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REPORT AND RECOMMENDATION  
OF THE  
PRESIDENT OF THE  
INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT  
TO THE  
EXECUTIVE DIRECTORS  
ON A  
PROPOSED LOAN  
TO  
NACIONAL FINANCIERA, S.A.  
WITH THE GUARANTEE OF  
UNITED MEXICAN STATES  
FOR A  
POLLUTION CONTROL PROJECT

May 4, 1982

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### CURRENCY EQUIVALENTS

The Central Bank withdrew from the exchange market on February 18, 1982. Prior to that date, the rate of exchange was 26.9 pesos to the US dollar. In recent weeks the Peso is being traded around 46 to the dollar.

### FISCAL YEAR

January 1 to December 31

### GLOSSARY OF ABBREVIATIONS

ACF	=	Index of Average Cost of Funds to Multipurpose Banks
FONEI	=	Industrial Equipment Trust Fund (Fondo de Equipamiento Industrial)
GMCA	=	Greater Mexico City Area
NAFINSA	=	Nacional Financiera, S.A.
PEMEX	=	Mexican Petroleum Company (Petroleos Mexicanos)
PPAR	=	Project Performance Audit Report
SAHOP	=	Secretariat of Human Settlements and Public Works (Secretaria de Asentamientos Humanos y Obras Publicas)
SARH	=	Secretariat of Agriculture and Water Resources (Secretaria de Agricultura y Recursos Hidraulicos)
SMA	=	Subsecretariat for Environmental Improvement (Subsecretaria de Mejoramiento del Ambiente)
SSA	=	Secretariat of Health and Public Welfare (Secretaria del Salubridad y Asistencia)
WHO	=	World Health Organization
WQCD	=	Water Quality Control District

MEXICO

POLLUTION CONTROL PROJECT

Loan and Project Summary

Borrower: Nacional Financiera, S.A.

Guarantor: United Mexican States

Beneficiary: Industrial Equipment Trust Fund (FONEI)

Amount: US\$60 million equivalent, including capitalized front-end fee.

Terms: Fifteen years, including 3 years of grace, at an interest rate of 11.6 percent per annum.

Onlending

Terms: FONEI would receive loan funds at an interest rate equal to that of the Bank loan. FONEI would retain the proceeds of the loan as additional government equity.

Project

Description: The project would:

- (a) finance industrial enterprises' acquisition and installation of pollution control equipment, process changes or plant relocation;
- (b) finance private automobile garages' acquisition of vehicular emission testing and diagnostic equipment;
- (c) finance local and federal authorities' acquisition and installation of pollution monitoring equipment, laboratory facilities, and emission testing and diagnostic equipment for automobile inspection stations;
- (d) train technical staff of implementing agencies, financial institutions and industries, and automobile mechanics;
- (e) support studies and technical assistance to help develop long-term control strategies and emissions standards.

Project

Risk: The most important risk is inadequate monitoring and enforcement of pollution control regulations. The high priority attached by the government to this program and its commitment on a project execution paper, with a detailed action program, suggest that this risk is not high.

Estimated Cost:

	<u>Local</u>	<u>Foreign</u>	<u>Total</u>
	-----US\$ millions-----		
<u>Air Pollution Control</u>	91.0	39.3	130.3
Industrial Source Control	82.8	35.2	118.0
Automobile Inspection	5.8	2.0	7.8
Air Quality Monitoring *	0.2	1.8	2.0
Training and Studies *	2.2	0.3	2.5
<u>Water Pollution Control</u>	35.9	18.3	54.2
Industrial Source Control	35.0	18.0	53.0
Training, Studies, and Monitoring Equipment *	0.9	0.3	1.2
<u>Solid Waste Control *</u>	2.2	0.3	2.5
Industrial Solid Waste Inventory	1.8	0.2	2.0
Feasibility Studies	0.4	0.1	0.5
<u>Health Impact Studies *</u>	1.8	1.2	3.0
<u>Front-End Fee</u>	-	0.9	0.9
TOTAL	<u>130.9</u>	<u>60.0</u>	<u>190.9</u>

Financing Plan:

	<u>Local</u>	<u>Foreign</u>	<u>Total</u>
	-----US\$ millions-----		
FONEI	84.3	-	84.3
Industries and Banks	38.0	-	38.0
Government	8.6	-	8.6
Bank	-	60.0	60.0
TOTAL	<u>130.9</u>	<u>60.0</u>	<u>190.9</u>

Estimated Disbursements:

	-----US\$ millions-----						
Bank FY	1983	1984	1985	1986	1987	1988	1989
Annual	2.4	10.5	15.5	15.1	10.0	5.0	1.5
Cumulative	2.4	12.9	28.4	43.5	53.5	58.5	60.0

Rate of Return: Not applicable.

Staff Appraisal Report: Report No. 38165-ME dated April 28, 1982.

\* Costs of these items include physical contingencies of 5 percent and price contingencies of 8 percent for 1982 and 1983, 7.5 percent for 1984 and 7 percent for 1985.

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

REPORT AND RECOMMENDATION OF THE PRESIDENT  
TO THE EXECUTIVE DIRECTORS ON A  
PROPOSED LOAN TO NACIONAL FINANCIERA, S.A. WITH THE GUARANTEE OF  
UNITED MEXICAN STATES FOR A POLLUTION CONTROL PROJECT

1. I submit the following report and recommendation on a proposed loan to Nacional Financiera, S.A. with the Guarantee of United Mexican States for the equivalent of US\$60 million to help finance a pollution control project. The loan includes a capitalized front-end fee of US\$0.9 million. Approximately US\$55 million of the loan would be onlent through the Industrial Equipment Trust Fund (FONEI) for the purchase of pollution control equipment by industrial enterprises and for purchase of automobile emissions testing equipment by private garages. FONEI would receive these funds at an interest rate equal to that of the Bank loan, and would retain them as additional government equity. The final borrowers would receive loan funds at a variable interest rate not lower than three points below the cost of funds to multipurpose banks (ACF). Subloans would have a maximum amortization period of 13 years including 3 years of grace. The government would assume the foreign exchange risk and the responsibility to repay the Bank loan. The loan would be repaid over 15 years, including 3 years of grace, with interest at 11.6 percent per annum.

PART I: THE ECONOMY <sup>1/</sup>

2. The Mexican economic situation and major issues of economic policy were analyzed in "Mexico: Development Strategy - Prospects and Problems" (3605-ME), distributed to the Executive Directors on August 31, 1981. Country data sheets are attached as Annex I.

Background

3. For the last thirty years, the Mexican economy recorded a high rate of growth: on average, GDP grew at 6 percent per year, in real terms, between 1950 and 1980, allowing output per capita to increase by 3 percent per year over the same period. Sustained growth brought about rapid industrialization: especially after 1955, industry has been the most dynamic sector of the economy, growing at an average rate of 7.5 percent per year, while agricultural output grew at 3.5 percent per year; thus, the share of the industrial sector in GDP went up from 26 percent in 1950 to 38 percent in 1980. A similar change took place in the structure of foreign trade, with manufactured products accounting for an increasing share of total exports between 1950 and 1975. Finally, the last thirty years witnessed the passage from a rural to a largely urban society: in 1980, the fraction of total population living in urban areas was estimated to exceed 60 percent, while it was less than 30 percent in 1950.

<sup>1/</sup> This section is substantially unchanged from the President's Report for the Capital Goods Industries Development Project (P-3284-ME of April 22, 1982). However some minor changes have been introduced in paras. 10-15.

4. Successful exploitation of profitable opportunities by a dynamic private sector has been the main engine of growth in the Mexican economy; but the market mechanism, left to itself, would have done little to correct the effects of an uneven distribution of resources on the relative position of the poorer segments of the population and of the less favored areas of the country; hence the government has had to play a critical role in balancing the need to provide resources and incentives for growth against the demands for a fair distribution of its benefits.

5. In the early seventies, the government sought to build up infrastructure, expand basic industries, stimulate agricultural output and implement massive social programs. The difficulties it encountered in mobilizing enough resources to attain all these aims simultaneously led to excessive public sector deficits, while domestic supply rigidities caused a large part of aggregate demand to spill over into imports. Efforts to redress financial imbalances by strengthening public revenues fell short of their goal, and, in September, 1976, the hitherto fixed parity of the peso was abandoned, while the government imposed a strict stabilization program on the economy.

#### Economic Performance, 1976-1981

6. The Administration of President Lopez Portillo, which took office in December, 1976, saw the control of inflation and the improvement of the current account balance as its most urgent tasks; it succeeded in reducing the rate of increase of domestic prices by half between 1977 and 1978 while, at the same time, the current account deficit decreased by over 40 percent. In 1978, the economy resumed its path of rapid growth. One of the major constraints on economic growth - the availability of foreign exchange - had been greatly relaxed by the successful exploitation of Mexico's oil reserves; these, which at the end of 1981 stood at 72 billion barrels (with potential reserves estimated at 200 billion barrels), enabled the economy to finance the purchases of raw materials and capital goods needed to sustain high GDP growth, while the revenues from federal taxes on oil exports provided the Government with resources, on a hitherto unprecedented scale, to pursue some of its long-standing policy goals.

7. In 1978-1981, output grew at an annual rate exceeding 7 percent, above what would have been needed to absorb the new entrants into the labor force; open unemployment is estimated to have fallen to 4-5 percent of the labor force in the modern sector although underemployment is likely to remain high in the medium run. The Administration succeeded in achieving investment growth of over 16 percent per year, strengthening its support to agriculture, reversing the trend towards a worsening trade balance on basic foods, containing to some extent rural migration and providing small farmers with access to more efficient production methods. Finally, a combination of fiscal incentives and administrative regulations (together with the increasing costs of congestion) had a positive effect on spatial decentralization, one of the major policy objectives of the Administration.

8. A marked increase in the size of the budget has been the first result of the government's new commitments: the expenditure budget grew, in real terms, 20 percent per year between 1979 and 1981; furthermore, actual expenditures exceeded budget figures by significant amounts (by as much as 12 percent in 1981). Revenues have grown more slowly, and, as a result, the public sector deficit amounted to over 14 percent of GDP in 1981. Despite a

high rate of mobilization of private savings into the financial system - made possible by a scheme of adjustable rates on peso deposits - the government had to resort increasingly to foreign borrowing. By 1980, moreover, the side-effects of rapid GDP growth were making themselves felt; aggregate demand - with total investment growing at over 16 percent per year, in real terms, since 1979 - was exerting pressure on prices, and domestic inflation reached 26 percent, while the nominal exchange rate had remained practically stable since 1977; as a result, non-oil exports were decreasing in real terms, while imports - encouraged to some extent by a more liberal trade policy - had grown by 30 percent per year since 1979. At the end of 1980, the current account deficit amounted to 4 percent of GDP, as it had in 1976.

#### Recent Developments

9. In 1981, the need to bring domestic inflation under control and to help restore the competitiveness of non-oil exports became obvious. The Administration opted for a policy of gradual adjustment, counting on slower demand growth in 1982 - brought about partly by a deceleration of public expenditures - to moderate inflation, and allowing a faster rate of float of the peso to reduce the gap between domestic and foreign prices over a two-year period. With a favorable outlook for oil exports, no major problems were expected in the external sector, and a path of gradual adjustment to a rate of growth of 6-7 percent appeared sustainable in the long run and was considered to be less costly in terms of inflation and unemployment than more drastic stabilization measures. Thus, the Administration attempted to reduce the extent of public overspending, while at the same time reintroducing import licenses on 80 percent of imports, tightening public procurement procedures and allowing the float to proceed at a faster pace.

10. This program suffered a setback when, in the second half of 1981, it became apparent that oil sales would not reach their target: actual oil revenues, at US\$14 billion, turned out to be 25 percent below what had been forecast. The public sector had to increase its foreign borrowing by US\$4 billion, and the current account deficit reached an estimated US\$11.3 billion, or 8 percent of GDP, at the end of the year. The exchange markets reacted by increasing the downward pressure on the peso, and, in early 1982, two events combined to make a guided float increasingly costly to maintain: on the one hand, it seemed likely that oil sales for the year would again fall short of expectations; on the other, the 5 percent increase in domestic prices in January - due in part to the rise in domestic fuel prices decreed in December, 1981, and in part to a 34 percent raise in the minimum wage for 1982 - suggested that inflation, which had reached 28.7 percent in 1981, might well accelerate further in 1982. Once more, the exchange markets reacted unfavourably, and, in order to stop the steady drain on reserves required for maintaining the float, the authorities withdrew their support of the peso on February 18. Since then, the exchange rate has stabilized at about Mex\$46 to the dollar, amounting to an adjustment of 70 percent (40 percent in dollar terms). Simultaneously, the Administration announced a stabilization program whose main components are a 3 percent cut in the 1982 budget - which, at the current rate of inflation, shows a decrease in real terms with respect to 1981 - the imposition of temporary price controls, the liberalization of certain necessary imports (basic foodstuffs, raw materials and capital goods) and the granting of financial support to firms affected by the parity change. Finally, a wage raise of 30 percent for the lower

echelons of the Administration was announced, with higher employees receiving increases of the order of 10 percent; labor has been urged to limit its demands to what would be necessary to restore the pre-devaluation real purchasing power of wages.

### Prospects

11. The rate of inflation for 1982 has been forecast at 40 to 45 percent, while output is expected to grow at 4-4.5 percent. Both figures are plausible, but sensitive to unpredictable circumstances. A 45 percent rate of inflation can be expected under a wage adjustment aimed at restoring the pre-devaluation purchasing power of wage income since, given the low import coefficient and the still lower share of imports in consumption, such an adjustment could be significantly lower than the parity change. A 4.5 percent rate of GDP growth is compatible with a slight fall in imports of around 5 percent which would bring about a substantial improvement in the current account balance. But a larger wage increase may result in higher domestic prices, and, if oil revenues fall short of their expected target of about US\$17 billion, an improvement in the current balance might require a sharper fall in imports which would, in turn, force a lower rate of GDP growth.

12. The Mexican Administration has sought to minimize the disruption caused by the stabilization measures so as not to jeopardize the remarkable growth of the past years. In doing so, it has opted for a policy of gradual adjustment whose effects will be apparent only in the medium run. Inflation may well exceed 40 percent in 1982, and this will offset part of the effects of the devaluation on the competitiveness of non-oil exports. On the other hand, the external sector can improve, in the short run, only to the extent that imports show a substantial deceleration, since, even though the adoption of a more realistic parity has removed a major obstacle to non-oil exports, the stimulus to foreign sales is unlikely to have a significant effect on aggregate exports in the next few months since oil accounts for three-fourths of total export revenues. Finally, the Administration has little margin to reduce its expenditures during this fiscal year. The only item in which substantial cuts can be effected in the short run is public investment: general expenses (38 percent of the expenditure budget), debt service (21 percent) or transfers and subsidies are virtually fixed for the duration of the budget. But if the Administration adheres to a strict budgetary policy, thereby contributing to moderate the rate of domestic inflation, significant improvements are likely to appear by the end of 1983: non-oil exports, led by tourism and certain consumer goods such as clothing, footwear and appliances, will probably grow substantially. A reduced public sector borrowing requirement (new net foreign financing is scheduled at US\$11 billion for 1982, down from US\$15-17 billion in 1981) will reduce the pressure on the peso, and, by 1984, Mexico could reach a sustainable rate of GDP growth of about 6 percent on average, while maintaining the current account deficit within manageable limits. Lastly, the Administration has an opportunity to overhaul the entire system of transfers and subsidies, reducing their levels and improving their cost-effectiveness.

13. The country still faces structural problems in the years to come, related mainly to poverty and unequal interpersonal and inter-regional distribution of income. Efforts were made in the past to improve the living



conditions of the poorer segments of the population. A family planning program started in 1972 brought the growth rate of the population to an estimated annual average of 2.6 percent, down from 3.5 percent in the 1970s. To tackle the problems of malnutrition and increasing dependence on foreign food, the present Administration launched the SAM (Mexican Food System) Program, aimed at increasing self-sufficiency in basic foods, providing for minimum nutritional needs of the poor and increasing rural employment. The Administration also placed greater emphasis on the promotion of small scale irrigation, rehabilitation of underutilized existing irrigation works and provision of credit and technical assistance for the development of rainfed agriculture.

14. The main urban-regional problems are: growing congestion, pollution, high cost of services (especially water) and other management problems that stem from the continued growth of Mexico City (already the third most populous metropolitan area in the world and moving rapidly to become the first) and Monterrey and Guadalajara, located in the dry, densely populated central plateau; and retarded development, poverty and great difficulty in providing better jobs or adequate public services to the one-third of all Mexicans who live in small, scattered centers in rural areas. The present government took many positive steps to confront these problems, including an administrative reorganization and the elaboration of a comprehensive National Urban Plan in 1978 and of a National Industrial Development Plan in 1979 which reflected the preoccupation of the present Administration with the long-term prospects of the industrial sector and their implications for the correction of the employment and regional imbalances problems.

15. The high rate of growth experienced by the Mexican economy in recent years has provided the strongest weapon to tackle the long-term problems mentioned above. At the present time, Mexico is in the midst of an adjustment process which may bring about higher unemployment, albeit from relatively low starting levels, thanks to the recent record of high GDP growth. Lower growth, on the other hand, will afford an opportunity to reappraise many of the past years' goals and policy instruments, in particular the level and structure of subsidies, and there is evidence that the Administration after having adopted unpopular decisions in a politically difficult year, intends to carry out such a reappraisal.

16. Mexico's public and publicly guaranteed debt service ratio has been increasing over the recent past and peaked at 69 percent in 1979. This high ratio reflected the still relatively low level of exports to GNP and the high proportion of Mexican borrowing from commercial banks. The public debt service ratio declined to around 30 percent in 1980, not only as a result of rapid increases in petroleum exports, but also because some of the debt contracted on the least favorable terms had been prepaid; but it had risen again to an estimated 43 percent by the end of 1981. Debt service on Bank loans amounted to about 3.2 percent of public debt service in 1980 this ratio is projected to remain about the same during the mid-1980s. The Bank currently holds about 5.7 percent of Mexico's total medium and long-term public debt, and this ratio is not likely to change significantly over the next few years. Mexico is creditworthy for borrowing on conventional terms.

PART II - BANK GROUP OPERATIONS IN MEXICO 2/

Bank Operations

17. As of March 31, 1982, Mexico had received 72 loans from the Bank amounting to US\$5,218.1 million net of cancellations and terminations; of these, 44 loans totalling US\$2,438.6 million were fully disbursed. The Bank held US\$4405.3 million, of which US\$1,942.9 million had not yet been disbursed. 3/ Some 46 percent of Bank lending has been for agriculture and rural development, 14 percent for industry, 13 percent for power, and 15 percent for transportation; the remaining 12 percent has been for water supply, tourism, urban development and vocational training projects. Annex II contains a summary statement of Bank loans as of March 31, 1982 and notes on the execution of ongoing projects.

18. Of the US\$5.2 billion total lending, about US\$2.5 billion was for establishing or strengthening institutions for channeling credit to areas where credit supply was deficient or non-existent, and setting up in the commercial banking system the ability to carry out project-related appraisal of investments in agriculture, industry and tourism. These credit programs have facilitated lending to low-income farmers and small- and medium-scale industrial enterprises based on productive investment plans rather than collateralized credit.

19. Implementation of most Bank-financed projects was delayed during the period of economic difficulties in the mid-1970s and during the period of stabilization that followed the September 1976 devaluation of the peso. Since then, the government has arranged adequate budget financing and has significantly improved project implementation. Four projects which had important structural constraints were modified and rephased to account for the changed circumstances. Government and Bank officials have met periodically to review project implementation, and greater attention has been focused in Mexico on project monitoring. As a result of these measures, most of the Bank-assisted projects are being implemented satisfactorily and disbursements have risen from US\$91 million in FY78 to US\$413 million in FY81.

IFC Operations

20. As of March 31, 1982, IFC had made investment commitments in 23 companies in Mexico, for a total of US\$551.2 million, of which US\$404.1 million had been sold, repaid or cancelled. A summary statement of IFC investments is presented in Annex II.

2/ This section is substantially unchanged from the President's Report for the Capital Goods Industries Development Project (P-3284-ME of April 22, 1982). However, some minor changes have been introduced in para. 23.

3/ These totals do not include a \$180 million loan for agricultural development approved in March 1982, but not yet signed.

Bank Strategy

21. The main objectives of recent Bank lending in Mexico have been to: (a) support policies and programs leading to a wider distribution of the benefits of economic growth; (b) help finance projects that make, directly or indirectly, significant contributions to output and employment; (c) help reduce Mexico's urban-regional imbalances; and (d) help break bottlenecks preventing rapid growth.

22. Because of the difficult structural problems of agriculture and the sector's crucial importance for the one-third of the national population living in the rural areas, the Bank has made agriculture the leading sector for its lending. The Bank's agricultural lending program in Mexico has four goals: first, to increase productivity of presently cultivated lands; second, to improve the productivity of small farmers; third, to complement infrastructure investments with support services, such as extension, marketing programs and credit; and fourth, to promote employment generating investments in rural areas. The Bank has made eleven loans in FYs76-81 totalling US\$1,466 million for irrigation, rural development and agricultural, agro-industrial and livestock credit programs. A US\$175 million loan for a rural development project and a US\$180 million loan for an irrigation rehabilitation project have been approved by the Executive Directors in FY82. Several projects for rainfed agriculture, rural development, irrigation, fisheries, and support services are in preparation.

23. Bank lending for industry has aimed at: (a) reduction of the balance of payments deficit; (b) promoting greater employment; and (c) decentralizing industrial activities away from the major and increasingly congested urban areas. A steel project which the Bank helped structure and finance is now operating in a previously underdeveloped area on the west coast of Mexico, and the city in which it is located, Lazaro Cardenas, is developing into a new growth pole. Four loans for industrial projects to promote the development of small- and medium-scale industrial enterprises, to finance expansion of small- and medium-scale mining, and to support an industrial equipment fund (FONEI) were approved by the Executive Directors in FYs78-80. They offer support to the private sector at a time of rapid expansion and are directed at all three goals mentioned above. A loan for a vocational training project was approved by the Executive Directors in July 1981; it is assisting a program to increase the supply of skilled workers and technicians. A loan for a capital goods industries development project is under consideration of the Executive Directors.

24. Bank lending for physical infrastructure has been focused on regional development and strengthening of institutions and sector policies. A highway sector project (FY79) and the fourth railway project (FY81) support these goals. The first and second medium size cities water supply and sewerage projects (FY76 and 81) reinforce the planning, management and finance of specialized water supply and sewerage institutions at the federal and municipal levels and contribute to the establishment of tariffs more closely related to costs; a third project has been appraised and is expected to be presented to the Executive Directors in the coming months.

25. The government has adopted a National Urban Development Plan that spells out its regional development priorities in operational terms. A project to assist in the development of the Lazaro Cardenas conurbation area was approved by the Executive Directors in FY78, and a second project for oil-producing southeastern Mexico was approved by the Executive Directors in FY81.

26. The Economic Development Institute (EDI) is assisting CECADE (a similar institute under the Ministry of Programming and Budget) in training Government staff in project preparation, monitoring and evaluation. EDI assistance is directed at urban and regional development, agriculture, rural development and agro-industries courses. The Bank has also assisted the Mexican authorities in training personnel for managing water supply and industrial credit projects.

27. The Inter-American Development Bank (IDB) is the second largest source of multilateral aid to Mexico. The IDB has made loans to Mexico totalling US\$2,697.1 million as of March 31, 1982. Over 60 percent of the total has gone for agricultural and rural development projects, and the balance for transportation, industry, water supply, and tourism infrastructure. The IDB and the Bank have coordinated their assistance on several projects. Each has made loans for the national integrated rural development program (PIDER), agricultural and livestock credit, small- and medium-scale industries development, and hotel development projects. The International Fund for Agricultural Development (IFAD) has approved a loan of US\$22 million for a rural development project in the state of Oaxaca which was appraised by the Bank's staff and for which the Bank is acting as cooperating institution for administering the loan.

28. Bank-supported power, steel, fertilizer and tourism projects in Mexico have been co-financed by several bilateral export credit agencies and commercial banks. The capital goods credit project, which will be presented to the Executive Directors shortly, will be co-financed with commercial banks and export credit agencies. In January 1982, Mexico borrowed US\$500 million to provide complementary financing for Bank-assisted projects where project specific co-financing would be difficult.

### PART III. ENVIRONMENTAL POLLUTION AND ITS CONTROL

#### Background

29. Mexico's industrial growth has averaged over eight percent per year for the past three decades. Industrial growth, larger employment and market opportunities and superior infrastructure facilities available in the urban centers, have led to high concentrations of populations. The Greater Mexico City Area (GMCA) accounts for nearly one quarter of the country's total population, more than one-third of the industrial production, and about one half of the country's estimated seven million motor vehicles. With estimated population of nearly 15 million, GMCA stands among the three or four most highly populated metropolitan areas in the world. Rapid industrial and urban

growth have created high levels of pollution of the air, water and land in GMCA and some other urban areas. Corrective measures have assumed critical importance. The Government has issued legislation to regulate levels of contaminants from industrial, vehicular, and other sources and is now in the process of implementing a comprehensive environmental protection program.

#### Nature of the Pollution Problem

30. Air Pollution. Industrial activities and combustion of high sulfur fuel oil account for nearly all of the particulate and sulfur dioxide emissions in GMCA, about one quarter of the hydrocarbon emissions, and two-thirds of the nitrogen oxides. Motor vehicles account for most of the carbon monoxide emissions and three quarters of the hydrocarbon emissions. Very high levels of these pollutants have been observed in GMCA's atmosphere in recent years. GMCA's air pollution problems are intensified by its location in a sheltered valley at a high altitude (over 2,200 meters), with high solar radiation, poor ventilation, and poor combustion conditions. The maximum daily concentration levels of the four major contaminants substantially exceed World Health Organization (WHO) standards. <sup>4/</sup>

31. Other areas of the country with significant air pollution problems include Guadalajara and Monterrey, the next two largest urban and industrial centers in the country, and the Coatzacoalcos-Minatitlan area which is the home of the country's rapidly growing petroleum industry. Particulates and sulfur dioxide emissions, predominantly from industrial sources, represent the major air quality problem in these areas. Air pollution levels for suspended particulates at some locations in these areas exceeded even the highest daily averages recorded in GMCA.

32. The daily emission rates of the various air pollutants will increase in the coming years unless rigorous corrective actions are taken. Installation of pollution control equipment, changes in industrial processes, use of natural gas (instead of oil) as fuel, and strict motor vehicle inspection and maintenance programs are being contemplated as corrective measures.

33. Studies in GMCA have indicated adverse health effects, including significant increases in the incidence of respiratory illnesses (with children showing a two-fold increase), and increased carboxyhemoglobin levels in the blood (which could cause adverse systemic effects, reduced maximum work capacity and visual impairments). Poor visibility conditions occur frequently in GMCA, mainly due to the high levels of ozone and particulates. Ozone is known to produce irritation of throat, nose and eyes, and could increase asthmatic attacks and pulmonary dysfunctions. Increases in respiratory and cardiovascular diseases, adverse effects on the human nervous system, loss in visibility and aesthetics, as well as damage to structures and local vegetation due to atmospheric pollutants have been documented at lower concentrations than those found in Mexico City.

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<sup>4/</sup> The contamination levels as a percentage of WHO prescribed limits are: 600 percent for ozone, 490 percent for total suspended particulates, 230 percent for carbon monoxide and 130 percent for sulfur dioxide.

34. Water Pollution. Industrial effluents are a major source of the country's water pollution; discharges of organic matter, toxic chemicals, detergents, heated liquids and other matter are recognized to have had harmful effects, including contamination of drinking and other waters, spread of water-borne diseases, and adverse impact on aquatic life. Such contamination can be particularly crippling in a water-short country such as Mexico. Water pollution problems are made more acute by the fact that much of the domestic and waste industrial waters are discharged without any treatment.

35. In 1973, the Secretariat of Agriculture and Water Resources (SARH) began a study of the country's hydrological basins, with a view to establishing priorities for water pollution control. The results of the study were used to group the 218 water basins according to their priority for pollution control action. The top priority group contains 11 basins containing 54 percent of the population and producing 77 percent of Mexico's GDP. These include the water bodies connected to GMCA, the Toluca-Lerma urban industrial corridor, the Guadalajara and Monterrey metropolitan areas, the Cuernavaca valley, and the Coatzacoalcos-Minatitlan petroleum producing zone.

36. Solid Wastes Pollution. Mexico's rapid urbanization and industrial growth has led to vast increases in the amounts of solid wastes generated by its population and industry, as well as to significant changes in the characteristics of such wastes. More importantly, the rapid industrialization has led to generation of large quantities of toxic and hazardous industrial solid wastes, which at present are simply discarded as part of municipal refuse. Such wastes if inadequately treated threaten to cause long-lasting damage to the environment, primarily through the percolation of rain waters which carry contaminants into the groundwater table. At present no reliable information is available on the amount of toxic and hazardous wastes generated by Mexican industry, their physical and chemical characteristics, location of sources and disposal sites, treatment and disposal practices being followed, and the environmental and public health consequences. To correct this and provide the basis for systematic monitoring and formulation of strategies to control industrial solid wastes, comprehensive studies would be undertaken under the project.

#### Institutions

37. The Secretariat of Health and Public Welfare (SSA) has the overall responsibility for coordinating the environmental protection and regulatory efforts of various government agencies. SSA has direct responsibility for monitoring air and land pollution and formulating and implementing protection and control measures for these media. Direct responsibility for water pollution monitoring and control to a large extent lies with the Secretariat of Agriculture and Water Resources (SARH). SARH collaborates with SSA on issues involving public health formulation of standards and sanctions against violation of the standards. The Secretariat of Public Works assists state and local agencies in public works execution, including in executing or supervising the construction of local water supply and sewerage systems.

38. A Subsecretariat for Environmental Improvement (SMA) was established within SSA in 1972 to be in charge of its environmental protection responsibilities. SARH's water pollution monitoring and control activities are organized under its Directorate General for Ecology Protection and

Management (DGEF). In August 1978, the government also created, through a Presidential decree, an Interministerial Commission for Environmental Improvement to facilitate coordination at a high level of the country's overall pollution control strategies. Coordination at the operational level among the agencies would need to be strengthened in the future to overcome some existing gaps and ambiguities.

#### Pollution Control Legislation

39. The Federal Environmental Protection Law became effective in February 1982, superseding a 1971 law. The new law retains emission standards set in 1972-1973 under the former law, but substantially increases the penalties for non-compliance and streamlines the enforcement process. It is an important first step in the strengthening of Mexico's pollution control efforts.

#### Pollution Control Standards and Enforcement

40. Industrial Air Emissions. Air pollution regulations issued in 1972 specify limits on particulate emissions from stationary sources such as industrial and electric power plants. While these emission standards have served to address some of the most critical dust and smoke emission problems in Mexico they need to be refined to take account of the degree of congestion in the respective areas, fraction of respirable particulates, and the toxic content of particulates emitted. Also at present there are no prescribed standards for gaseous emissions from stationary sources--a critical gap since some of the most important pollutants from industrial sources are gaseous. As part of the pollution control activities undertaken to complement the proposed project, the government is expected to issue modified emission standards to correct the above gaps. Enforcement efforts have also been hindered by lack of adequate air monitoring equipment and by deficiencies in knowledge of the sources of emissions. In connection with the proposed project, SMA would take steps to upgrade its air emissions inventory, develop its air pollution modelling capabilities and carry out a number of studies to be able to refine standards and emission control strategies in the medium term.

41. Starting in 1977-78, SMA's staff has been carrying out an inspection program for particulate emissions from the major stationary sources, particularly in GMCA. While a reasonably intensive program of inspection visits has been carried out, effectiveness of the enforcement effort has been severely hampered by low limits on penalties for non-compliance. To help correct this, the 1982 law raised the ceiling to 10,000 times the minimum daily wage rate in Mexico City (corresponding to about US\$80,000 equivalent presently) per offense, with doubling or further increases for repeated non-compliance.

42. Vehicular Emissions. Starting in 1971, the government has been implementing a program to control emissions from new motor vehicles which has resulted in a 60 to 70 percent reduction in hydrocarbon and carbon monoxide emissions for the latest model cars in comparison with the pre-1971 uncontrolled vehicles.

43. The legislation provides adequate control authority for vehicles in circulation, as well as new ones. The government has announced a mandatory vehicle inspection and maintenance program for GMCA. Implementation of this program would be undertaken by the government in connection with the proposed project which would provide financing and technical assistance to private automobile garages and the government's inspection stations for the purchase of emissions testing equipment.

44. Water Effluent Control. The law requires all industries to register with SARH all liquid discharges. SARH has the responsibility for setting discharge standards for each registered source so that overall quality for a body of water can be maintained. Such discharge standards apply to industries, municipalities, and agricultural users of water.

45. The regulations provide for discharge inspections and for fines and other penalties, including plant closure, for violators. However, plant inspections have averaged only about 350 per year in the last 3-4 years. Individual discharge conditions have been established only for about 3,000 discharge outlets out of about 93,000 registered with SARH. To date SARH's strategy has been to focus on the largest water polluting sources or on situations where there is a strong public pressure for prescribing discharge conditions. While this has been an effective initial strategy, a more systematic priority setting in terms of the water basins and type of discharges (e.g., toxic substances), and an accelerated and consistent setting of individual discharge conditions in the selected areas for priority action is now needed.

46. The main reasons why enforcement of standards has not been very effective are: (a) entities discharging into municipal sewer systems are not supervised by SARH nor are municipalities enforcing water quality standards; (b) effluent standards for municipal discharges have not been adequately enforced by SARH; (c) maximum fines for pollution offenses were too low under the old law (maximum of US\$2,000 equivalent); (d) control effort was constrained by limited staff and budget resources for inspection and enforcement; and (e) a medium term strategy in water pollution control was not clearly defined.

47. Water Quality Control Districts. SARH is establishing Water Quality Control Districts (WQCDs) to facilitate the reduction of water pollution in priority zones. Common wastewater treatment plants would be constructed for groups of industries and municipalities within a given WQCD. While SARH's proposal to establish WQCDs seems attractive, further experience with the technical, organizational and cost recovery problems involved in operating common wastewater treatment plants is needed. To facilitate a decision on a national WQCD program which involves large investment costs, the Government is considering construction of pilot common wastewater treatment plants in one or two selected high priority basins and has sought the Bank's assistance for this experimental program. A pilot project is being studied for possible Bank assistance.

#### Incentives for Pollution Control Related Investments

48. As part of its strategy to reduce urban and industrial concentration, the Government is providing fiscal incentives to encourage location of industry away from the most congested and polluted urban areas. The incentives include 10 to 20 percent tax credits on investments plus an



additional credit proportional to the number of incremental jobs created by the investments. Similar tax and employment incentives are available for industrial enterprises relocating out of the GMCA to other parts of Mexico. The Government has also established fiscal incentives equivalent to 20 percent of the investment cost plus additional employment incentives for companies purchasing pollution control equipment, as well as those manufacturing such equipment in Mexico. Pollution control equipment is also eligible for accelerated depreciation.

#### Finance for Pollution Control Investments

49. The main source of financing for Mexican industry is its banking system comprising private and mixed public-private banks which offer a combination of commercial banking investment banking and other financial services. The Mexican government has established trust funds to channel additional finance through the commercial banking system for investment in priority areas. The Industrial Equipment Trust Fund (FONEI) established in the Bank of Mexico is the most important fund providing finance for pollution control investment by private industries.

50. FONEI has had considerable experience in appraising and financing industrial investments. It has maintained high standards and has developed sound relationships with major commercial banking chains in Mexico. In 1981, FONEI approved loans totaling about US\$300 million for 110 projects. Under the Bank-supported Fourth Industrial Equipment Fund Project, FONEI began to finance pollution control investments. FONEI has gained useful experience in pollution control finance, and its performance has been satisfactory. So far, about US\$23 million (representing some 54 percent of total investment costs of the projects) have been loaned to projects for control of emissions from metallurgical, cement, textile and chemical industries. Industrial enterprises have shown considerable demand for credit for pollution control investments. In 1981, FONEI financed 12 projects totalling about US\$18 million equivalent as compared to 4 in 1980 and 1 in 1979. Pollution control projects now account for 6 percent of FONEI's total lending. Most of the projects are in the GMCA, Monterrey, Guadalajara and Toluca. This growth in demand is expected to continue as a result of the greater enforcement of the law being undertaken by SSA and SARH.

#### Experience under Previous Projects

51. The Fourth Industrial Equipment Fund (FONEI) project, assisted by Bank Loan 1712-ME of July 30, 1979, includes an experimental pollution control component of US\$6 million (para. 50). The majority of the funds provided to FONEI under the four Bank loans has financed investments in export-oriented or import substituting industries. Execution of these four projects has progressively improved (para 53); subprojects have been well prepared and properly appraised. Most subprojects have been carried out successfully with actual output, exports, and employment exceeding appraisal projections. Appraisal estimates of economic rates of return for subprojects, mostly in the range of 20 to 40 percent, appear to have been met in practice in the majority of cases.

52. A Project Performance Audit Report (PPAR) of the First and Second Industrial Equipment Fund (FONEI) Projects (SecM79-535) of June 1979 commented on two important aspects of FONEI's early operations:

- (a) FONEI's lending mostly benefitted large and well-established borrowers; and
- (b) FONEI made little progress towards achieving its objective, set under the second Bank loan, of encouraging the intermediaries to use project appraisals as a major input to their lending decisions, rather than lending primarily on the basis of loan collateral.

At the same time, the report acknowledged that FONEI financed sound investments that resulted in substantial foreign exchange savings.

53. The difficulties noted in the PPAR are in large part due to the fact that FONEI, in the period covered by the PPAR, was a new institution. Each of these difficulties has been addressed in the Third and Fourth projects subsequently approved by the Bank. FONEI's lending rates have since been increased and are now on a floating basis linked to the ACF index (para. 61). Interest rate spreads to participating banks have been increased to reasonable levels to provide an incentive for banks to assume greater lending risks in the utilization of FONEI rediscounts and to participate more actively in the appraisal and supervision of investment projects. Recent evidence indicates that these measures, together with changes in the banking law, have helped to reduce banks' collateral requirements and to increase appraisal-based lending. FONEI's lending is also becoming increasingly diversified, with a lower proportion of the subloans going to the largest clients. FONEI's loan portfolio at year-end 1981 was distributed among 270 companies of which 86 borrowed from FONEI for the first time in 1981.

#### PART IV. THE PROJECT

54. A report entitled "Pollution Control Project" (No. 3816b-ME dated April 28, 1982) is being distributed separately. Negotiations for the Loan took place in Washington, D.C. on April 15-23, 1982. The Mexican delegation was led by Mr. Luis Nava of NAFINSA.

##### Objectives and Project Description

55. The proposed project is part of Mexico's long run program to reduce pollution levels. The principal objectives of the project are to:

- (i) introduce more effective pollution control strategies and enforcement procedures; and
- (ii) encourage and help finance investments by industrial firms aimed at reducing atmospheric and water pollution.

56. To help achieve these objectives, the project would:

- (a) provide credit to industrial enterprises undertaking investments involving: (i) installation of equipment to control air or water pollution from stationary sources; (ii) changes in production process or technology to reduce such pollution; (iii) relocation of plants from congested areas to more decentralized locations; and (iv) conversion of fuel oil combustion facilities to natural gas;

- (b) provide credit to private automobile garages for the purchase of vehicle emissions testing and diagnostic equipment;
- (c) finance local or federal authorities for the purchase of emissions testing and diagnostic equipment for the automobile inspection stations mostly in GMCA, pollution monitoring equipment for the major urban areas, and related laboratory facilities;
- (d) provide training for the technical staff of SSA, SARH, local agencies, industrial enterprises and participating financial institutions on air and water pollution, and for auto-mechanics and automobile inspection staff in testing and diagnosis of vehicular emissions;
- (e) support studies, pilot programs, and technical assistance for developing long term control strategies and refinement of pollution standards, including: (i) on air pollution control: research and pilot testing programs to examine the technical and economic feasibility of conversion of motor vehicles to alternative, less polluting, fuels (e.g., LPG, gasoline-methanol mixtures); (ii) on water pollution control special studies to analyze water pollution problems and ways to address them in selected high priority water basins; (iii) on industrial solid wastes disposal: a comprehensive study for characterization, quantification and identification of disposal technologies for hazardous wastes which are being discharged by industries; (iv) on health impact of pollution: strengthening of the data base, and carrying out studies of the effect of air and water pollution on public health and productivity; and (v) other technical assistance as needed to implement the overall program.

#### Complementary Control and Other Initiatives

57. In order to complement the specific actions to be taken under the proposed project, measures are needed to strengthen the regulatory framework and the staffing and technical capabilities of the concerned agencies. The specific initiatives that the government intends to take during the course of the project are detailed in the project execution paper being prepared in connection with the proposed project (para. 68). The more important of these initiatives are: (a) development and adoption of modified particulate and gaseous emission standards for major stationary sources; (b) speedy implementation of the mandatory annual inspection for all motor vehicles circulating in GMCA; (c) rigorous application of the unified water quality control strategy in high priority basins to ensure consistent enforcement across different source categories; (d) systematic gathering and updating of emissions inventories in the major industrial-urban centers, and strengthening of methodology for standards setting; (e) agreements with the major public sector enterprises on major pollution control actions to be achieved by them; (f) measures encouraging the use of natural gas in new burning facilities in congested areas, and conversion of selected large fuel

oil burning facilities (particularly in GMCA) to natural gas; and (g) expansions in staff and budgets of the key agencies involved in standard setting and enforcement.

#### Project Cost

58. The total cost of the project (including the portions financed by the participating banks, the own resources of the sponsoring industries, and the front-end fee on the Bank loan but net of all taxes and duties), is estimated to be US\$190.9 million. The project is expected to support 80 to 100 industrial investments for pollution control, equipping of 300 to 400 private automobile-garages for emissions testing and diagnosis, and the purchase of monitoring and laboratory equipment. This reflects the expected demand indicated by SSA and SARH surveys taking into account the impact of new enforcement initiatives. About 62 percent of the total project cost is expected to support air pollution control investments by industries and 28 percent would finance industrial water pollution control investments. Equipment for private auto-garages and automobile inspection stations, studies, training, technical assistance and improvement of monitoring and laboratory facilities account for the remaining 10 percent.

#### Project Finance

59. The proposed US\$60 million Bank loan would cover the estimated foreign exchange cost of the project (including the front-end fee on the Bank Loan). The loan would be channeled to private industries and automobile garages through FONEI (US\$55 million), or used directly by SSA and SARH for the purchase of equipment (US\$5 million).

60. Of the US\$131 million of local resources required to finance the project, FONEI would provide about US\$84 million and the Government about US\$9 million. The balance (approximately US\$38 million) would be provided by the beneficiary industries and their banks.

#### Lending Interest Rates

61. Subloans to final beneficiaries would bear variable interest rates adjustable every six months. FONEI charges an interest rate equal to the ACF for pollution control loans. This practice is expected to prevail under the proposed project. However, because of the significant externalities and social benefits involved in pollution control investments and their generally non-productive nature, FONEI would have the flexibility to make subloans at an interest rate not lower than three points below the ACF index (Section 2.02(b) of Project Agreement). The ACF tends to move in parallel with the inflation rate and typically is above the inflation rate.

62. Bank funds would be provided to FONEI at an interest rate equal to that of the Bank loan. The government would assume responsibility for repayment of the loan as well as for the foreign exchange risk.

#### Eligible Investments

63. Since a major rationale for providing preferential financing is to assist enterprises which made investments prior to the enforcement of stringent pollution control standards, subloans to industries would be limited to the financing of investments for controlling pollution from

facilities installed at least one year prior to the submission of the financing request to the Bank (Loan Agreement, Section 2.02(d)).

64. The final beneficiaries would be required to finance at least 10 percent of the investment costs. In case of investments to achieve pollution control which are carried out in conjunction with expansions of productive capacity, total financing provided under the proposed project would be limited to the estimated cost of achieving the target pollution reductions through an efficient control method. Similarly, financing of relocation would be limited to the estimated cost of establishing a plant of similar size and characteristics as the plant to be relocated. FONEI would require subproject appraisals accompanying financing requests to demonstrate compliance with these criteria.

65. Appraisals of subprojects would also present a full financing plan for the investments being supported and an adequate economic and financial analysis justifying the proposed investment following FONEI's guidelines. It would be a condition of loan effectiveness that FONEI's guidelines for evaluation of pollution control projects, reflecting the points listed above, had been issued (Loan Agreement, Section 7.01(b)). In addition, to avoid undue concentration of Bank loan funds, Bank financing for a single subproject would be limited to US\$5 million in the case of industrial subloans and US\$20,000 in the case of subloans for diagnostic equipment for automobile garages (Loan Agreement, Section 2.02(d)).

#### Project Implementation and Coordination

66. The main implementing agencies of the project would be SSA, SARH, and FONEI. The project components involving strengthening of monitoring and laboratory facilities, and studies, training and technical assistance would be implemented by SSA for air pollution control and solid wastes control programs and by SSA and SARH for water pollution control programs, in accordance with programs or terms of reference satisfactory to the Bank (Guarantee Agreement, Section 3.01(b), Loan Agreement Section 2.02(d)). The credit component of the proposed project would be executed by FONEI.

67. The project would be coordinated by a steering committee chaired by the Subsecretary for Environmental Improvement of SSA with representation from other concerned agencies and financial institutions. This committee would set the overall strategies and would periodically review the progress achieved on each of the project elements and complementary initiatives. This committee is a sub-group of the government's Intersectoral Commission for Pollution Control which acts as a high-level national body for establishing and implementing pollution control policies and initiatives.

68. To help ensure that the various elements of the proposed project are implemented in a timely and coordinated manner, a project execution paper is being prepared by the government. The paper would include schedules for implementing each of the project elements and would describe the complementary initiatives to be carried out by the government agencies and other implementation details. The government has provided assurances that it will undertake the complementary measures for pollution control described in the paper (Guarantee Agreement, Section 3.06). Submission of the paper, satisfactory to the Bank, by the government is a special condition for loan effectiveness (Loan Agreement, Section 7.01(b)). Changes in the paper would have

to be satisfactory to the Bank (Loan Agreement, Section 6.01(b)). In view of the complexity of the project and the need to monitor the progress in implementing its various components on a continuing basis, the government, the Bank, and the participating institutions would together carry out annual reviews of the progress achieved in implementing each of the project elements and of the complementary measures.

#### Disbursement Procedures

69. Disbursements under the Bank loan for pollution control subloans and for expenditures of SSA and SARH for goods and services (except consultants) for carrying out proposed studies, training and technical assistance activities would be made for: (a) 100 percent of foreign expenditures for directly imported equipment and related services; (b) 70 percent of total expenditures for imported equipment purchased off-the-shelf in Mexico; (c) 45 percent of the ex-factory costs of domestically manufactured equipment; and (d) 25 percent of the costs of industrial construction and installation.

70. Prior Bank approval would be sought for the first FONEI subloans for industrial relocation, for change of production process, for equipping automotive garages, and for all FONEI subloans involving more than US\$750,000 equivalent in Bank financing (Loan Agreement, Section 2.02(c)). These limits are expected to result in the Bank reviewing between one-fourth and one-third of subloans, corresponding to about half of the loan amount.

71. The loan is expected to be fully committed by December 1985 and fully disbursed by December 1988.

#### Procurement

72. Procurement procedures for goods and services financed under the subloans channeled to the private sector though FONEI would follow the standard practice for FONEI's industrial credit operations. FONEI would be responsible for ensuring the competitiveness of items procured in terms of price and quality, and their suitability for the purposes intended. Items purchased by the executing agencies for their own use, which would mostly consist of packages of goods and services estimated to cost less than US\$500,000 equivalent, would have to comply with the government's normal procurement procedures, which have been reviewed by the Bank and include comparative price and quality evaluation of at least three bids. In the case of the automatic air monitoring network to be used by SSA which is expected to cost about US\$2.0 million equivalent in total, limited international tendering with evaluations based on quotations from at least three foreign suppliers would be required.

#### Project Benefits

73. The proposed project represents an effort to tackle Mexico's most urgent pollution control needs and to lay the basis for formulating more comprehensive pollution control strategies. Such strategies would help Mexico achieve its ambitious targets for industrialization without serious adverse effect on health, environment and ecology.

74. The project would help in controlling 80-100 critical sources of industrial pollution and in implementing an automobile inspection and maintenance program which would cover a significant part of GMCA's 3.5 million motor vehicles. The project's direct economic and social benefits are not readily quantifiable, but are nevertheless considered to be substantial, as evidenced by prior studies on the impact of pollution on public health and the physical environment. Other benefits are also expected, including aesthetic improvements through cleaner air and waterways, associated increases in tourism revenues, and reductions in structural damage attributable to contaminated air or water. Recycling of inputs, byproducts and waste heat, which is likely to take place in conjunction with some of the industrial pollution control investments, offers potential financial benefits to the individual firms.

75. The project would have a substantial institution building impact. It would strengthen the ongoing programs of the concerned agencies by helping to train staff, to develop and to provide important physical facilities. The project would also promote coordination within and between the various agencies involved in pollution control activities.

#### Project Risks

76. Inadequate monitoring and enforcement of pollution control regulations and the complex coordination required between agencies are the main risks associated with the project. However, the government has shown a strong commitment to reducing pollution by establishing a new law and a vehicular emissions testing program for Mexico City. The complementary actions planned under the project, as described in the project execution paper, and the joint annual reviews suggest that the risks are not high.

#### PART V - LEGAL INSTRUMENTS AND AUTHORITY

77. The draft Loan Agreement between the Bank and Nacional Financiera, S.A., the draft Guarantee Agreement between United Mexican States and the Bank, the draft Project Agreement between the Bank and Banco de Mexico, S.A. and the Report of the Committee provided for in Article III, Section 4(iii) of the Articles of Agreement are being distributed to the Executive Directors separately.

78. The following additional conditions of loan effectiveness referred to in the text and listed in Section III of Annex III are of special interest:

- (a) approval of the project execution paper in a form satisfactory to the Bank; and
- (b) approval of FONEI's Guidelines for Evaluation and Financing of Pollution Control Projects in a form satisfactory to the Bank.

79. I am satisfied that the proposed loan would comply with the Articles of Agreement of the Bank.

PART VI -- RECOMMENDATION

80. I recommend that the Executive Directors approve the proposed loan.

A. W. Clausen  
President

Attachments

May 4, 1982



TABLE 3A  
MEXICO - SOCIAL INDICATORS DATA SHEET

LAND AREA (THOUSAND SQ. KM.)	MEXICO			REFERENCE GROUPS (WEIGHTED AVERAGES - MOST RECENT ESTIMATE) <sup>/a</sup>	
	1972.5		MOST RECENT ESTIMATE /b	MIDDLE INCOME	MIDDLE INCOME
	TOTAL	AGRICULTURAL		LATIN AMERICA & CARIBBEAN	EUROPE
AGRICULTURAL	977.2				
GNP PER CAPITA (US\$)	400.0	750.0	1640.0 *	1616.2	2609.1
ENERGY CONSUMPTION PER CAPITA (KILOGRAMS OF COAL EQUIVALENT)	769.2	1141.0	1672.7	1324.1	2368.4
POPULATION AND VITAL STATISTICS					
POPULATION, MID-YEAR (THOUSANDS)	36369.0	50313.0	65509.0 *	.	.
URBAN POPULATION (PERCENT OF TOTAL)	50.8	59.0	65.9	64.2	53.2
POPULATION PROJECTIONS					
POPULATION IN YEAR 2000 (MILLIONS)			108.9	.	.
STATIONARY POPULATION (MILLIONS)			138.0	.	.
YEAR STATIONARY POPULATION IS REACHED			2075	.	.
POPULATION DENSITY					
PER SQ. KM.	18.4	25.5	33.2	34.3	30.6
PER SQ. KM. AGRICULTURAL LAND	36.0	52.0	65.1	34.5	133.9
POPULATION AGE STRUCTURE (PERCENT)					
0-14 YRS.	45.6	46.5	45.3	40.7	30.1
15-64 YRS.	51.0	50.0	51.2	55.3	61.5
65 YRS. AND ABOVE	3.4	3.5	3.5	4.0	8.3
POPULATION GROWTH RATE (PERCENT)					
TOTAL	3.1	3.2	2.9	2.4	1.5
URBAN	4.9	4.8	4.2	3.7	3.1
CRUDE BIRTH RATE (PER THOUSAND)	45.0	42.3	36.0	31.4	22.9
CRUDE DEATH RATE (PER THOUSAND)	12.0	9.0	7.3	8.4	9.1
GROSS REPRODUCTION RATE	3.4	3.2	2.6	2.3	1.6
FAMILY PLANNING					
ACCEPTORS, ANNUAL (THOUSANDS)	..	25.1	842.0	..	..
USERS (PERCENT OF MARRIED WOMEN)	..	..	40.0	..	..
FOOD AND NUTRITION					
INDEX OF FOOD PRODUCTION					
PER CAPITA (1969-71-100)	97.0	100.0	101.0	108.3	119.8
PER CAPITA SUPPLY OF					
CALORIES (PERCENT OF REQUIREMENTS)	110.0	112.0	114.0	107.6	125.7
PROTEINS (GRAMS PER DAY)	65.0	63.0	66.0	65.8	92.5
OF WHICH ANIMAL AND PULSE	27.0	27.0	27.0	34.0	39.7
CHILD (AGES 1-4) MORTALITY RATE	13.0	8.8	5.7	7.6	3.4
HEALTH					
LIFE EXPECTANCY AT BIRTH (YEARS)	58.3	62.4	66.0	64.1	68.9
INFANT MORTALITY RATE (PER THOUSAND)	78.0	74.0	60.0	70.9	25.2
ACCESS TO SAFE WATER (PERCENT OF POPULATION)					
TOTAL	23.5	54.0	62.0	65.7	..
URBAN	..	71.0	70.0	79.7	..
RURAL	..	29.0	49.0	43.9	..
ACCESS TO EXCRETA DISPOSAL (PERCENT OF POPULATION)					
TOTAL	..	..	..	59.9	..
URBAN	..	..	..	75.7	..
RURAL	..	13.0	14.0	30.4	..
POPULATION PER PHYSICIAN	1798.0	1480.6	1815.0	1723.2	973.3
POPULATION PER NURSING PERSON	..	1612.2	1398.0	1288.2	896.6
POPULATION PER HOSPITAL BED					
TOTAL	577.6	828.1 **	851.0	471.2	262.3
URBAN	..	1151.2	758.0	558.0	191.8
RURAL	..	1350.9	1077.0	..	..
ADMISSIONS PER HOSPITAL BED	..	..	..	..	18.2
HOUSING					
AVERAGE SIZE OF HOUSEHOLD					
TOTAL	5.4	5.7	..	..	..
URBAN	5.7	5.7	..	..	..
RURAL	5.2	5.8	..	..	..
AVERAGE NUMBER OF PERSONS PER ROOM					
TOTAL	2.9	2.5	..	..	..
URBAN	2.6	2.2	..	..	..
RURAL	3.4	3.2	..	..	..
ACCESS TO ELECTRICITY (PERCENT OF DWELLINGS)					
TOTAL	..	58.9	..	..	..
URBAN	..	80.7	..	..	..
RURAL	..	27.8	..	..	..

TABLE 3A  
MEXICO - SOCIAL INDICATORS DATA SHEET

	MEXICO			REFERENCE GROUPS (WEIGHTED AVERAGES - MOST RECENT ESTIMATE) /a		
	1960 /b	MOST RECENT ESTIMATE /b		MIDDLE INCOME LATIN AMERICA & CARIBBEAN	MIDDLE INCOME EUROPE	
		1970	/b	/b		
<b>EDUCATION</b>						
ADJUSTED ENROLLMENT RATIOS						
PRIMARY:	TOTAL	80.0	104.0	116.0	101.7	105.9
	MALE	82.0	107.0	119.0	103.0	109.6
	FEMALE	77.0	102.0	114.0	101.5	102.2
SECONDARY:	TOTAL	11.0	22.0	39.0	35.3	55.3
	MALE	14.0	27.0	42.0	34.9	73.2
	FEMALE	8.0	17.0	36.0	35.6	59.5
VOCATIONAL ENROL. (% OF SECONDARY)		24.0	27.0	9.0	30.1	28.4
PUPIL-TEACHER RATIO						
	PRIMARY	44.0	46.0	41.0	29.6	26.8
	SECONDARY	13.0	14.0	17.0	15.7	23.6
ADULT LITERACY RATE (PERCENT)						
		65.0	74.2	82.4	80.0	75.4
<b>CONSUMPTION</b>						
PASSENGER CARS PER THOUSAND						
	POPULATION	14.0	24.5	42.4	42.6	83.9
RADIO RECEIVERS PER THOUSAND						
	POPULATION	90.7	278.4	306.0	215.0	181.6
TV RECEIVERS PER THOUSAND						
	POPULATION	17.9	59.5	88.7	89.0	131.1
NEWSPAPER ("DAILY GENERAL INTEREST") CIRCULATION PER THOUSAND POPULATION						
		73.0	..	66.6	62.8	123.8
CINEMA ANNUAL ATTENDANCE PER CAPITA						
		10.0	5.0	4.2	3.2	5.7
<b>LABOR FORCE</b>						
TOTAL LABOR FORCE (THOUSANDS)						
		10990.9	14488.8	18965.4	..	..
FEMALE (PERCENT)						
		15.2	17.4	19.3	22.6	32.9
AGRICULTURE (PERCENT)						
		55.1	45.0	36.8	35.0	34.0
INDUSTRY (PERCENT)						
		19.5	23.0	25.7	23.2	28.7
PARTICIPATION RATE (PERCENT)						
	TOTAL	30.2	28.8	29.0	31.8	42.3
	MALE	51.1	47.4	46.5	49.0	56.5
	FEMALE	9.2	10.1	11.2	14.6	28.5
ECONOMIC DEPENDENCY RATIO						
		1.6	1.7	1.7	1.4	0.9
<b>INCOME DISTRIBUTION</b>						
PERCENT OF PRIVATE INCOME RECEIVED BY						
	HIGHEST 5 PERCENT OF HOUSEHOLDS	..	..	..	..	..
	HIGHEST 20 PERCENT OF HOUSEHOLDS	61.1/c	60.7	57.7	..	..
	LOWEST 20 PERCENT OF HOUSEHOLDS	3.4/c	3.3	2.9	..	..
	LOWEST 40 PERCENT OF HOUSEHOLDS	9.8/c	9.9	9.9	..	..
<b>POVERTY TARGET GROUPS</b>						
ESTIMATED ABSOLUTE POVERTY INCOME LEVEL (US\$ PER CAPITA)						
	URBAN	..	..	270.0	..	..
	RURAL	..	..	216.0	187.6	..
ESTIMATED RELATIVE POVERTY INCOME LEVEL (US\$ PER CAPITA)						
	URBAN	..	..	471.0	513.9	..
	RURAL	..	..	471.0	362.2	385.1
ESTIMATED POPULATION BELOW ABSOLUTE POVERTY INCOME LEVEL (PERCENT)						
	URBAN	..	..	..	..	..
	RURAL	..	..	..	..	..

.. Not available  
. Not applicable.

NOTES

/a The group averages for each indicator are population-weighted arithmetic means. Coverage of countries among the indicators depends on availability of data and is not uniform.

/b Unless otherwise noted, data for 1960 refer to any year between 1959 and 1961; for 1970, between 1969 and 1971; and for Most Recent Estimate, between 1976 and 1979.

/c 1963.

May, 1981

\* - The updated 1980 GNP per capita and population estimates shown in the the 1981 World Bank Atlas are \$2,130.0 (at 1978-80 prices) and 67,458 thousand.

\*\* - Total includes specialized hospitals not included in urban/rural figures.

DEFINITIONS OF SOCIAL INDICATORS

Notes: Although the data are drawn from sources generally judged the most authoritative and reliable, it should also be noted that they may not be internationally comparable because of the lack of standardized definitions and concepts used by different countries in collecting the data. The data are, nonetheless, useful to describe orders of magnitude, indicate trends, and characterize certain major differences between countries.

The reference groups are (1) the same country group of the subject country and (2) a country group with somewhat higher average income than the country group of the subject country (except for "Capital Surplus Oil Exporters" group where "Middle Income North Africa and Middle East" is chosen because of stronger socio-cultural affinities). In the reference group data the averages are population weighted arithmetic means for each indicator and shown only when majority of the countries in a group has data for that indicator. Since the coverage of countries among the indicators depends on the availability of data and is not uniform, caution should be exercised in relating averages of one indicator to another. These averages are only useful in comparing the value of one indicator at a time among country and reference groups.

LAND AREA (thousand sq. km.)

Total - Total surface area comprising land area and inland waters.  
Agricultural - Estimate of agricultural area used temporarily or permanently for crops, pastures, market and kitchen gardens or to its fallow; 1979 data.

GDP PER CAPITA (US\$) - GNP per capita estimates at current market prices, calculated by same conversion method as World Bank Atlas (1977-79 basis); 1960, 1970, and 1979 data.

ENERGY CONSUMPTION PER CAPITA - Annual consumption of commercial energy (coal and lignite, petroleum, natural gas and hydro-, nuclear and geothermal electricity) in kilograms of coal equivalent per capita; 1960, 1970, and 1979 data.

POPULATION AND VITAL STATISTICS

Total Population, Mid-Year (thousands) - As of July 1, 1960, 1970, and 1979 data.

Urban Population (percent of total) - Ratio of urban to total population; different definitions of urban areas may affect comparability of data among countries; 1960, 1970, and 1979 data.

Population Projections

Population in year 2000 - Current population projections are based on 1980 total population by age and sex and their mortality and fertility rates. Projection parameters for mortality rates comprise of three levels assuming life expectancy at birth increasing with country's per capita income level, and female life expectancy stabilizing at 77.5 years. The parameters for fertility rate also have three levels assuming decline in fertility according to income level and past family planning performance. Each country is then assigned one of these nine combinations of mortality and fertility trends for projection purposes.

Stationary population - In a stationary population there is no growth since the birth rate is equal to the death rate, and also the age structure remains constant. This is achieved only after fertility rates decline to the replacement level of unit net reproduction rate, when each generation of women replaces itself exactly. The stationary population size was estimated on the basis of the projected rates of the population in the year 2000, and the rate of decline of fertility rate to replacement level.

Year stationary population is reached - The year when stationary population size has been reached.

Population Density

Per sq. km. - Mid-year population per square kilometer (100 hectares) of total area; 1960, 1970 and 1979 data.  
Per sq. km. agricultural land - Computed as above for agricultural land only; 1960, 1970 and 1979 data.

Population Age Structure (percent) - Children (0-14 years), working-age (15-64 years), and retired (65 years and over) as percentages of mid-year population; 1960, 1970, and 1979 data.

Population Growth Rate (percent) - total - Annual growth rates of total mid-year population for 1950-60, 1960-70, and 1970-79.  
Population Growth Rate (percent) - urban - Annual growth rates of urban populations for 1950-60, 1960-70, and 1970-79.

Crude Birth Rate (per thousand) - Annual live births per thousand of mid-year population; 1960, 1970, and 1979 data.  
Crude Death Rate (per thousand) - Annual deaths per thousands of mid-year population; 1960, 1970, and 1979 data.

Gross Reproduction Rate - Average number of daughters a woman will bear in her normal reproductive period if she experiences present age-specific fertility rates; usually five-year averages ending in 1960, 1970, and 1979.

Family Planning - Acceptors, Annual (thousands) - Annual number of acceptors of birth-control devices under auspices of national family planning program.  
Family Planning - Users (percent of married women) - Percentage of married women of child-bearing age (15-44 years) who use birth-control devices to all married women in same age group.

FOOD AND NUTRITION

Index of Food Production per Capita (1965=100) - Index of per capita annual production of all food commodities. Production excludes seed and feed and is on calendar year basis. Commodities cover primary goods (e.g. sugarcane instead of sugar) which are edible and contain nutrients (e.g. coffee and tea are excluded). Aggregate production for each country is based on national average producer price weights; 1961-65, 1970, and 1979 data.  
Per capita supply of calories, percent of requirements - Computed from energy equivalent of net food supplies available in country per capita per day. Available supplies comprise domestic production, imports less exports, and changes in stocks. Net supplies exclude animal feed, seeds, quantities used in food processing, and losses in distribution. Requirements were estimated by FAO based on physiological needs for some activity and health considering environmental temperature, body weights, age and sex distribution of population, and allowing 10 percent for waste at household level; 1961-65, 1970, and 1979 data.

Per capita supply of protein (grams per day) - Protein content of per capita net supply of food per day. Net supply of food is defined as above. Requirements for all countries established by CSFA provide for minimum allowance of 60 grams of total protein per day and 70 grams of animal and pulse protein, of which 10 grams should be animal protein. These standards are lower than those of 75 grams of total protein and 23 grams of animal protein as an average for the world, proposed by FAO in the Third World Food Survey; 1961-65, 1970 and 1979 data.

Per capita protein supply from animal and pulse - Protein supply of food derived from animals and pulses in grams per day; 1961-65, 1970 and 1979 data.

Child (ages 1-4) Mortality Rate (per thousand) - Annual deaths per thousand in age group 1-4 years, to children in this age group; for most developing countries data derived from life tables; 1960, 1970 and 1979 data.

HEALTH

Life Expectancy at Birth (years) - Average number of years of life remaining at birth; 1960, 1970 and 1979 data.  
Infant Mortality Rate (per thousand) - Annual deaths of infants under one year of age per thousand live births.

Access to Safe Water (percent of population) - total, urban, and rural - Number of people (total, urban, and rural) with reasonable access to safe water supply (includes treated surface water or untreated but uncontaminated water such as that from protected boreholes, springs, and sanitary wells) as percentages of their respective populations. In an urban area a public fountain or standpost located not more than 250 meters from a house may be considered as being within reasonable access of that house. In rural areas reasonable access would imply that the housewife or members of the household do not have to spend a disproportionate part of the day in fetching the family's water needs.

Access to Excreta Disposal (percent of population) - total, urban, and rural - Number of people (total, urban, and rural) served by excreta disposal as percentages of their respective populations. Excreta disposal may include the collection and disposal, with or without treatment, of human excreta and wastewater by water-borne systems or the use of pit privies and similar installations.

Population per Physician - Population divided by number of practicing physicians qualified from a medical school at university level.  
Population per Nursing Person - Population divided by number of practicing male and female graduate nurses, practical nurses, and assistant nurses.

Population per Hospital Bed - total, urban, and rural - Population (total, urban, and rural) divided by their respective number of hospital beds available in public and private general and specialized hospital and rehabilitation centers. Hospitals are establishments permanently staffed by at least one physician. Establishments providing principally curative care are not included. Rural hospitals, however, include health and medical centers not permanently staffed by a physician (but by a medical assistant, nurse, midwife, etc.) which offer in-patient accommodation and provide a limited range of medical facilities. For statistical purposes urban hospitals include WHO principal, general hospitals, and rural hospitals local or rural hospitals and medical and maternity centers. Specialized hospitals are included only under total.  
Admissions per Hospital Bed - Total number of admissions to or discharges from hospitals divided by the number of beds.

HOUSING

Average Size of Household (persons per household) - total, urban, and rural - A household consists of a group of individuals who share living quarters and their main meals. A boarder or lodger may or may not be included in the household for statistical purposes.

Average number of persons per room - total, urban, and rural - Average number of persons per room in all urban, and rural occupied conventional dwellings, respectively. Dwellings exclude non-permanent structures and unoccupied parts.

Access to Electricity (percent of dwellings) - total, urban, and rural - Conventional dwellings with electricity in living quarters as percentage of total, urban, and rural dwellings respectively.

EDUCATION

Adjusted Enrollment Ratio  
Primary school - total, male and female - Gross total, male and female enrollment of all ages at the primary level as percentage of respective primary school-age population; normally includes children aged 6-11 years but adjust for different lengths of primary education; for countries with universal education enrollment may exceed 100 percent since some pupils are below or above the official school age.

Secondary school - total, male and female - Computed as above; secondary education requires at least four years of approved primary instruction; provides general, vocational, or teacher training instructions for pupils usually of 12 to 17 years of age; correspondence courses are generally excluded.

Vocational enrollment (percent of secondary) - Vocational institutions include technical, industrial, or other programs which operate independently or as departments of secondary institutions.

Pupil-teacher ratio - primary, and secondary - Total students enrolled in primary and secondary levels divided by numbers of teachers in the corresponding levels.

Adult literacy rate (percent) - Literate adults (able to read and write) as a percentage of total adult population aged 15 years and over.

CONSUMPTION

Passenger Cars (per thousand population) - Passenger cars comprise motor cars seating less than eight persons; excludes ambulances, hearses and military vehicles.

Radio Receivers (per thousand population) - All types of receivers for radio broadcasts to general public per thousand of population; excludes unlicensed receivers in countries and in years when registration of radio sets was in effect; sets for recent years may not be comparable since most countries abolish licensing.

TV Receivers (per thousand population) - TV receivers for broadcast to general public per thousand population; excludes unlicensed TV receivers in countries and in years when registration of TV sets was in effect.

Newspaper Circulation (per thousand population) - Shows the average circulation of "daily general interest newspaper", defined as a periodical publication devoted primarily to recording general news. It is considered to be "daily" for its principal purpose at least four times a week.

Cinema Annual Attendance per Capita per Year - Based on the number of tickets sold during the year, including admissions to drive-in cinemas and mobile units.

LABOR FORCE

Total Labor Force (thousands) - Economically active persons, including armed forces and unemployed but excluding housewives, students, etc., covering population of all ages. Definitions in various countries are not comparable; 1960, 1970 and 1979 data.

Female (percent) - Female labor force as percentage of total labor force.  
Agriculture (percent) - Labor force in farming, forestry, hunting and fishing as percentage of total labor force; 1960, 1970 and 1979 data.

Industry (percent) - Labor force in mining, construction, manufacturing and electricity, water and gas as percentage of total labor force; 1960, 1970 and 1979 data.

Participation Rate (percent) - total, male, and female - Participation or activity rates are computed as total, male, and female labor force as percentages of total, male and female population of all ages respectively; 1960, 1970, and 1979 data. These are based on ILO's participation rates reflecting age-sex structure of the population, and long time trend. A few estimates are from national sources.

Economic Dependency Ratio - Ratio of population under 15 and 65 and over to the total labor force.

INCOME DISTRIBUTION

Percentage of Private Income (both in cash and kind) - Received by richest 5 percent, richest 10 percent, poorest 20 percent, and poorest 40 percent of households.

POVERTY TARGET GROUPS

The following estimates are very approximate measures of poverty levels, and should be interpreted with considerable caution.  
Estimated Absolute Poverty Income Level (US\$ per capita) - urban, and rural - Absolute poverty income level is that income level below which a minimal nutritionally adequate diet plus essential non-food requirements is not affordable.

Estimated Relative Poverty Income Level (US\$ per capita) - urban and rural - Rural relative poverty income level is one-third of average per capita personal income of the country. Urban level is derived from the rural level with adjustment for higher cost of living in urban areas.

Estimated Population Below Absolute Poverty Income Level (percent) - urban and rural - Percent of population (urban and rural) who are "absolute poor".

	A C T U A L					Prelimi- nary Estimates	P R O J E C T I O N			Growth Rates			As % of GDP		
	1970	1975	1977	1979	1980		1981	1982	1983	1985	1970-75	1975-80	1980-82	1970	1980
	Constant 1972 Prices, US\$ Millions														
<b>NATIONAL ACCOUNTS</b>															
GDP	36,971.7	48,508.4	50,966.2	58,836.1	63,119.3	67,512.9	65,471.4	72,110.7	78,395.4	6.7	5.3	4.3	99.7	96.9	
Gains in terms of trade	120.1	+88.5	352.2	752.5	2,049.5	1,461.1	1,706.9	1,741.5	1,801.4	-	-	-	0.3	3.1	
GDY	37,091.2	49,196.9	51,318.5	59,628.7	65,168.9	68,974.0	71,578.3	73,852.2	80,196.8	6.2	5.8	3.7	100.0	100.0	
Imports (Incl. NFS)	4,411.3	6,661.0	4,819.6	7,677.5	10,087.6	13,108.4	12,051.0	13,016.4	15,135.9	11.0	8.9	4.3	11.9	15.5	
Exports	3,273.0	3,762.8	4,419.3	5,932.4	7,029.7	11,719.2	11,251.5	13,173.3	15,124.7	3.8	13.6	8.5	8.6	10.8	
Resource Gap	1,138.3	2,898.2	400.3	1,745.4	3,058.1	1,383.2	1,199.5	-156.9	1.2	29.7	1.1	-24.0	9.1	4.7	
Consumption	30,935.2	40,878.7	41,999.5	47,803.7	51,358.5	51,401.9	52,690.9	53,203.8	57,786.6	6.1	4.8	4.3	83.4	78.8	
Investment	7,174.8	10,527.9	9,367.0	12,777.6	14,819.1	17,500.2	18,380.0	18,750.0	20,620.0	9.4	7.5	5.8	19.3	22.7	
Gross Dom. Savings	6,156.6	8,318.7	9,327.0	11,824.5	13,810.4	17,572.1	18,887.4	20,648.4	22,410.2	6.9	10.4	9.3	16.6	21.2	
Gross Nat. Savings	5,820.4	7,541.7	8,478.4	10,391.9	12,249.2	11,032.8	17,896.4	19,073.2	21,090.1	6.2	10.0	5.8	15.7	18.8	
<b>TRADE IN GOODS AND SERVICES</b>															
Current Prices, US\$ Millions															
IMPORTS, TOTAL	3,416.9	8,636.7	7,855.0	17,051.9	25,596.3	32,714.9	30,881.2	33,727.0	45,149.5	23.5	25.4	10.3	100.0	100.0	
Consumption	472.4	949.7	779.2	1,835.8	4,085.6	5,246.8	5,295.8	5,251.6	9,210.7	22.2	36.8	13.3	13.8	15.9	
of which: Food	(77.6) 1/	499.3	475.1	1,086.3	2,956.2	3,654.3	3,005.3	4,389.0	5,242.6	-	21.7	11.4	2.3	11.8	
Petroleum & Product	35.0	269.1	107.5	259.2	299.4	-	-	-	-	-	39.7	25.1	-	1.0	
Non-Factor Services	1,064.7	2,022.9	1,934.3	4,915.5	6,962.2	9,484.1	9,147.3	9,483.3	11,858.8	13.7	29.0	9.1	31.2	27.2	
Other Goods	1,844.8	5,395.0	5,034.0	10,035.4	14,249.1	17,983.9	16,438.1	18,992.1	24,080.0	17.8	17.2	9.4	54.0	55.7	
EXPORTS, TOTAL	2,745.4	6,081.7	7,795.1	15,285.9	23,569.7	29,049.5	28,946.5	35,260.2	46,464.1	19.8	30.8	14.2	100.0	100.0	
Selected Agricultural Goods	621.2	814.8	1,439.1	2,153.4	1,941.6	1,786.1	2,021.0	2,309.8	2,965.9	6.5	20.2	10.2	22.6	8.2	
Petroleum & Product	38.4	450.1	1,029.4	3,974.2	10,422.5	14,653.9	12,030.0	15,000.0	19,526.6	61.0	87.8	11.5	1.4	44.2	
Minerals	246.3	423.4	444.9	805.2	1,366.5	1,197.8	1,367.2	1,560.9	1,987.2	16.9	25.0	9.8	8.9	5.8	
Manufactures	443.9	1,186.9	1,611.0	2,351.7	2,437.3	2,177.6	2,587.0	3,352.8	4,325.2	26.3	18.5	14.8	16.2	10.3	
Other Goods	*	119.3	79.9	1.7	3.2	4.8	7.1	11.6	24.5	*	19.5	*	*	8	
Non-Factor Services	1,397.7	3,077.2	3,190.8	5,999.7	7,418.6	9,229.3	10,954.2	13,025.9	17,634.7	19.3	20.5	19.7	50.9	31.5	
<b>TRADE INDICES (1972=100)</b>															
Average 72=100															
Export Price Index	88.2	161.4	175.2	261.4	367.0	392.4	399.3	416.3	469.3	16.6	25.5	4.9			
Import Price Index	91.0	148.0	164.1	187.9	207.9	229.1	220.3	237.3	273.1	12.5	8.1	5.1			
Terms of Trade	96.9	109.1	106.8	140.0	176.5	171.3	181.3	175.4	171.8	2.5	12.4	-0.3			
<b>VALUE ADDED BY SECTOR</b>															
Constant 1972 Prices, US\$ Millions															
Primary	4,139.1	4,483.4	4,771.6	4,955.7	5,227.9	6,547.3	6,628.6	6,893.7	7,456.2	1.7	3.4	4.1	11.2	8.3	
Secondary	12,417.3	16,948.7	18,245.7	22,084.6	23,878.0	25,920.8	26,469.7	27,157.9	28,588.5	7.1	7.4	3.4	33.6	37.8	
Tertiary	20,415.3	27,076.3	27,943.9	31,795.8	34,013.6	35,044.7	36,773.1	38,059.1	42,350.7	5.8	4.8	5.0	55.2	53.9	
Total GDP	36,971.7	48,508.4	50,966.2	58,836.1	63,119.3	67,512.8	69,871.4	72,110.7	78,395.4	6.0	5.6	4.3	100.0	100.0	
<b>CONSOLIDATED PUBLIC SECTOR FINANCES</b>															
Millions 1972 US\$															
Current Receipts	5,953.3	9,519.9	10,605.6	13,671.9	15,867.9	16,218.7									
Current Expend.	4,340.1	9,016.4	9,203.9	10,850.5	12,481.4	13,978.7									
Public Savings	1,533.1	593.6	1,402.7	2,821.3	3,386.5	2,240.0									
Investment	2,277.7	4,883.7	4,426.5	6,820.3	6,893.7	7,996.1									
Deficit (Net)	666.1	4,308.8	2,927.0	3,958.2	4,907.7	5,756.1									
<b>Domestic Prices</b>															
General Price Index (1972=100)	90.4	159.7	233.4	331.1	418.2	538.2									
Exchange Rate	12.49	12.49	22.58	22.81	22.95	26.22 2/									
<b>ALLOCATION OF GROSS PUBLIC SECTOR EXPENDITURES</b>															
										Growth Rates			As % of Total		
													1979		
Energy	5,369.1	6,474.2	7,736.9	10,549.5	n.a.	n.a.				18.4			37.3		
Transport and Communications	1,751.1	1,503.3	1,537.4	1,403.2	n.a.	n.a.				-5.4			4.4		
Social Expenditures	4,221.9	4,602.0	4,771.8	5,338.3	n.a.	n.a.				6.0			16.9		
Industry	1,840.0	1,455.6	1,392.4	1,828.5	n.a.	n.a.				2.8			5.8		
Agric. & Rural Dev.	1,977.1	1,617.5	1,562.7	1,474.3	n.a.	n.a.				-7.1			-7.7		
Gen. Administration					n.a.	n.a.							29.9		
& Defense	3,290.8	5,160.8	5,552.2	9,384.1	n.a.	n.a.				-1.8			5.2		
Commerce	1,331.7	1,436.9	1,785.2	1,644.0	n.a.	n.a.							0.2		
Tourism	63.2	73.5	53.9	60.0	n.a.	n.a.				-1.0			0.2		
Total	19,843.9	22,323.7	24,392.5	31,681.0	n.a.	n.a.				12.4			100.0		
<b>SELECTED INDICATORS</b>															
ICOR	2.62	3.60	5.94	2.50	4.31	3.37				3.98	3.66				
Import Elasticity	2.60	0.60	-4.6	1.59	4.61	4.30				1.64	2.80				
Marginal Savings Ratio	2.61	0.23	0.17	0.19	0.17	0.16				0.16	0.24				
<b>LABOR FORCE</b>															
		In Millions			As % of Total					Growth Rate					
	1960	1970	1978	1980	1970	1978				1960-70	1970-78				
Agriculture	5.4	4.5	4.9	50.5	31.9	29.2				-16.7	8.9				
Industry	2.1	2.7	3.7	19.6	20.9	22.0				28.6	37.0				
Services	3.2	5.7	8.2	29.9	44.2	48.6				78.1	43.9				
Total	10.7	13.9	16.8	100.0	100.0	100.0				20.6	31.0				
<b>VALUE ADDED PER WORKER</b>															
		1972 Prices			As % of Total					Growth Rate					
	1960	1970	1978	1980	1970	1980				1960-70	1970-78				
Agriculture	608.0	919.8	1,020.4	34.7	32.1	31.6				4.4	1.4				
Industry	2,468.9	4,588.9	5,421.6	120.7	160.1	167.9				5.3	2.2				
Services	3,222.8	7,582.5	7,600.0	183.6	125.0	111.1				2.3	-				
Total	1,755.6	2,665.9	3,229.0	100.0	100.0	100.0				5.0	1.6				

1/ The classification for this series has been changing therefore the figures might not represent exactly the same criteria over the years.

2/ December 30, 1981

\* Negligible



THE STATUS OF BANK GROUP OPERATIONS IN MEXICO

A. Statement of Bank Loans (as of March 31, 1982) 1/

Loan No.	Year	Borrower	Purpose	Amount less Cancellations	Undisbursed
44 loans fully disbursed				2,438.6	
970-5	1974	NAFINSA	Irrigation	47.0	4.2
1022	1974	NAFINSA	Airports	25.0	0.2
1053-5	1974	NAFINSA	Integrated Rural Development	38.0	15.2
1111-5	1975	NAFINSA	Irrigation	50.0	21.3
1186	1975	BANOBRAS	Water Supply	40.0	11.8
1420-5	1977	NAFINSA	Tourism	42.0	3.0
1462-5	1977	NAFINSA	Integrated Rural Development	120.0	25.1
1552-5	1978	NAFINSA	Industry	47.0	1.0
1553-5	1978	NAFINSA	Agriculture	56.0	36.8
1554	1978	BANOBRAS	Urban Development	16.5	9.2
1560-5	1978	NAFINSA	Industry	100.0	4.9
969-6	1979	NAFINSA	Irrigation	25.0	1.2
1643-5	1979	NAFINSA	Small-scale Agri.	60.0	51.7
1671	1979	BANOBRAS	Highways	120.0	80.8
1686-5	1979	FERTIMEX and NAFINSA	Industry	80.0	36.6
1706-5	1979	NAFINSA	Irrigation	92.0	82.7
1712-5	1979	NAFINSA	Industry	175.0	97.4
1820-5	1980	NAFINSA	Small and Medium Scale Mining	40.0	36.1
1858-5	1980	NAFINSA	Irrigation	160.0	159.2
1881	1980	NAFINSA	Small and Medium Scale Industry	100.0	54.7
1891-5	1980	NAFINSA	Agricultural Credit	325.0	262.1
1908	1981	NAFINSA	Irrigation	23.0	21.0
1913	1981	BANOBRAS	Water Supply	125.0	117.4
1929	1981	BANOBRAS	Railways	150.0	118.3
1945	1981	NAFINSA	Rainfed Agri.	280.0	249.3
1964	1981	PANPESCA	Port Development	14.0	14.0
1990	1981	BANOBRAS	Urban Development II	164.0	164.0
2042	1982	NAFINSA	Technical Training	90.0	88.7
2043	1982	NAFINSA 2/	Integrated Rural Development	175.0	175.0
TOTAL				<u>5,218.1</u>	<u>3/</u>
Of which has been repaid to the Bank				812.8	
Total now outstanding				4,405.3	
Amount sold				92.3	
of which has been repaid				<u>92.3</u>	0.0
Total now held by Bank 3/				4,405.3	
Total undisbursed					<u>1,942.9</u>

1/ Loan 2100, for \$180 million, made in FY1982 to NAFINSA for an Irrigation Project, was approved by the Executive Directors on March 16, 1982, but has not yet been signed.

2/ Loan not yet effective.

3/ Prior to exchange adjustments.

B. STATEMENT OF IFC INVESTMENTS (as of March 31, 1982)

Fiscal Year	Obligor	Type of Business	US\$ Million		
			Loan	Equity	Total
1958/59	Industrias Perfect Circle, S.A. <u>1/</u>	Industrial Equipment	0.8	--	0.8
1958	Bristol de Mexico, S.A. <u>1/</u>	A.C. Engine Overhaul	0.5	--	0.5
1961	Acero Solar, S.A. <u>1/</u>	Twist Drills	0.3	--	0.3
1962/65/ 66/68	Compania Fundidora Fierro y Acero de Monterrey, S.A.	Steel	2.3	21.4	23.7
1963	Tubos de Acero de Mexico, S.A. <u>1/</u>	Steel	0.9	0.1	1.0
1963	Quimica del Rey, S.A. <u>1/</u>	Sodium Sulphate	0.7	--	0.7
1964/66	Industria del Hierro, S.A. <u>1/</u>	Construction Equipment	--	2.0	2.0
1970	Minera del Norte, S.A. <u>1/</u>	Iron Ore Mining	1.5	--	1.5
1971	Celanese Mexicana, S.A.	Textiles	12.0	--	12.0
1972	Promotora de Papel Periodico, S.A. de C.V. <u>1/</u>	Pulp and Paper	<u>2/</u>	<u>2/</u>	<u>2/</u>
1973/79	Cemento Veracruz, S.A.	Cement	15.9	--	15.9
1974/81	Cancun Aristos Hotel	Tourism	1.0	0.3	1.3
1975/78	Mexinox, S.A.	Steel	12.0	3.2	15.2
1978/81	Papeles Ponderosa, S.A.	Pulp and Paper	9.0	3.5	12.5
1978	Tereftalatos Mexicanos, S.A.	Petrochemicals	19.0	--	19.0
1979	Cementos Tolteca, S.A. <u>3/</u>	Cement	100.0	--	100.0
1979/81	Hotel Camino Real Ixtapa, S.A.	Tourism	--	3.1	3.1
1979	Conductores Monterrey, S.A. <u>3/</u>	Electrical Wire and Cable	18.0	--	18.0
1980	Industrias Resistol, S.A. <u>3/</u>	Particleboard	25.0	--	25.0
1980	Vidrio Plano de Mexico S.A. <u>3/</u>	Flat Glass	114.9	--	114.9
1980	Minera Real de Angeles, S.A. de C.V. <u>3/</u>	Mining	110.0	--	110.0
1981	Celulosicos Centauro S.A. <u>3/</u>	Pulp and Paper	59.5	--	59.5
1981	Corporacion Agroindustrial, S.A.	Agri-Business	<u>11.3</u>	<u>3.0</u>	<u>14.3</u>
Total Gross Commitments			514.6	36.6	551.2
Less Cancellations, Terminations, Repayment and Sales			<u>382.0</u>	<u>22.1</u>	<u>404.1</u>
Total Commitments Now Held by IFC			<u>132.6</u>	<u>14.5</u>	<u>147.1</u>
Total undisbursed (including participants)			<u>35.4</u>	<u>1.5</u>	<u>36.9</u>

1/ Investments which have been fully cancelled, terminated, written off, sold, redeemed or repaid.

2/ US\$25,000.

3/ Gross commitment including amounts sold to participants.

C. Status of Projects in Execution (as of March 31, 1982). 1/

Ln. No. 970 Rio Sinaloa Irrigation Project: US\$47 Million Loan of March 1, 1974; Effectiveness Date: May 29, 1974. Closing Date: June 30, 1982.

Project authorities have rephased construction; a substantial reduction in project scope was approved by the Executive Directors (R79-51 of March 13, 1979). Progress is now satisfactory and the project will be completed on schedule.

Ln. No. 1022 Airport Development Project: US\$25 Million Loan of June 28, 1974; Effectiveness Date: September 16, 1974. Closing Date: June 30, 1982.

Although behind schedule, this project is proceeding satisfactorily. Project components that have been completed are achieving higher rates of utilization than envisaged at time of appraisal because of greatly increased air traffic in Mexico. Four of the six project airports are completed, and the other two will be finished by mid-1982.

Ln. No. 1053 Papaloapan Integrated Rural Development Project: US\$50 Million Loan of November 15, 1974; Subsequently reduced to US\$38 million; Effectiveness Date: January 27, 1975. Closing Date: December 30, 1982.

Project implementation experienced delays mostly due to management difficulties and inadequate budget support. At the borrower's request US\$12 million of the loan were cancelled on March 5, 1981. A reprogramming of the project and extension of the closing date to December 30, 1982 were approved by the Executive Directors on January 4, 1982 to allow completion of the modified project.

Ln. No. 1111 Seventh Irrigation Project - Bajo Rio Bravo and Bajo Rio San Juan: US\$150 Million Loan of May 8, 1975; Subsequently reduced to US\$50 Million; Effectiveness Date: July 30, 1975; Closing Date: December 31, 1982.

In view of the project's size, complexity and high cost, the Government and the Bank agreed to phase project development over a longer period of time and substantially reduce the scope of the project to be financed under the Bank loan (R77-305 of December 13, 1977 and R79-56 of March 19, 1979). Progress on most components of the revised project is now satisfactory. The project is expected to be completed ahead of schedule.

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1/ These notes are designed to inform the Executive Directors regarding the progress of projects in execution and, in particular, to report any problems which are being encountered and the action being taken to remedy them. They should be read in that sense, and with the understanding that they do not purport to present a balanced evaluation of strengths and weaknesses in project execution.



Ln. No. 1186 Medium-Size Cities Water Supply and Sewerage Project: US\$40 million Loan of January 13, 1976; Effectiveness Date: April 26, 1976. Closing Date: January 14, 1984.

Subloan agreements have been signed with all cities included in the project, fully committing the loan. Five out of seven subprojects have been completed and works are progressing satisfactorily.

Ln. No. 1420 Baja California Tourism Project: US\$42 Million Loan of July 5, 1977; Effectiveness Date: June 28, 1978; Closing Date: June 30, 1982.

After extension of the closing date by one year, due to difficulties in internal coordination, the project is progressing satisfactorily.

Ln. No. 1462 Integrated Rural Development Project - PIDER II: US\$120 million Loan of July 5, 1977; Effectiveness Date: October 28, 1977; Closing Date: July 31, 1982.

The project is proceeding satisfactorily; major efforts to decentralize project planning and execution have been made. The result is increased beneficiary participation and better coordination between executing agencies at the field level. However, decentralization, reprogramming of micro-region investment plans, and several changes in management have resulted in delay in project execution; the closing date will have to be extended.

Ln. No. 1552 Small- and Medium-Scale Industrial Development Project; US\$47 million Loan of May 4, 1978; Effectiveness Date: January 12, 1979; Closing Date: June 30, 1982.

After some initial delays, the integrated program to assist industrial enterprises is making rapid progress. Forty-eight extension agents have now received full training and have been assigned to 14 regional offices. The loan has been fully committed.

Ln. No. 1553 Tropical Agricultural Development Project: US\$56 Million Loan of September 27, 1978; Effectiveness Date: January 12, 1979; Closing Date: December 31, 1983.

The six pilot projects have been approved by the Bank. Project authorities are making good progress in the agricultural development program of each pilot project. The applied research programs are proceeding on schedule. Disbursements are improving.

Ln. No. 1554 Lazaro Cardenas Conurbation Development Project: US\$16.5 Million Loan of September 27, 1978; Effectiveness Date: February 14, 1979; Closing Date: June 30, 1982.

The shelter-related component and the training centers are progressing satisfactorily. Progress has also been made in the production credit component, but delays still remain in the implementation of the industrial premises and river control components and the studies. A request from the Borrower for reallocating funds to the shelter-related components is expected soon.

Ln. No. 1560 FONEI III: US\$100 Million Loan of September 27, 1978; Effectiveness Date: January 12, 1979; Closing Date: June 30, 1982.

The loan has been fully committed.

Ln. No. 969-6 Rio Paluco Irrigation Project; US\$25 Million Loan of September 27, 1978; Effectiveness Date: January 12, 1979. Closing Date: June 30, 1982.

Major project civil works are on schedule and expected to be completed by the closing date. Progress in agricultural development has been slower than infrastructure construction. The technical assistance program has been strengthened to emphasize better water utilization and intensive agriculture.

Ln. No. 1643 Small Scale Agricultural Infrastructure Project: US\$60 Million Loan of February 6, 1979; Effectiveness Date: April 13, 1979; Closing Date: June 30, 1983.

Most livestock and irrigation subprojects to be included in the Project have been approved by the Bank, and the Government is accelerating preparation of withdrawal applications.

Ln. No. 1671 Highway Sector Project: US\$120 Million Loan of August 23, 1979; Effectiveness Date: October 12, 1979; Closing Date: June 30, 1984.

Commitments are ahead of schedule but disbursements are behind schedule because of budget cuts in 1979 and because of delays in submitting reimbursement applications to the Bank. The authorities have agreed to increase budget allocations and speed up disbursement requests.

Ln. No. 1686 Second Fertilizer Project - Lazaro Cardenas: US\$80 Million Loan of May 18, 1979; Effectiveness Date: September 21, 1979; Closing Date: October 31, 1982.

Orders for most of the equipment have been placed and about 30 percent of the construction work is committed with about 22 percent completed. The project is now about 17 months behind schedule and runs the risk of further delays unless implementation arrangements are improved. FERTIMEX's management is considering steps to improve implementation.

Ln. No. 1706 Rio Fuerte/Rio Sinaloa Irrigation Project: US\$92 Million Loan of July 30, 1979; Effectiveness Date: October 5, 1979; Closing Date: July 31, 1986.

Project implementation is on schedule.

Ln. No. 1712 FONEI IV: US\$175 Million Loan of July 30, 1979; Effectiveness Date: October 5, 1979; Closing Date: June 30, 1984.

Demand for industrial financing continues to be strong, and most of the loan has been committed.

Ln. No. 1820 Small and Medium Scale Mining Development Project: US\$40 Million Loan of August 18, 1980; Effectiveness Date: December 4, 1980; Closing Date: June 30, 1984.

Project execution is being initiated. Demand for credit has been less than originally anticipated due to softening of mineral prices.

Ln. No. 1858 Apatzingan Irrigation Project; US\$160 Million Loan of September 29, 1980; Effectiveness Date: December 19, 1980; Closing Date: June 30, 1987.

Contracting for the main civil works is progressing satisfactorily and a strengthened technical assistance program is underway. However, disbursements are lagging behind due to delays in processing.

Ln. No. 1881 Second Small and Medium-Scale Industry Development Project; US\$100 Million Loan of September 29, 1980; Effectiveness Date: December 22, 1980; Closing Date: December 31, 1984.

About one-third of the loan has been committed. The program is making satisfactory progress.

Ln. No. 1891 Seventh Agricultural Credit Project: US\$325 Million Loan of August 15, 1980; Effectiveness Date: November 17, 1980; Closing Date: March 31, 1984.

No major problems in implementation are foreseen. The review panels in the regional offices for speedy loan processing have been established.

- Ln. No. 1908 Ocoroni Irrigation Project: US\$23 Million Loan of March 2, 1981; Effectiveness Date: July 1, 1981; Closing Date: June 30, 1986.  
Project implementation is on schedule.
- Ln. No. 1913 Second Medium-Size Cities Water Supply and Sewerage Project: US\$125 Million Loan of January 23, 1981; Effectiveness Date: June 23, 1981; Closing Date: December 31, 1984.  
Subloan agreements have been signed between BANOBRAS and seven cities, and investment proposals amounting to 88 percent of project costs have been submitted to the Bank. Completion of works is ahead of schedule in Toluca and Queretaro, but overall the project is one and a half years behind schedule due to delays in completion of final designs.
- Ln. No. 1929 Fourth Railway Project: US\$150 Million Loan of February 12, 1981; Effectiveness Date: June 9, 1981; Closing Date: June 30, 1984.  
Project execution is proceeding on schedule.
- Ln. No. 1945 Rainfed Agricultural Development Project: US\$280 Million Loan of March 2, 1981; Effectiveness Date: July 1, 1981; Closing Date: June 30, 1986.  
Project implementation has begun on schedule. Staffing of the ten project districts is near completion, and district operational committees have been established.
- Ln. No. 1964 Ports Development Preparation Project: US\$14.0 Million Loan of May 7, 1981; Effectiveness Date: August 24, 1981; Closing Date: December 31, 1984.  
Project implementation is on schedule; about 40 percent of the loan has been committed.
- Ln. No. 1990 Second Urban and Regional Development Project: US\$164 million Loan of August 13, 1981; Effective Date: January 12, 1982; Closing Date: December 31, 1986.  
Signing of subsidiary loan agreements is still proceeding. Good progress is taking place in the shelter-related component in Tabasco, but the remaining components are suffering delays.
- Ln. No. 2042 Technical Training Project: US\$90 Million Loan of July 31, 1981; Effectiveness Date: November 25, 1981; Closing Date: June 30, 1984.  
Project implementation is proceeding rapidly.
- Ln. No. 2043 Integrated Rural Development (PIDER III): US\$175 Million Loan of November 6, 1981; Effectiveness Date: \_\_\_\_\_; Closing Date: September 30, 1985.  
The loan is not yet effective.

Ln. No. 2100 Bajo Rio Bravo/Bajo Rio San Juan Irrigation Rehabilitation  
Project II: US\$180 million Loan of \_\_\_\_\_ ;  
Effectiveness Date: \_\_\_\_\_ ; Closing Date: December 31, 1984.

This loan, approved by the Executive Directors on March 16, 1982,  
has not yet been signed.

Ln. No. 2100 Bajo Rio Bravo/Bajo Rio San Juan Irrigation Rehabilitation  
Project II: US\$180 million Loan of \_\_\_\_\_;  
Effectiveness Date: \_\_\_\_\_; Closing Date: December 31, 1984.

This loan, approved by the Executive Directors on March 16, 1982,  
has not yet been signed.

MEXICO

POLLUTION CONTROL PROJECT

SUPPLEMENTARY PROJECT DATA SHEET

Section I: Timetable of Key Events

- |                                     |               |
|-------------------------------------|---------------|
| (a) Time to prepare project         | About 2 years |
| (b) Project prepared by:            | SSA/SARH      |
| (c) First presentation to Bank:     | April 1981    |
| (d) Departure of Appraisal Mission: | June 1981     |
| (e) Completion of Negotiations:     | April 1982    |
| (f) Planned date of effectiveness:  | August 1982   |

Section II: Special Bank Implementation Actions

None

Section III: Special Conditions

Conditions of Loan Effectiveness

- (a) Satisfactory operating guidelines for FONAI's pollution control loans had been issued (para 65);
- (b) Approval of the project implementation paper in a form satisfactory to the Bank (para 69);

Other

- (c) Interest rates to beneficiaries would range from ACF-3 to ACF (para 61);
- (d) Bank finance for a single subproject would be limited to US\$5 million in the case of loans to industries and US\$20,000 in the case of loans to automobile garages (para 65);

- (e) Prior Bank approval would be required for:
  - (i) the first FONEI subloans for industrial relocation, for change of production process, and for equipping automotive garages; and
  - (ii) all FONEI subloans involving more than US\$750,000 in Bank finance (para 70); and
- (f) The project components involving strengthening of monitoring and laboratory facilities, and implementation of studies, training, and technical assistance would be done in accordance with programs or terms of reference satisfactory to the Bank (para 66).



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**World Bank**