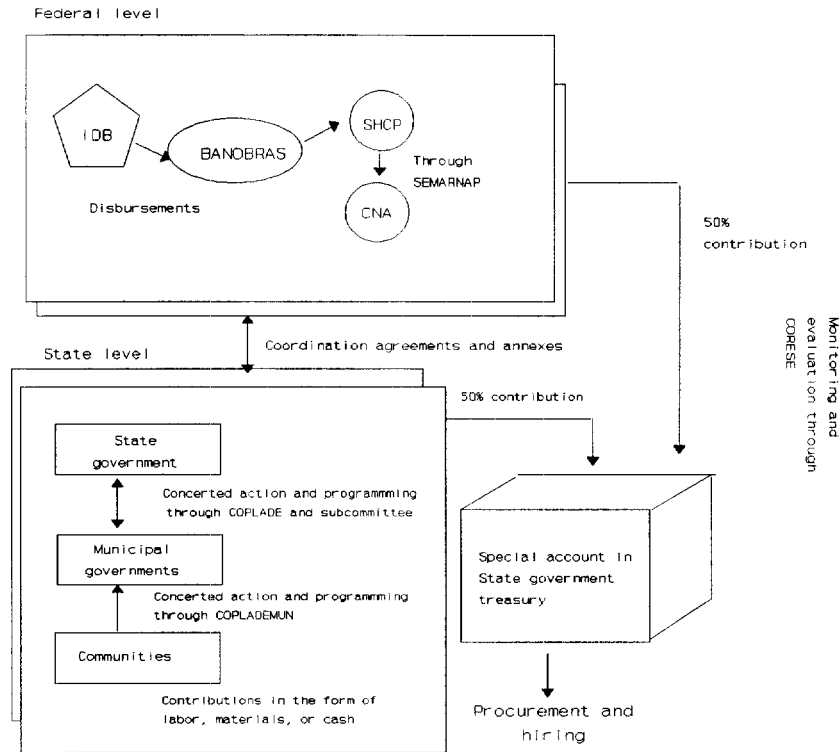
7. Authorization of resources

- 3.21 Through the SEMARNAP, the SHCP will notify the CNA of the financial ceiling for the year. The CNA will set about distributing the authorized federal funds and proceed to inform the CEAS. Depending on the ceiling, the COPLADEs will advise the municipal and local authorities of the amount of federal funds available, in order for them to make budgetary adjustments, if need be, and to proceed to draw up the final works schedule. This, in turn, would be formalized upon signature of the execution and technical annexes to the coordination agreements 14/, agreements, or other legal instruments. 15/
- 3.22 The CNA's head office will receive the comprehensive investment and works proposal formalized in the execution and technical annexes, agreements, and other legal instruments, and will proceed to review them, with a view to issuing a consolidated letter of authorization to regional or state managers, who will then advise the CEAS, which in turn will notify the state finance departments or the pertinent unit, with a copy of the communication to COPLADE. The financial resources provided under the federal contribution agreed upon in the execution and technical annexes would then be transferred to the federal agencies via certified accounts payable issued by the Federal Treasury (TESOFE). TESOFE itself would be responsible for crediting the investment funds to special bank accounts opened by each state's treasury. The flow of funds would follow the pattern shown in the following diagram.

14/ Between the federal government and each of the state governments.

15/ Between the states and municipalities, and between the latter and the local governments.

FLOW OF FUNDS



8. Control mechanisms

- 3.23 Regulation and monitoring committees (CORESEs) would be set up to evaluate the results of decentralization. They would be comprised of representatives of the federal and state governments and their main responsibilities would be: (a) to monitor the decentralization process; (b) to monitor and evaluate the results of the commitments established in the coordination agreement, execution and technical annexes, and other legal instruments; (c) to suggest changes whenever necessary to improve program execution subject to the procedures agreed upon with the IDB; and (d) to establish mechanisms to control and follow up on progress made in achieving the program's objectives.
- 3.24 The Ministry of the Comptroller and Administrative Development (SECODAM) established the standards to be enforced. The budget reports required by SECODAM would be submitted by the executing agencies through the CORESE. During the year, the CORESE should periodically monitor the reconciliation of records. The end-of-fiscal-year data would then be incorporated into the federal public account of the program for sustainability of the water supply and sanitation services in rural communities.

9. Monitoring and supervision

- 3.25 During the first six months following signing of the loan contract, the borrower would comply with the conditions precedent to the first disbursement. In order for the IDB to assist in the process of declaring this operation eligible as soon as possible, an initial follow-up mission has been scheduled to take place three months after signing of the loan contract. Operational and technical reviews would be conducted annually. The first of these reviews would be performed 18 months after signature of the loan contract. The second would be a more comprehensive midterm review. The reviews, which if need be could be done by consultants financed out of program resources 16/, would help assess to what extent the program's objectives have been attained as measured against indicators agreed upon by the borrower and the IDB and set out in the logical framework (see annex).
- 3.26 The indicators relate, *inter alia*, to: (a) Institutional development: (i) number of states and municipalities with responsibilities and functions transferred to meet the needs of rural communities; (ii) establishment and operation at the state level of units to support rural communities; (iii) strengthening at the state level of planning and monitoring mechanisms; (iv) mechanisms at the state and municipal levels for rehabilitation and expansion of water supply and sanitation systems working efficiently and adequately and small-scale actions undertaken; (v) training conducted in administrative, financial, technical, operation, environmental, and social areas at the federal, state, and municipal levels; and (vi) state and, where applicable, municipal authorities that have received equipment; (b) Community development support and community participation: (i) people trained in each state on diagnostic assessment and participatory planning mechanisms; (ii) local population involved in the participatory diagnostic assessment; (iii) community organizations strengthened and/or created; (iv) number of members of the organization; and (v) communities and people trained in hygiene, sanitation, and environmental issues. (c) Water supply and sanitation infrastructure: (i) water supply and sanitation systems built, rehabilitated, or expanded, that fulfill the environmental evaluation, economic, social, technical, and sanitary characteristics agreed upon with the IDB; (ii) contribution of the states, municipalities, and, where applicable, communities to the investment in the systems; (iii) trained communities and organizations that perform preventive maintenance and cover the costs; and (d) Purpose and goal: (i) rural communities and users receiving water supply and sanitation services; (ii) water supply systems operating adequately and sanitation systems properly used; (iii) changes nationwide in the coverage of water supply and

16/ For a total not exceeding the equivalent of US\$150,000.

sanitation services in rural communities; and (iv) waterborne disease patterns.

- 3.27 The annual reviews would also serve as a basis for agreeing on the following year's investments and, if need be, on adjustment of methodologies.

E. Execution period and investment schedule

- 3.28 The period of execution of the program is five years as of the date the loan contract is signed. The following table shows a tentative disbursement schedule, by source of funds:

(In US\$ thousands)							
Funding	Year 0 a/	Year 1	Year 2	Year 3	Year 4	Year 5	Totals
IDB-OC	6,034	22,115	35,804	60,373	89,382	96,292	310,000
Local contribution	6,034	20,934	30,734	51,180	66,897	74,221	250,000
Total	12,068	43,049	66,538	111,553	156,279	170,513	560,000
Percentages	2.2%	7.7%	11.9%	19.9%	27.9%	30.4%	100%
a/ Pilot phase 1998.							

F. Procurement regulations

- 3.29 The contracting of goods and services will be governed by the IDB's procurement procedures and, in all aspects not at variance with them, the National Procurement and Public Works Act. Execution of the program will require the use of consulting and supervisory services, as well as the procurement and installation of equipment, and the contracting of civil works. Contracts for works worth over US\$5 million and purchases of goods and related services worth more than US\$350,000 will be subject to international competitive bidding procedures. For the selection of consulting firms, international calls for bids will be conducted for amounts exceeding US\$200,000. The procurement of goods and services for lesser amounts will be tendered locally, but with no restrictions on participation by bidders from IDB member countries.
- 3.30 The IDB Country Office will carry out ex post evaluations in accordance with procedures currently in force, when the bidding or other methods of procurement involve amounts below the ceilings indicated in the preceding paragraph and when individual experts are hired for amounts under US\$100,000. All international calls for bids and the first call for bids in the first two states participating, for amounts under the aforementioned ceilings will

be supervised by the Bank ex ante. The CNA will submit the model bidding document to be used thereafter to the Bank for approval.

- 3.31 With regard to the hiring of consulting services, the borrower requests an exception, in the sense of being able to consider the price of the bid as a factor in evaluation, with a weight of up to 30%, in contracts worth less than US\$200,000. This request is compatible with authorizations granted by the IDB on previous occasions, bearing in mind that the contracts will involve relatively minor consulting jobs on subjects that are not particularly complex.
- 3.32 Once the activities and projects by subprogram and year have been approved, the executing agencies will be responsible for contracting, in accordance with the loan contract, IDB policies and procedures, and the provisions of the Procurement and Public Works Act. As bids are awarded, the state government will receive the funds, formalize the contracts, and initiate execution. With help from technical supervisors, the executing agencies will review the estimates and receipts of consultants and contractors. The technical files on each activity and project to be put together by the executing agencies will remain in their keeping and under their responsibility, and will be made available to the IDB and to the authorities upon request.
- 3.33 The bidding processes will start once the consolidated authorization letter is ready. It will be based on the particulars of the activities and projects described in the execution and technical annexes of the coordination agreements between the federal government and the state governments, and in the other agreements or legal instruments between the states and the municipalities, and between the latter and the communities. The CEAS, the municipality, or the technically and legally qualified operating agencies will carry out the tenders. Once the project activities and construction have been completed, the consultants and contractors will proceed to deliver the products for which they were hired to the executing agencies and the community, which, ultimately, verify that the agreed terms of reference and specifications have been met. The amounts to be spent on acquisitions is projected in the following table:

(In US\$ millions)						
Description	Year 0 a/	Year 1	Year 2	Year 3	Year 4	Year 5
Consulting services	1.2	3.8	5.9	9.9	14.3	14.3
Goods and services, institutional development, community development support	3.0	4.0	6.6	10.8	15.1	15.1
Equipment and works	8.0	23.6	39.7	66.1	95.9	95.9
Total	12.2	31.4	52.2	86.8	125.3	125.3
a/ Pilot phase, 1998.						

G. Recognition of expenses

- 3.34 It is proposed that up to the equivalent of US\$6.1 million be charged against the local contribution and US\$6.1 million against the loan proceeds to cover expenses incurred in preparing the pilot program in the states of Baja California, Colima, Guanajuato, Oaxaca, and Veracruz in 1998. Prior to recognition, normal IDB procedures will be used to verify that substantially the same criteria and procedures as those established in the loan contract were followed.

H. Works by force account

- 3.35 The borrower requests authorization to allow water supply and sanitation system works to be performed by force account, for a total of up to US\$12 million equivalent, to be funded in equal parts by the loan and the local contribution. The works would involve isolated and remote systems which would not be attractive to contractors, and the cost per locality would be no more than the equivalent of US\$50,000. For this kind of work, the idea would be to make use of the equipment and technical capacities of the states and municipalities. This would, moreover, be one way to involve the communities in the execution of these systems with: (a) adequate community participation; (b) solutions that are compatible with the socioeconomic circumstances of the users; (c) duly constituted community organizations; and (d) health and environmental education. The total cost that would be authorized in this case amounts to 3.1% of the direct cost of infrastructure works. Rehabilitation works would only be financed if they meet the requirements established in the program for institutional development, community development support, and community participation.

I. Revolving fund and disbursements

- 3.36 To execute the program, a revolving fund would be set up for the equivalent of 5% of the loan, in accordance with current IDB policy. Given the nature of this program, which is comprised of three subprograms with a very large number of activities and projects, supporting documentation for disbursements would be reviewed on an ex post basis, in accordance with guideline OA-340.
- 3.37 The executing agencies will make sure that the information contained in the breakdown of payments form of the requests for disbursement, which BANOBRAS submits to the IDB, is properly substantiated in accordance with IDB rules and procedures. The executing agencies will keep the original or legalized copies of the contracts, payment orders, invoices, receipts, suppliers' certificates and certificates of origin, and any other documents validating the information provided in the breakdown of payments form for IDB review.

J. Rehabilitation and expansion mechanism

- 3.38 There is already a financing mechanism for rehabilitation and expansion of water supply and sanitation systems in rural areas. The procedure followed by the communities is to use their community organization to approach the municipality in which they are located. The application is channeled through the COPLADEMUN, which decides on priorities for inclusion in the annual operating program. When state resources are tapped, these applications are submitted to the COPLADE water supply and sewerage subcommittees. To operate, this mechanism depends on the funds allocated by the federal government, states, municipalities, and the communities themselves.
- 3.39 The mechanism does not have completely standardized procedures, operates on an irregular basis, and does not have specific allocations of financial resources. Because of these circumstances, on several occasions requests from the communities have not received a timely response. Once funds have been assigned, the municipality, operating agencies, or the CEAS proceed to rehabilitate and expand water supply and sanitation systems. Given that this mechanism and the financing thereof constitute an essential ingredient in sustaining the provision of services, program funds will be earmarked for consultants to carry out a nationwide assessment and submit recommendations on ways to make it more effective. The hiring of the consultants, the assessment, and implementation of the recommendations agreed upon by the borrower and the IDB will take place in the first 30 months following signature of the loan contract.

K. Readiness

- 3.40 This operation was analyzed with the help of the design documents for the pilot program and the documents listed in the technical file on the operation. They were prepared by the CNA and specialized consultants. To design the pilot program, various workshops were held, with the participation of the groups involved: a logical framework workshop, workshops in the five states taking part in the pilot program, and a national workshop. The events helped to design and structure the institutional development, community development support, and community participation subprograms. As for water supply and sanitation infrastructure works, the CNA has files on approximately 500 projects, of which 50 were evaluated. With some supplementary adjustments, the projects evaluated could match all the environmental, economic, social, technical, and health standards agreed upon with the IDB.

L. External audit

- 3.41 Throughout the five years of project execution and within 120 days of the end of each fiscal year, the borrower will present annual financial statements for the program audited by a firm of independent public accountants. The external auditor's opinion will include a review of management of relevant aspects of the program by the borrower, the coordinator, and the executing agencies.

IV. FEASIBILITY

A. Technical and sanitary feasibility

- 4.1 The technical appraisals conducted indicate that the water supply and sanitation infrastructure works and their execution are viable under the terms and within the time frame considered, bearing in mind that:
- a. The CNA has files on some 500 water supply and sanitation projects, of which a group of 50 were reviewed. Given that the reviewed projects involve simplified systems using appropriate technology, that are easily constructed, operated, and maintained, they would meet the environmental, economic, social, technical, and sanitary requirements agreed upon, after some minor adjustments and additions.
 - b. The review of these projects showed that the cost of the new works and rehabilitation are within acceptable ranges. In fact, the average cost per family served, for water supply and sanitation services combined, is US\$1,000.
 - c. The projects were designed in accordance with procedures laid down in the CNA's terms of reference. This document contains the hydraulic engineering and sanitary specifications for intake works, pipelines, treatment, storage tanks, distribution networks, septic tanks, and latrines. Nevertheless, prior to their inclusion in the program, the projects will be reviewed from the point of view of the parameters and criteria agreed upon during analysis of the operation.
 - d. The parameters and criteria agreed upon link the technical and sanitary aspects to environmental, economic, and social considerations, and, in addition, emphasize active participation by the target communities throughout the project cycle. They try to ensure: (i) that the systems meet their needs; (ii) a sense of ownership, with a change in behavior, rational use of water, water conservation, responsibility for management, and payments of associated costs; and (iii) provision of services in such a way that can be sustainable.
 - e. Currently, execution capacity exists in state agencies and in some municipalities. With the institutional development, community development support, and community participation provided for in the program, that capacity is expected to grow and become increasingly effective.

B. Environmental and social feasibility

- 4.2 The program is in line with the social development policies of the 1995-2000 National Development Plan that aim to reduce poverty and the significant lags faced by the rural population. In 1995, the target rural population totaled 26.2 million people living in communities of up to 2,500 people. Of that total, 7 million belong to indigenous groups and 14.2 million are women. The program will have positive environmental and social impacts since it is specifically geared to improving the quality of life of the rural population and of indigenous communities, which have the highest levels of poverty in the country.
- 4.3 The program will foster and encourage the conscious and committed involvement of the different sectors comprising the communities, in areas ranging from planning and design to operation and maintenance of the systems. Active participation by the beneficiary communities will provide: (a) economic sustainability; (b) environmental and social sustainability; and (c) a more equitable supply of water and sanitation services.
- 4.4 Execution of the program will have positive environmental and social impacts because providing water and sanitation services to rural communities will significantly raise the quality of life and improve collective health conditions.
- 4.5 Given the nature of the works and the fact that small rural communities are involved, the negative environmental and social impacts would be moderate and could be mitigated. Nonetheless, an easily applicable methodology for evaluating the impacts of the projects to be included in the program will be used, with criteria that are compatible with IDB procedures and Mexican legislation in this field.
- 4.6 The methodology contemplates, among other things: (a) carrying out environmental and social diagnostic assessments of the communities; (b) studying alternatives to match the requirements of the communities and local conditions; and (c) installing basic solutions for excreta disposal along with water supply services.
- 4.7 Although the dearth of water supply and sanitation systems affects all members of rural communities, women are worst hit. Rural women are usually responsible for collecting water for domestic use, hygiene in the home, and the education of their children. Nevertheless, at times they tend to be excluded from decision-making and management. The program envisages including women and children in rural and indigenous communities to a significant extent in arrangements in which responsibility for the provision of these services is shared.

- 4.8 The communities will also benefit directly from: (a) educational programs for all groups on the proper use of water, sanitation, hygiene, and the environment; and (b) strengthening of the management capacity thereby creating favorable conditions for maintaining the community's commitment and ownership of the systems.
- 4.9 The program will boost the ability of state and municipal institutions and of operating agencies to perform community development support, promote community participation, provide technical assistance, and train people in the use of methodologies and teaching materials tailored to the cultural context in rural areas.

C. Economic feasibility

- 4.10 An examination of a group of projects similar to those that could be considered for inclusion in this program reveals the high economic returns obtained and that are typical of water supply services are brought in rural areas for users who lack proper alternative sources of supply. ^{17/} In some cases, the return was over 50%, with most yielding between 12% and 30%. There were only two cases with returns of 7% and 11%, due to high unit costs per connection combined with relatively easy community access to alternative sources of water. The traditional analysis methodology was used. It consists in defining a demand function starting from at least two points above that function. Because small projects are involved, the basic data were obtained through simplified surveys to establish water volume and prices in situations with and without the project. The area added by the project, weighing price against volume, quantified the increase in benefits achieved. With incremental values of project benefits and costs, the economic return was determined.
- 4.11 The analysis also confirmed a marked correlation between high economic returns and factors related to the degree of community participation by the users. That participation applies to all stages of a project cycle. It begins with selection of a technical solution, continues with contributions toward covering the costs of the investment, and extends to fulfillment of the commitment to operate and maintain the systems, defraying the respective costs via a fee or rate.

^{17/} Half these projects have already been built.

- 4.12 In view of the aforementioned correlation between economic return and factors related to community participation, in order to ensure that economically feasible projects are selected, the program's operations manual will include specific requirements related to: (a) the community organization which will be responsible for operation and maintenance and payment of related costs; and (b) the upper limits on water supply and sanitation investments per inhabitant served. The joint application of these requirements will make it possible to infer an acceptable economic return on the projects. If the costs of a project exceed the established ceilings, the methodology described in paragraph 4.10 would be used to evaluate the benefits and the economic return would be determined.

D. Institutional and financial feasibility

- 4.13 The program with the IDB, supported by the CNA, is considered the federal government's top priority. During the decentralization phase, the CNA, as the General Coordinator, will provide the administrative and technical support needed to ensure that the services delivered meet sustainability criteria. The program sees sustainability as guaranteed by the community's paying for the operation and maintenance costs of the services and by the strengthening of mechanisms for financing rehabilitation and expansion of water supply and sanitation systems. Under the program, sustainable resource management involves the rational management of water resources and community awareness campaigns regarding health, hygiene, gender equilibrium, and improvements in the quality of life.
- 4.14 The communities would participate in defining and executing projects and in operation and maintaining activities, in close coordination with and technical assistance from the municipal and state agencies and operating agencies. This participation would strengthen the sense of ownership and responsibility for management. In addition, in order to ensure adequate management by community organizations, the program would finance training courses in systems operation and maintenance.
- 4.15 Functional responsibilities and financial resources will gradually be transferred to state authorities, to the extent they interact with the municipalities in their jurisdiction and the latter with the communities, in line with the progress made in the program's subprograms for institutional development, community development support, and community participation.

E. Focus on low-income groups

- 4.16 The program's investments qualify as being targeted on low-income groups, on the basis of geographical location (document GN-1964-3). The beneficiaries are rural communities with up to 2,500 inhabitants, with poverty indexes below the national average. National Population Council (CONAPO) data for 1995 show that: (a) 75% of Mexico's population living in poverty was concentrated in rural areas; and (b) 17% of the total population, 63% of the rural population, and 95% of the indigenous communities presented high and very high poverty indexes. Since this is a program with investments focused on low-income groups, the Government of Mexico has requested additional financing over and above the matrix, of up to 10% of the total cost of the program.

F. Risks

- 4.17 The program faces certain risks that are inherent in restructuring this sector in rural areas. They include:
- a. Failure to achieve the objectives of decentralization and devolution of responsibilities to states, municipalities, and communities. Nevertheless, the degree of commitment demonstrated by the Government of Mexico in laying down policy directives in the Program for a New Federalism, which was published in the Official Gazette of the Federation on August 6, 1997, together with the high priority it attaches to this operation, are clear signs of its interest in seeing through the restructuring of this sector in rural areas to the point at which it is consolidated.
 - b. Uncertainty as to state, municipal, and community participation, which could translate into less utilization of funds and a limited program scope. Nonetheless, the program is designed in such a way that it must be implemented with participatory techniques initiated in the communities themselves. That, plus the highly positive reactions discernible during the seven preparatory workshops, suggest that demand will be both adequate and effective.

G. Benefits

- 4.18 With program execution, a degree of institutional development, community development support, and community participation will be encouraged and hopefully attained that will make it possible: (a) to create favorable conditions for financial and resource-management sustainability and social equality in the provision of

water supply and sanitation services in rural areas; and (b) to improve quality of life and public health in communities that still have unacceptable levels of poverty.

LOGICAL FRAMEWORK
PROGRAM FOR SUSTAINABILITY OF WATER SUPPLY AND SANITATION SERVICES IN RURAL COMMUNITIES
(ME-0150)

OBJECTIVES	INDICATORS	MEANS OF VERIFICATION	ASSUMPTION																																										
Quality of life and public health for poor rural areas.	<ul style="list-style-type: none">Changes nationwide in the coverage of water supply and sanitation services in rural communitiesLess water-borne illness	Government report Available Ministry of Health data	Federation, states, municipalities and communities sponsor or participate in the development of the sector in rural areas																																										
Financial and management sustainability for water and sanitation services in rural areas	<ul style="list-style-type: none">Number of communities and users receiving water and sanitation services in rural areas.<table><thead><tr><th></th><th>Yr. 1</th><th>Yr. 2</th><th>Yr. 3</th><th>Yr. 4</th><th>Yr. 5</th></tr></thead><tbody><tr><td><u>Communities</u></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>Water supply</td><td>100</td><td>150</td><td>250</td><td>350</td><td>350</td></tr><tr><td>Sanitation</td><td>40</td><td>80</td><td>180</td><td>300</td><td>350</td></tr><tr><td><u>Users</u></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>Water supply</td><td>165</td><td>258</td><td>397</td><td>527</td><td>479</td></tr><tr><td>Sanitation</td><td>47</td><td>109</td><td>231</td><td>407</td><td>479</td></tr></tbody></table>Percentage of water supply systems functioning adequately (continuity-hours per day; quantity; water quality at source and distribution) 3rd year: 80% 5th year: 90%Percentage of properly utilized sanitation systems 3rd year: 80% 5th year: 90%		Yr. 1	Yr. 2	Yr. 3	Yr. 4	Yr. 5	<u>Communities</u>						Water supply	100	150	250	350	350	Sanitation	40	80	180	300	350	<u>Users</u>						Water supply	165	258	397	527	479	Sanitation	47	109	231	407	479	Monitoring reports Annual reviews Midterm and final evaluations	States, municipalities, communities accept traditional characteristics, rights and duties derived from their program to implement changes.
	Yr. 1	Yr. 2	Yr. 3	Yr. 4	Yr. 5																																								
<u>Communities</u>																																													
Water supply	100	150	250	350	350																																								
Sanitation	40	80	180	300	350																																								
<u>Users</u>																																													
Water supply	165	258	397	527	479																																								
Sanitation	47	109	231	407	479																																								

OBJECTIVES	INDICATORS					MEANS OF VERIFICATION	ASSUMPTION
OBJECTIVES/COMPONENTS							
<p>Community development</p> <p>Strengthen the institutional framework for addressing the needs of rural areas</p>	<ul style="list-style-type: none"> Number of states and municipalities to which functions and responsibilities are transferred to address the needs of rural areas 					<p>US\$23.1 million</p> <p>Coordination agreements, with their execution and technical annexes signed by the federal government and states, and agreements or legal instruments between states and municipalities and between municipalities and communities, executed. Annual reviews</p>	<p>Political will at the federal, state, and municipal levels</p>
	<u>Yr. 1</u>	<u>Yr. 2</u>	<u>Yr. 3</u>	<u>Yr. 4</u>	<u>Yr. 5</u>		
States	5	5	5	5	-		
Municipalities	25	50	50	50	25		
<p>Planning and monitoring for rural areas</p>	<ul style="list-style-type: none"> Creation and operation of a unit to support rural communities, responsible for community development support and support for community participation 					<p>Coordination agreements with execution and technical annexes. Annual reviews.</p>	<p>Completed institutional diagnostic assessments, recommendations of evaluations implemented</p>
	<u>Yr. 1</u>	<u>Yr. 2</u>	<u>Yr. 3</u>	<u>Yr. 4</u>	<u>Yr. 5</u>		
States	5	5	5	5	-		
	<ul style="list-style-type: none"> Strengthening of planning and monitoring mechanisms for rural areas in each state, in the first year of its participation in the program. 						
	<u>Yr. 1</u>	<u>Yr. 2</u>	<u>Yr. 3</u>	<u>Yr. 4</u>	<u>Yr. 5</u>		
States	5	5	5	5	-		

OBJECTIVES	INDICATORS	MEANS OF VERIFICATION	ASSUMPTIONS																																				
Enhance state and municipal mechanisms for future rehabilitation and technical assistance in	<ul style="list-style-type: none">Number of efficient and properly functioning mechanisms for rehabilitation and expansions and actions performed <table><thead><tr><th></th><th>Yr. 1</th><th>Yr. 2</th><th>Yr. 3</th><th>Yr. 4</th><th>Yr. 5</th></tr></thead><tbody><tr><td>States</td><td>-</td><td>5</td><td>5</td><td>5</td><td>5</td></tr><tr><td>Actions</td><td>100</td><td>150</td><td>250</td><td>350</td><td>350</td></tr></tbody></table>		Yr. 1	Yr. 2	Yr. 3	Yr. 4	Yr. 5	States	-	5	5	5	5	Actions	100	150	250	350	350	Monitoring reports Annual reviews	Diagnostic assessments completed, agreements concluded and implemented. State and municipal authorities have sufficient technical, financial, and operational capacity.																		
	Yr. 1	Yr. 2	Yr. 3	Yr. 4	Yr. 5																																		
States	-	5	5	5	5																																		
Actions	100	150	250	350	350																																		
Strengthening of providers of water and sanitation services in rural	<ul style="list-style-type: none">Number of states and municipalities in which strengthening activities and training courses have been carried out (in managerial, administrative, financial, technical, operational, and environmental aspects). <table><thead><tr><th></th><th>Yr. 1</th><th>Yr. 2</th><th>Yr. 3</th><th>Yr. 4</th><th>Yr. 5</th></tr></thead><tbody><tr><td>States</td><td>5</td><td>5</td><td>5</td><td>5</td><td>-</td></tr><tr><td>Municipalities</td><td>25</td><td>50</td><td>50</td><td>50</td><td>25</td></tr></tbody></table> <ul style="list-style-type: none">Number of states and municipalities that have received equipment <table><thead><tr><th></th><th>Yr. 1</th><th>Yr. 2</th><th>Yr. 3</th><th>Yr. 4</th><th>Yr. 5</th></tr></thead><tbody><tr><td>States</td><td>5</td><td>5</td><td>5</td><td>5</td><td>-</td></tr><tr><td>Municipalities</td><td>25</td><td>50</td><td>50</td><td>50</td><td>25</td></tr></tbody></table>		Yr. 1	Yr. 2	Yr. 3	Yr. 4	Yr. 5	States	5	5	5	5	-	Municipalities	25	50	50	50	25		Yr. 1	Yr. 2	Yr. 3	Yr. 4	Yr. 5	States	5	5	5	5	-	Municipalities	25	50	50	50	25	Monitoring reports Annual reviews	Satisfactory manuals, documents, procedures, and models for strengthening accepted by participating bodies.
	Yr. 1	Yr. 2	Yr. 3	Yr. 4	Yr. 5																																		
States	5	5	5	5	-																																		
Municipalities	25	50	50	50	25																																		
	Yr. 1	Yr. 2	Yr. 3	Yr. 4	Yr. 5																																		
States	5	5	5	5	-																																		
Municipalities	25	50	50	50	25																																		
Community development support and community participation		US\$31.4 million																																					
Methodology for diagnostic assessment and participatory planning implemented in health facilities and operating agencies	<ul style="list-style-type: none">Number of people trained in each state in the methodology of diagnostic assessment and participatory planning. Target: 10 per state.	Monitoring reports. Annual reviews.	Authorities back the process and exercise quality control																																				
Strengthening of community participation	<ul style="list-style-type: none">% of the population involved in participatory diagnostic assessment Overall target: an increase from the current less than 10% to 25% in the third year and at least 50% by the end of the fifth year.	Monitoring reports. Annual reviews. Mid-term and final evaluations.	State and municipal assistance is available. Handbooks and methodologies for strengthening community participation are applied.																																				

OBJECTIVES	INDICATORS	MEANS OF VERIFICATION	ASSUMPTION																		
	<ul style="list-style-type: none">A community organization created and/or strengthened by a decision taken by the Assembly (in each community). Target: 1 per community.Number of members of the community organization. Female participation target: an increase from the current 8% to 20% by the third year and at least 30% by the end of the fifth year.																				
Training of the communities	<ul style="list-style-type: none">% of communities and people trained in hygiene, sanitation, and environmental issues. Target (communities): 100% by the end of the program. Target (people): 85% by end of program.	Monitoring reports. Mid-term and final evaluations.	Manuals, teaching materials and methodologies for community training have been developed.																		
<u>Water supply and sanitation infrastructure</u> Design and construction work performed	<ul style="list-style-type: none">Number of water supply and sanitation projects meeting environmental, economic, social, and technical standards built, rehabilitated and expanded.<table><tr><td></td><td><u>Yr. 1</u></td><td><u>Yr. 2</u></td><td><u>Yr. 3</u></td><td><u>Yr. 4</u></td><td><u>Yr. 5</u></td></tr><tr><td>Water</td><td>100</td><td>150</td><td>250</td><td>350</td><td>350</td></tr><tr><td>Sanitation</td><td>40</td><td>80</td><td>180</td><td>300</td><td>350</td></tr></table>% of contribution towards project investment by states, municipalities, and, where applicable, communities. Target: about 50%.		<u>Yr. 1</u>	<u>Yr. 2</u>	<u>Yr. 3</u>	<u>Yr. 4</u>	<u>Yr. 5</u>	Water	100	150	250	350	350	Sanitation	40	80	180	300	350	US\$329.1 million Feasibility studies Project designs. Supervisors' reports. Annual reviews.	Technical, operational and supervisory capacity at the state and/or municipal level.
	<u>Yr. 1</u>	<u>Yr. 2</u>	<u>Yr. 3</u>	<u>Yr. 4</u>	<u>Yr. 5</u>																
Water	100	150	250	350	350																
Sanitation	40	80	180	300	350																
Operation and maintenance satisfactory and sustainable	<ul style="list-style-type: none">Number of community organizations and people trained in operation and maintenance<table><tr><td></td><td><u>Yr. 1</u></td><td><u>Yr. 2</u></td><td><u>Yr. 3</u></td><td><u>Yr. 4</u></td><td><u>Yr. 5</u></td></tr><tr><td>Org.</td><td>200</td><td>300</td><td>500</td><td>300</td><td>200</td></tr><tr><td>People</td><td>600</td><td>900</td><td>1,500</td><td>900</td><td>600</td></tr></table> <p>% of communities/organizations that:</p> <ul style="list-style-type: none">perform preventive maintenance: at least 85%charge fees: 85% of collectable balances.		<u>Yr. 1</u>	<u>Yr. 2</u>	<u>Yr. 3</u>	<u>Yr. 4</u>	<u>Yr. 5</u>	Org.	200	300	500	300	200	People	600	900	1,500	900	600	Monitoring reports. Evaluations by the CNA, CEAS, and municipal authorities. Annual reviews.	Adequate units are available to provide technical assistance and evaluations at the federal, state, and municipal levels.
	<u>Yr. 1</u>	<u>Yr. 2</u>	<u>Yr. 3</u>	<u>Yr. 4</u>	<u>Yr. 5</u>																
Org.	200	300	500	300	200																
People	600	900	1,500	900	600																

RGII-ME0118P
ME-0150
Original: Spanish
Appendix I

PROPOSED RESOLUTION

MEXICO. LOAN ___/OC-ME TO THE BANCO NACIONAL DE OBRAS
Y SERVICIOS PUBLICOS, S.N.C.

Program for the Sustainability of Potable Water
and Sanitation Services in Rural Communities

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 Banco Nacional de Obras y Servicios Públicos, S.N.C., as Borrower, and the Estados Unidos Mexicanos, as Guarantor, for the purpose of granting the former a financing to cooperate in the execution of a Program for the Sustainability of Potable Water and Sanitation Services in Rural Communities. Such financing will be for the amount of up to US\$310,000,000, from the resources of the Single Currency Facility of the Bank's Ordinary Capital, and will be subject to the "Financial Terms and Conditions" and to the "Special Contractual Conditions" of the Executive Summary of the Loan Proposal.