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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 THE  
COLOMBIAN NATIONAL RAILWAYS  
WITH THE GUARANTEE OF THE REPUBLIC OF COLOMBIA  
FOR THE  
SEVENTH RAILWAY PROJECT

January 27, 1982

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## CURRENCY EQUIVALENTS

Currency Unit = Peso - Col\$

### Average Calendar 1980

US\$1 = Col\$47.280  
Col\$1 = US\$0.02115

### Average Calendar 1981

US\$1 = Col\$54.414  
Col\$1 = US\$0.01838

## WEIGHTS AND MEASURES

1 meter (m)	=	3.281 feet (ft)
1 square kilometer (km <sup>2</sup> )	=	0.386 square mile (mi <sup>2</sup> )
1 cubic meter (m <sup>3</sup> )	=	35.315 cubic feet (ft <sup>3</sup> )
	=	264.2 gallons (gal)
1 kilogram (kg)	=	2.206 pounds (lb)
1 ton (t; metric; 1,000 kg)	=	1.00 short tons (sh. tons)

## GLOSSARY OF ABBREVIATIONS

CNR	Colombian National Railways
COLPUERTOS	Colombian Port Authority
CONPES	Social and Economic Policy Committee of the Cabinet
DAAC	Administrative Department of Civil Aeronautics
DNP	Department of National Planning
DRI	Integrated Rural Development
ECOPETROL	Colombian Petroleum Agency
FAN	National Aeronautics Fund
FNCV	National Rural Roads Fund
FONADE	Economic Development Fund
FVN	National Highway Fund
IDB	Inter-American Development Bank
IDEMA	Government Marketing Institution
MOPT	Ministry of Public Works and Transportation
PAN	National Nutrition Program
PIN	National Integration Plan
SENA	Colombian National Training Center

## FISCAL YEAR

January 1 to December 31

COLOMBIA

SEVENTH RAILWAY PROJECT

LOAN AND PROJECT SUMMARY

Borrower: Colombian National Railways (CNR)  
Guarantor: Republic of Colombia  
Amount: US\$77 million equivalent  
Terms: Repayment in seventeen years, including four years of grace at 11.6% interest per annum.

Project

Description:

The project would support the Government's objective of improving the country's transport infrastructure as well as of lowering transport costs by promoting efficiency in the national railway. The project comprises the first four years of CNR's Five-Year Rehabilitation Program (1982-86), including action targets to strengthen its overall performance. The project has been divided into two tranches, with most items under the second tranche dependent upon potential traffic. The first tranche or Group I of the project consists of: (a) rehabilitation of about 428 km of track; (b) acquisition of four, high-horsepower, diesel locomotives, and related spare parts and 100 wagons; (c) rehabilitation of 139 diesel locomotives, 1,410 freight cars and reconstitution of the stock of locomotive spares; (d) rehabilitation and upgrading of workshop; (e) rehabilitation of freight-handling equipment and purchase of forklift trucks, cranes and parts and equipment for signalling and telecommunications; and (f) technical assistance to study: (i) Bogota-Buenaventura Corridor; (ii) line capacity; (iii) signalling and telecommunications; (iv) tariff structure, cost accounting, financial planning, inventory control and statistical reporting; (v) locomotive repair and scrapping program; (vi) a traffic demand model; (vii) reduction of operating costs, and (viii) training of CNR's technical staff. The second tranche or Group II of the project comprises: (a) rehabilitation of another 83 km of track; (b) purchase of 4 additional locomotives and 100 wagons including related spare parts; and (c) signalling and telecommunications equipment. In view of CNR's checkered past performance the project faces somewhat higher risks than are usual in projects of this type. However, the Government's strong commitment to rehabilitate and strengthen CNR, the appointment of a General Manager of proven competence to head CNR and close supervision by the Bank, should ensure the successful attainment of project objectives.

<u>Estimated Cost:</u>	<u>Local</u>	<u>Foreign</u>	<u>Total</u>
	--(US\$ million equivalent)--		
<u>Permanent Way</u>	35.8	30.3	66.1
<u>Motive Power</u>	2.4	34.2	36.6
<u>Rolling Stock</u>	5.6	14.9	20.5
<u>Workshops</u>	0.9	1.6	2.5
<u>Freight Handling Equipment</u>	0.2	2.9	3.1
<u>Signalling and Telecommunications</u>	0.1	7.2	7.3
<u>Training and Consulting Services</u>	1.5	2.2	3.7
Sub-total	<u>46.5</u>	<u>93.3</u>	<u>139.8</u>
 <u>Contingencies</u>			
Physical	2.3	2.4	4.7
Price	<u>17.6</u>	<u>14.5</u>	<u>32.2</u>
Total Project Cost	<u>66.4</u>	<u>110.2</u>	<u>176.7</u>
 <u>Financing Plan:</u>			
Proposed IBRD loan	-	77.0	77.0
Credit from the Colombian Coffee Federation	1.9	6.9	8.8
UNDP Technical Assistance	-	1.0	1.0
Government Contribution	57.4	22.0	79.5
CNR's Cash Generation	<u>7.1</u>	<u>3.3</u>	<u>10.4</u>
Total	<u>66.4</u>	<u>110.2</u>	<u>176.7</u>

<u>Estimated Disbursements:</u>	<u>FY83</u>	<u>FY84</u>	<u>FY85</u>	<u>FY86</u>
	----- (US\$ million equivalent) -----			
Annual	21.5	37.0	13.0	5.5
Cumulative	21.5	58.5	71.5	77.0

Rate of Return: 26%

Appraisal Report: Report No. 3262b-CO, January 27, 1982

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

REPORT AND RECOMMENDATION OF THE PRESIDENT  
TO THE EXECUTIVE DIRECTORS  
ON A PROPOSED LOAN TO  
THE COLOMBIAN NATIONAL RAILWAYS  
WITH THE GUARANTEE OF THE REPUBLIC OF COLOMBIA  
FOR THE SEVENTH RAILWAY PROJECT

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1. I submit the following report and recommendation on a proposed loan to the Colombian National Railways, with the guarantee of the Republic of Colombia, for the equivalent of US\$77 million to help finance the Seventh Railway Project. The loan would have a term of 17 years, including four years of grace, with interest at 11.6% per annum.

PART I - THE ECONOMY 1/

2. An Economic Report on Colombia (3556-CO) was distributed to the Executive Directors in September 1981. This section on the economy reflects the major findings of this report. Country data sheets are presented in Annex 1.

Background

3. The Colombian economy has become more resilient to external shocks as a result of the structural changes that have occurred over the past 30 years. Rapid economic growth has resulted in a substantial structural transformation of the country from a predominantly rural and self-contained economy to a more diversified urban, industrial, services and open economy. Colombia has reached a point where population pressure on land no longer increases much, if at all. Public sector investment and output now play a greater role, primarily as a result of increased activity on the part of decentralized agencies and public enterprises. Also, greater emphasis on foreign trade has allowed the external sector to grow with non-coffee exports, particularly exports of manufactured goods, expanding rapidly and the range of products sold abroad widening considerably. The growing urban-industrial-services oriented economic activity and a rapid expansion of surplus labor in rural areas attracted by higher wages and better services in the cities has given rise to rapid rural-urban migration. This phenomenon, together with the increased participation of women in the labor force, has been instrumental in reducing poverty and improving income and distribution over time. Financial and capital markets have evolved pari-passu with the growing needs of the economy, and Colombia has become an active participant in international capital markets.

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1/ Substantially unchanged from report for the Upper Magdalena Pilot Watershed Management Project (No. P-3106-CO, November 24, 1981).

4. Real GDP per capita rose by 2.4% p.a. on average during the 1950-80 period, with each succeeding decade registering greater gains in per capita income. This was the result of lower population growth, combined with more rapid GDP growth. Population growth, which had remained in the 3.0% to 3.5% range during the 1950s and early 1960s, declined dramatically after 1965 as a consequence of a sharp fall in the fertility rate. Greater economic and educational opportunities for women, rapid rural-urban migration, rising per capita income and increased effectiveness of family planning programs contributed to the decline in fertility. Colombia's population is currently growing at an annual rate of 2.1%. As a result of the high proportion of women now entering childbearing years, this rate of population growth is likely to continue until the early 1990s.

5. The combination of rising per capita income and expanded public services has brought about a significant improvement in the welfare of the poorest, in both absolute and relative terms. As a result of increased sanitation control, improved diets and better health care, the crude death rate fell by about 50% and life expectancy rose from 48 years in the early 1950s to 63 years currently. The child mortality rate declined from 20 per thousand in the early 1960s to 8 per thousand in the late 1970s. Infant mortality, one of the best indicators of welfare, fell to 65 per thousand in the later 1970s, from about 124 per thousand in the early 1950s. School enrollment ratios have increased substantially at all grade levels since 1960s, and by the late 1970s, 91% of urban children aged 7 to 14 were enrolled in school. The poorest income groups have experienced the greatest increases in electricity and water services in recent years and have benefitted more than the average of the population from services of the national health system. In spite of this progress, Colombia remains largely under-developed, with a relatively small modern sector superimposed on a broad, traditional and economically poor base. Development has been concentrated in relatively few areas of the country, public services are still not available to many of the rural and urban populations and unemployment and underemployment are relatively high. The coverage of health care and water supply requires continuous improvement and adequate housing is not available to a substantial proportion of the population. Rapid migration to the large and medium-sized cities has created urban development problems, with attendant social difficulties. Moreover, in spite of the steady increase in per capita income over the past 30 years, substantial efforts are still required to improve and extend the benefits of development to the poorest income groups.

6. In large part, the achievements of the past thirty years were the results of government efforts to stimulate the productive sectors, provide the required economic and social infrastructure and establish an effective institutional base in the economy. In the 1950s and early 1960s, development policy favored import substitution supported by high tariff protection and the provision of economic infrastructure by the public sector. It was during this period that the country's major communication and transportation networks were developed and the transformation to a semi-industrial economic structure began in earnest. By the mid-1960s, the prospects for further import substitution were substantially diminished and the country was confronted with great economic uncertainty, arising from the fact that economic activity and the balance of payments were heavily influenced by developments in the world coffee market. In order to ease this constraint, during 1967 the authorities adopted an outward-looking development strategy, expanding and diversifying exports and, among the export markets, increas-

ingly tapping the Andean Group countries. Export promotion policies, including frequent exchange rate devaluations, export tax rebates and other export incentives were introduced and the authorities began lowering tariffs somewhat and freeing capital markets from controls as means of raising efficiency and increasing the competitiveness of Colombian goods in external markets. These measures were highly successful in relieving the foreign exchange constraint and stimulating growth and employment. However, by mid-1970s the economy was once again experiencing difficulties caused primarily by the world recession and by excessive Central Bank financing of domestic budget deficits.

#### Recent Economic Development

7. In late 1974, the Government introduced a wide range of fiscal and monetary policies designed to correct the structural and policy weaknesses prevailing in the economy at that time. Before these reforms were fully effective, the economy was subjected to strong inflationary pressures arising from a sharp increase in world coffee prices. The increased receipts from coffee exports, together with some official surrender of foreign exchange from illegal exports, caused a turnabout in the balance of payments. Incomes rose rapidly and stimulated aggregate demand; inflation accelerated. Economic growth also accelerated and unemployment fell substantially, both in rural and urban areas. Largely as a consequence of increased coffee tax revenues, the public finances generated surpluses averaging about 7% of GDP during the 1976-79 period, and by the end of 1979, net official international reserves had risen to about US\$4.1 billion, equivalent to nearly 12 months imports of goods and non-factor services.

8. While beneficial in many respects, the foreign exchange boom has had a somewhat negative impact on the evolution of the Colombian economy, largely as a consequence of the need for measures to stabilize the economy. Public investment was curbed, thereby delaying some badly needed additions to economic and social infrastructure. The rate of currency devaluation was slowed and the conversion of export receipts into pesos was delayed to moderate the growth of domestic demand, with adverse effects on export expansion and diversification. Also, the Government was compelled to maintain high reserve requirements and expand controls over credit thereby reducing, in real terms, the financing available to the private sector via the official capital market.

9. The stabilization measures were virtually unchanged from early 1977 through 1979 but were partially successful in restraining aggregate demand growth; thus relatively high inflation persisted. In response to the increasing stabilizing effects on aggregate demand and the troublesome financial market distortions caused by inflation and the extended period of monetary restraint, the authorities began in late 1979 to adjust the stabilization program. The rate of peso devaluation was advanced to increase export incentives and reduce borrowing abroad, and in early 1980, credit restraints were relaxed by lowering reserve requirements. At the same time, interest rates on time deposits captured by commercial banks and development finance companies -- and on the lending therefrom -- were freed from controls. To offset the inflationary effects of these measures the authorities further liberalized import payments and adopted the policy, supported by the emission of new short-term certificates, of not expanding the subsidized selective credit operations of the Central Bank in excess of the resources captured

from private savings for this purpose. The authorities also increased the surveillance and control of the illegal export trade. The effects of the above measures were not immediately noticeable. Real GDP growth declined to 4% in 1980, unemployment started to creep up, and inflationary pressures continued.

10. In 1981, manufacturing activity has remained sluggish, hemmed in by the slow growth in aggregate consumer demand, and limited by power shortages during most of the year. Coffee exports have fallen as a result of reduced world demand and declining prices while non-coffee export growth has weakened. On a more positive note, construction activity, which had fallen sharply in 1979-80, began to recuperate toward the end of the year. In response to favorable price incentives, petroleum production is estimated to have increased by over 5% in 1981. Agricultural output has registered some gains despite decreases in the area planted resulting from a prolonged drought. Both public and private investment have expanded rapidly. Real GDP growth is estimated to have reached 3-4% in 1981. Inflation continued to be a problem in 1981, however, with consumer prices increasing by about 27% for the year. Despite world coffee prices at relatively low levels for most of the year, Colombia's balance of payments continued to remain strong, with net official reserves maintained at about one year of imports of goods and non-factor services.

#### Development Strategy

11. Achievement in this decade of the Government's objectives of increased productivity and maximum economic growth, increased employment, improved distribution of income and greater welfare for all Colombians will require a major effort to remove from the economy the constraints of inadequate economic and social infrastructure and insufficient demand. Infrastructure needs are most pressing in the energy, transportation, and agriculture sector.

12. The Government's strategy for accomplishing its development objectives are set forth in the recently formulated Plan de Integración Nacional (PIN). This strategy continues the previous emphasis on export promotion as a means of supplementing domestic demand and assuring balance of payments stability, and on policy measures, including further import liberalization, designed to increase economic efficiency and raise institutional capacity. It proposes a large increase in public investment, giving high priority to energy projects and to the provision of transport infrastructure. Economic decentralization, regional autonomy and the uniting of regional growth centers through improved transport, communication and financial links are directed towards creating an integrated national market, a strategic goal of the PIN. The Plan also places emphasis on the promotion of both small scale and commercial agriculture as a means of diversifying and increasing exports, assuring adequate domestic food supplies, holding down inflation and contributing to the Government's nutrition and welfare goals. Industrial policy objectives are to provide an environment of certainty, along with adequate credit and infrastructure, so that entrepreneurs are encouraged to invest and expand output. Because of its benefits in opening foreign markets, creating employment and bringing in new technology, private foreign investment is to be encouraged. The Government's approach to helping the poor takes on a new

orientation in the PIN. Its efforts are focussed upon improving efficiency in the use of resources and strengthening the social service institutions. Programs in the health and education sectors are to be better focussed and integrated, and selected low income and disadvantaged groups, such as workers in the informal sector, children and unemployed youth, are singled out for special attention. Combined with extensions of the Integrated Rural Development (DRI) and National Nutrition (PAN) programs, the new directions given to social programs are expected to raise significantly the welfare of low income groups in Colombia.

13. While the PIN provides a good analysis of the development issues facing the country and sets forth the general guidelines for policies and programs to resolve these issues, there are two important aspects of bringing off the development strategy that are expected to receive increasing attention from the authorities in coming months. The first involves a required deepening of the sector analyses in order to improve coordination in planning and execution sector strategies, and the second has to do with matters related to financing the PIN. Given the large investment required to carry out the PIN strategy, inadequate planning and coordination among sectors or insufficient domestic resource mobilization would be likely to result in substantial resource misallocation and to delay execution of the strategy. The two most important sectors where additional work is urgently required are energy and transportation.

14. Colombia became a net oil importer in 1976 and by 1985 petroleum imports are projected to absorb about 20% of total merchandise exports. In the absence of rapid energy development, energy shortages will become a major constraint on growth later in this decade. Resolution of the energy problem depends on the country's success in developing its abundant domestic energy resources -- hydroelectricity, coal and natural gas -- and also upon increasing petroleum exploration and development. The strategy for doing this will require energy pricing policies that rationalize consumption with energy resource availabilities, a least cost program of investments, sufficient domestic and external financing for these investments, strengthened sector institutions, improved program execution capability and rapid carrying out of investments. Although planning and policy making have improved substantially in many energy sector institutions in recent years, overall planning and coordination in the sector is still weak. A study about to be completed by the National Planning Department is expected to provide the basis for improvements in sector-wide planning and policy-making, and recent pricing decisions have gone a considerable way towards providing the correct signals for regulating consumption and encouraging production. The prices paid to producers (primarily foreign companies) for "incremental" and "new" crude have been raised to levels which provide adequate production incentives, and the retail prices of petroleum products have been increased substantially in recent years, which on the whole reflect international levels.

15. Colombia's high transportation costs and inadequate services could become a constraint on economic growth, affecting particularly the development of the country's vast coal reserves and agriculture. The State Railway is in poor condition and the road network needs maintenance and rehabilitation. The authorities have begun to take steps to improve the country's infrastructure and PIN assigns an important share of future investments to the sector. An important part of this effort is the recently approved Rural Roads and Highway Sector Projects as well as the proposed loan

for railway rehabilitation. The Highway Sector Project addresses the need for more efficient planning to insure that only least-cost investments are carried out and that a sound policy framework for the sector is established to deal effectively with the problems of intermodal coordination and energy conservation in line with the Government's energy objectives.

#### Investments and Its Financing

16. A substantial increase and redirection of public sector investment will be required in the next several years to carry out the development strategy outlined in the PIN. Over the 1981-85 period, such investment is expected to increase by about 15% p.a. in real terms. The energy and transportation sectors are expected to account for the bulk (59.5%) of this investment; however, sizeable real increases in investment are also expected in the nutrition and health, small scale agriculture and industry (including mining), water and sewerage, and education sectors. Overall, public fixed investment is projected to average 8.4% of GDP during the 1981-85 period, and is expected to total Col\$1,603 billion (about US\$20.5 billion). Private investment will have to increase also during this period to provide the goods and services required by the expanding economy.

17. This increase in investment will demand a major resource mobilization effort on the part of Colombia's public sector. The buoyancy of the tax system (excluding coffee tax revenues and receipts from earnings on foreign exchange holdings), which has declined in recent years, will have to be increased through new taxes and better tax administration, resources will have to be used more efficiently, and the charges levied for public services will have to be raised substantially in real terms. Since this effort is expected to coincide with increased private sector demand for investment resources, the importance of measures to expand domestic savings cannot be over-stressed. The recent capital market liberalization should encourage savings. A significant increase in voluntary private savings is not likely, however, as long as inflation remains high. Consequently, stabilization remains a sine qua non for the country's future growth and development.

#### Growth and Balance of Payments Prospects

18. Given the country's strong resource base and sound economic management, Colombia's growth prospects for this decade are good and significant advances in economic welfare are expected. The urgent need to relieve the pressure on aggregate demand arising from the growth of foreign exchange earnings and the necessity to increase rapidly imports to develop the country's resource potential and restore higher economic growth requires a shift in the balance of payments from a small current account deficit of US\$195 million registered in 1980 to a current account deficit projected to average US\$1,865 million, over the 1981-85 period. By the end of this period, net official international reserves would have fallen to a level slightly over four months of imports of goods and non-factor services (a level which is adequate for Colombia) without prejudice to the country's creditworthiness. This should be sufficient to support an average growth of real GDP of 5.5% during this period. Beyond 1985, the current account deficit should improve as a result of increasing export proceeds (particularly from coal) and a levelling-off of imports. The current account deficit would fall to about 2% of GDP in 1987 and turn into a surplus of less than 1% by 1990. To achieve real GDP growth of 5.5% per annum, gross domestic investment will have to

expand to about 25% of GDP, up from 18% in the early 1970s and 20% in recent years, and to avoid too large an increase in foreign indebtedness, gross national savings would need to average about 22% of GDP.

19. Gross external capital requirements (net of reserve drawdown) are projected to total US\$10.3 billion in current prices for the 1981-85 period, for an annual average requirement of US\$2,057 million. About 26% of this amount will be required annually for debt amortization and the rest to cover current account deficits. Multilateral and bilateral agencies are expected to provide 33% of these requirements, 50% is expected to come from foreign suppliers and financial institutions and the balance should come from private foreign investment. At the end of 1980, Colombia's public and publicly guaranteed external debt disbursed and outstanding amounted to US\$4.3 billion, equivalent to 13% of GDP. The Bank/IDA share of this external debt was 25%. Reflecting the recently increased lending by the Bank and the decline by bilateral sources, this share is expected to increase to about 29% in 1983, before falling to about 25% in 1986. The debt service ratio at the end of 1980 was 10% and is expected to climb to 17% by 1985, peak at about 20% in 1988 and then decline gradually. The World Bank's share in public debt service is expected to rise to about 26% in 1985 from about 25% in 1980. With continued sound economic and financial management, Colombia is expected to maintain its creditworthiness through and beyond the 1981-1990 period.

#### PART II - BANK GROUP OPERATIONS IN COLOMBIA

20. The proposed loan, the 95th to be made to Colombia, would bring the total amount of Bank loans to Colombia to US\$3,340.9 million (net of cancellations). Of this amount the Bank held, as of September 30, 1981, US\$2,687.5 million: IDA made one credit of US\$19.5 million for highways in 1961. Disbursements have been completed on 57 loans and the IDA credit. During 1972-77 disbursements averaged US\$86 million equivalent per year, then declined slightly to US\$82 million in 1978 but increased sharply to US\$215 million in 1980 and US\$249 million in 1981. The gradually improving performance of social sector institutions in the execution of Bank-financed projects, the gradual containment of inflationary pressures, which should allow relaxation of fiscal restraint, and increased Bank lending for infrastructure projects, all point to higher level of disbursements in the future. IFC has made investments and underwriting commitments of US\$78.7 million in 26 enterprises and, as of September 30, 1981, it held US\$23.2 million. Annex II contains a summary statement of Bank loans, the IDA credit and IFC investments as of September 30, 1981 and a brief report on the status of the 36 ongoing projects.

21. In response to the objectives established by successive Governments (self-sustained economic growth, increased employment and improved income distribution), since 1966, Bank lending to Colombia has become more diversified with heavier concentration on production-oriented programs and activities which emphasize social as well as economic benefits. All three loans for education have been made during this period, and so have 12 of the 14 loans for industry, 13 of the 15 agricultural loans, one loan for a nutrition project, two loans for urban development projects and all nine loans for water supply and sewerage. During the same period, 19 loans were made in the power and transport sectors, while before 1966, 22 out of a total of 25 loans were made to these sectors.

22. Bank lending to Colombia in FY81 consisted of two loans for power generation and distribution projects, and one each for rural roads, irrigation rehabilitation and village electrification totalling US\$550 million equivalent. In addition to the loan presented in this report and the one recently approved for watershed management, the FY82 program includes proposed loans for integrated rural development, highways, secondary oil recovery and rural basic education. Work is also under way on projects for petroleum development, mining, oil refining, electric power, agricultural credit, agro-industries, fertilizers, water supply and sewerage, ports and small-scale industry for possible consideration by the Executive Directors during the next two years.

23. The proposed Bank lending conforms closely with the Government's development strategy as outlined in the PIN (paragraph 12 through 15). To help Colombia develop renewable sources of energy, a sizeable part of the proposed lending would be for hydropower. The Bank intends to assist in the development of coal mines which hold potential to help Colombia meet part of its energy requirements and in diversifying exports. In support of the Government's objective to increase the supply and the recovery of domestic petroleum, the Bank plans to finance further petroleum projects as a complement to investments of private firms and, for the first time, become involved in projects which promote the efficient processing of hydrocarbons. Bank financing in the energy sector would also assist in strengthening major institutions and in mobilizing external finance as some of the projects would require substantial co-financing. Other future loans would finance agriculture and industry to support the Government in its efforts to raise overall productivity, income and employment, and to increase and diversify exports. Closely related to these objectives would be the proposed Bank lending for transport infrastructure. In this context, the Bank is assisting the Government in preparing a highway paving and rehabilitation program in support of the increasing interregional flow of goods and services. A loan under preparation for ports is aimed at helping Colombia handle larger volumes of non-traditional exports and the imported inputs on which the modern sector of its economy relies for expansion. Finally, several loans are being prepared in support of the Government's efforts to help the lowest 50% of the Colombian population. Lending for rural electrification, rural development, agricultural credit, water supply and sewerage, irrigation and rural education projects is principally designed to improve the standard of living of the poor.

24. The operations of external lenders in Colombia are shown in Annex I. While IBRD, IDB, and bilateral sources provided about 75% of total external financing to Colombia in the 1961-72 period, their share has decreased since then to approximately 63% for the 1975-80 period and is expected to decline further to about 30% of external capital requirements during 1981-86. Like the Bank, IDB has given increased emphasis to projects with a poverty orientation and has financed projects in low-cost housing, urban and rural development, agrarian reform, university education, water supply, rural electrification and land erosion control. In the future, it proposes to assist Colombia in developing sources of domestic energy and in expanding productive sector activities to help generate increased employment. USAID has supported programs in education, urban development and small farm development, but is phasing out its program in Colombia. The Government of Canada, the Federal Republic of Germany and the Netherlands have also provided concessional financing for basic needs and regional integration projects.

### PART III - THE TRANSPORT SECTOR AND THE NATIONAL RAILWAY

#### Characteristics

25. Since the early 1950s, Colombia's transport investment policy has been aimed at national integration through efforts to overcome the regional and community-level isolation imposed by topography. The country's advantage of having coastlines on both the Pacific Ocean and the Caribbean Sea is offset by the difficulty of movement between the coasts and the interior. The three massive ranges of the Andes Mountains which run from north to south present formidable barriers to communication between the main areas of population, which until recently developed as separate and almost isolated communities. In fact, the Magdalena River provided the only overland route between the Central Region and the Caribbean coast until the 1960s. At this time, the Atlantic Railroad connecting Bogota (the capital) and Medellin (the third largest city and one of the country's most important industrial and agricultural centers) with the Caribbean port of Santa Marta, the Eastern Road connecting Santa Marta, Bucaramanga, Bogota and Neiva, and the Western Road connecting Cartagena, Medellin, Cali and Pasto were completed. The development of the country's railways, trunk highways and civil aviation has greatly improved inter-regional communication and fostered national integration.

26. The work to complete the basic transport infrastructure has required a considerable proportion of the country's total investment. Transport represented about half of Central Government investment in the late 1950s (between 10% and 15% of domestic investment). When the trunk highway system and the Atlantic Railroad were being completed, it exceeded 60% of Central Government investment. More recently, however, transport's share has declined to about 25%. In 1980, Col\$19,195 million (US\$430 million equivalent) were invested in the transport sector of which 86% was allocated to roads, 7% to ports and inland navigation, 5% to airports and 2% to railways. The small size of railway investment has contributed to its declining efficiency.

#### Infrastructure and Traffic

27. Colombia has a road network totalling about 77,000 km of which about 7,900 km is paved. The railway system consists of 3,403 km (2,822 km currently in use) all single track and narrow gauge (914 mm compared with 1,435 mm in Europe and North America); there are gradients in the system of 3% or more. Although the development of road and rail transport has lessened the importance of inland waterway shipping, both the Magdalena and Cauca Rivers are navigable and account for almost all inland shipping. Over the last decade, domestic freight traffic has grown at rates close to GDP growth, 6%-7% annually. In 1979, about 21.5 billion ton-km of freight was transported; 81% by road, 8% by coastal shipping, 5% by riverway; 5% by railway and 1% by aviation. The largest share of passenger traffic is carried by road, 71%, while aviation handles 27% and railways 2%.

28. Aviation transport developed at an early date (1920) and has become a major mode of domestic and foreign travel. There are three national and eleven foreign airlines providing international service, and 10 additional, regularly-scheduled domestic carriers. Colombia has 70 airports, eight of which are equipped for international flights. The country's principal seaports are Cartagena, Barranquilla and Santa Marta on the

Atlantic Coast, and Buenaventura and Tumaco on the Pacific Coast. The ports move about 3 million tons of cargo per year, with Buenaventura handling over 1.5 million tons annually. However, goods are not evacuated from the docks in a timely way because of unsatisfactory cargo-handling operations, labor difficulties, lack of inland storage facilities and deficient transport services. A faulty system of port charges also contributes to congestion, with unenforced demurrage levies that, in any event, are too low. With UNDP-financing and the Bank as Executing Agency, consultants and the Colombian Port Authority (COLPUERTOS), have studied port operations and containerization, and are analyzing possible corrective measures.

### The National Railway

29. What has become Colombia's railway system began as a number of relatively short lines often of different gauges and standards, located in different parts of the country and built to meet local needs. Altogether the railways comprised in 1950 about 3,000 km of main lines, of which 2,400 km were owned by the State Railway, 400 km by Departmental Railroads and the remainder by private companies. The State Railway suffered considerable financial losses; management was weak, maintenance was inadequate and the number of locomotives and rolling stock awaiting repair was exceedingly high. Although railway tariffs were lower than truck rates, the latter were able to provide a more reliable service thus making large inroads into the railways traffic. This situation has continued to persist.

30. The Bank's General Survey Mission (September 1950-August 1951) identified the need to link the different railways under a single, fully autonomous, corporation. Consistent with this, on October 27, 1954, the Government established the Colombian National Railways (CNR) to manage the country's railway system. Three Bank loans (68-CO, 119-CO and 267-CO) supported the construction of the Atlantic Line, which served to interconnect the different networks. Two subsequent loans in 1963 and 1968 (343-CO and 551-CO) contributed to the rehabilitation of track and rolling stock, while attempting to improve management and operating practices. Performance under these loans was mixed; there were numerous achievements but also disappointments. Except for 1966 and 1969 when CNR realized net profits from operations, the Government had to finance its operating losses. Budget transfers were not always on time and the railway's plant capacity deteriorated. The problem was compounded by an amendment made to the constitution in 1968 that introduced a cost-of-living escalator in CNR's pensions as well as other fringe benefits. Personnel emoluments, therefore, rose sharply and in 1970 amounted to 67% of CNR's operating cost.

### The Sixth Railway Project and Recent Performance

31. In 1970, CNR, with consultants, prepared a rehabilitation program to revert the cycle of deteriorated infrastructure, numerous derailments, poor service and loss of traffic. To finance the first two years of the program, in August 1973, the Bank made a US\$25 million loan to CNR. Its inefficiency and the heavy subsidy given to the trucking industry in the form of highway improvements and cheap fuel had caused CNR to lose considerable traffic (from about 20% of total freight traffic in 1960 to about 8% in 1970). For long hauls and bulk commodities, however, the railway continued to have a clear economic advantage. The main investment

items of the project were improvements to permanent way, motive power, rolling stock, and repairs to overcome the 1970/1971 winter damages (destruction by flood and landslides), the worst in history.

32. Under competent management during the first two years of the project CNR achieved impressive results. In 1973 and 1974 most of the operating targets agreed at negotiations were surpassed. Derailments were almost cut in half (from 7,116 in 1970 to 3,614 in 1974), locomotive availability was a healthy 87% and, through reliable service and aggressive marketing, freight tonnage increased by 11% over 1973 as compared with 1.4% between 1968 and 1972. In 1974, CNR obtained again an operating ratio of 98.8, thus covering its operating expenses from revenues.

33. With the change of Government in August 1974, a new management took over and CNR's performance began to deteriorate once more. A major factor contributing to this was the excessive changes made in CNR's managerial and senior staff, both by the Government and CNR, causing discontinuity of operations, failure to adhere to targets and the adoption of unsound policies, including excessive liberties in the form of social benefits being gained by the Railway Labor Union, whose power was increasing during this period. Furthermore, disciplinary actions became more difficult to enforce partly due to union intervention; even such critical actions as enforcing locomotive speed or firing reckless drivers, became virtually impossible to accomplish. In these circumstances many experienced middle-level managers and supervisory staff left, for more attractive employment opportunities in private industries and other Latin American railways. The cost to CNR's long-run institutional effectiveness which had been built up over the years was a heavy one during this period.

34. Together with the slowing down of the economy in 1975, CNR's marketing efforts slackened and freight traffic declined by 14%. The Government was unable to provide CNR with the financial support it needed; consequently, in 1975 when the Pacific network was severed by track washouts, it was never repaired and at this writing is largely skeletal with several lines closed (491 km in total), thus preventing CNR from transporting freight from the Central Region to the Pacific coast. Other sections of the network fell into disrepair as well and newly laid, low-grade, untreated sleepers deteriorated rapidly in the humid, tropical climate. Equipment received substantially less maintenance than was normal; because of a lack of funds, spare parts were not ordered. Locomotive availability, therefore, dropped from 87% in 1974 to an all-time low of 30% in 1980. Furthermore, since negotiations, the preliminary results for 1981 indicate that locomotive availability has declined even further to 27%. Of the 169 locomotives in CNR's fleet, 28 are 6-10 years old, 60 are 11-15 years old, 63 are 16-20 years old and 18 are 21-25 years old. Fifteen locomotives are beyond repair and are being scrapped. An even greater number of locomotives should be scrapped since the scrapping program for the older locomotives under the Sixth Railway Project had to be postponed and was never implemented in view of the declining motive power availability. The 88 locomotives purchased from Spain under a barter arrangement (which constitute the backbone of the locomotive fleet), have proven unsuitable for high altitude conditions with steep grades.<sup>1/</sup> The diesel engines (Caterpillar D-398) overheat and fail

<sup>1/</sup> Locomotive GE-U-10B, with 1,050 horsepower.

to give sufficient margin of power for acceptable reliability of service, when exposed to sustained heavy loading at high altitudes. The problem has been particularly serious on the Facatativa-Bagazal section where CNR has had to resort to using trios of locomotives to make the grade, further stretching the already scarce motive power. Under these conditions, CNR's financial performance worsened; between 1974 and 1980 its operating ratio increased to 163 and the resulting financial losses (about US\$30.9 million equivalent in 1980) had to be covered by the Government and, to lesser extent, by domestic credit.

#### Future Railway Traffic and the Government's Program

35. In 1980, CNR still transported 862 million ton-km, less than 5% of the country's domestic freight and the lowest level of traffic in its history. In terms of ton-km, the most important commodities were coffee (15%), fertilizer (13%), coal (6%), crude oil (9%) and wheat (8%). Well over two-thirds of the railway traffic is concentrated in the Atlantic network between Santa Marta and Bogota/Medellin, involving 1,287 km or 48% of the railway system. The remaining lines have low traffic densities and in the instance of the Pacific Network, economic justification is becoming doubtful. It may be possible that if connected again with the Atlantic Network, the Pacific Network could provide an outlet through the port of Buenaventura for bulk cargo to and from foreign markets on the Pacific Ocean. This alternative would be studied under the proposed project (paragraph 43).

36. The relevance of passenger traffic on CNR's operation has been decreasing over the years. In 1980, CNR transported 2.2 million passengers, down more than 2 million since 1974. The decline has been the result of the much improved bus service in Colombia, the closure of non-remunerative services, as well as the need to divert CNR's scarce motive power to more profitable freight traffic. This situation is likely to continue since CNR will have to reduce further its passenger services to allow for sufficient motive power to haul its freight traffic until the working locomotive fleet is increased (Section 4.09(a) of the Draft Loan Agreement).

37. The policy which the Government is pursuing with respect to the consumer price of hydrocarbons is improving gradually the competitive position of CNR. The already mentioned price increases for gasoline and diesel fuels has reduced the implicit economic subsidy to road users from US\$435 million or 1.6% of GDP in 1979 and US\$189 million or 0.7% of GDP in 1980 to US\$44.8 million or less than 0.1% of GDP in 1981.<sup>1/</sup> As stated, the Government's policy is to maintain domestic prices at the international c.i.f. Barranquilla level; this will have a greater effect on highway transport than on CNR. Provided CNR improves its plant and its service, higher domestic fuel prices will be an incentive for bulk freight to return to the railways. A commodity review carried out by the Ministry of Public

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<sup>1/</sup> Estimate based upon an equivalent import price at the pump of US\$57.84 per barrel or US\$1.01 per gallon of regular gasoline (US\$0.96 is the price of low octane regular gasoline being sold in Colombia) and estimated annual consumption of 26.0 million barrels.

Works and Transport (MOPT) estimates a demand growth for railway services far beyond CNR's carrying capacity. With the proposed project CNR would only be able to satisfy 44% of this in 1982 and 60% in 1986. The forecast excludes the potential demand from coal, copper, bauxite and phosphate mining investments now in gestation. Colombia is only beginning to exploit its mineral wealth, much of which is unexplored. Coal, with potential reserves of over 16 billion tons, of which 11 billion are proven or semiproven, will depend heavily on CNR for its development. The same is likely for some other minerals. The Government, therefore, is giving high priority to the rehabilitation of CNR as an initial step to its eventual conversion to a minerals carrier. When this comes about, CNR will require considerable investments to modernize its facilities, particularly in motive power and rolling stock. To provide CNR with financial resources for track and rolling stock upkeep, as well as high-priority investments, the Government has modified Law 64 of 1967 which established the National Highway Fund (FVN), to the effect that 10% of FVN's revenues will be given to the railway. The principal revenue source of FVN is an ad-valorem, ex-refinery tax on gasoline and diesel fuel.

#### The Bank's Role in Transport Development

38. The Bank has played an important role in the development of Colombia's transport sector. Overall since 1950, the Bank has lent over US\$400 million equivalent for highways, rural roads, railways and one airport project to assist the Government in developing basic transport infrastructure to facilitate economic and social integration, as well as overall growth of economic activity.

39. The highway projects, although beset with delays and cost overruns, resulted in the reconstruction or upgrading of 3,200 km of roads and contributed to the development of a unified trunk road system as well as to the emergence of road transportation. They also fostered the development of local consulting and construction industries, and have directly supported Government efforts to improve engineering practices and contractual procedures as well as transport investment and planning.

40. The already mentioned six railway loans were aimed at integrating the railway network and at strengthening CNR. The review of the first five loans carried out by Operations Evaluation Department (OED), concluded that past railway investments had a low return, particularly the Atlantic Railroad.<sup>1/</sup> It recognized, however, that the Atlantic Railroad had an important developmental impact on the Magdalena and Cesar Valleys. It regarded the rehabilitation projects as well-conceived but criticized the lack of operational targets to monitor progress and the heavy emphasis placed by the Bank on the financial aspects of CNR during supervision. Starting with the Sixth Railway Project, therefore, operational targets were set, but these were useful for gauging performance only as long as CNR had a management team committed to them. Under the proposed project, operational targets have been agreed with the Government and CNR, to which loan disbursements would be conditioned (paragraph 52). In the event that there is in the future a new management in CNR, the proposed loan's conditionality element is expected to ensure continuity of effort. Lastly, the Bank supervision of CNR has been placing greater emphasis on technical aspects;

<sup>1/</sup> "Bank Operations in Colombia: An Evaluation," Report No. Z-18, 1972.

the work done by the Bank to assist CNR to resolve the problem of motive power is an example of this. The consultants to be retained in connection with the project, would complement this work (paragraph 43).

#### PART IV - THE PROJECT

##### Background

41. The proposed project was prepared by CNR with the assistance of UNDP-financed consultants (ITALCONSULT). It was appraised by a Bank mission in September 1980. Negotiations were held in Washington, D.C. during the week of May 7, 1981 with a Colombian delegation led by Dra. Leonor Montoya de Torres, Director of Public Credit, Ministry of Finance and Public Credit, and Dr. Alfonso Orduz, General Manager of CNR. In view of the delay experienced in receiving confirmation from the Government with respect to the supplemental domestic financing for CNR, two follow-up missions in October and November 1981 visited Colombia to update traffic and financial forecasts as well as the agreed performance targets in the Program of Action. The Staff Appraisal Report (No. 3262b-CO of January 27, 1982) is being distributed separately to the Executive Directors.

##### Project Objective and Description

42. The proposed project would support the Government's aim of improving the country's transport infrastructure, as well as of lowering transport costs by promoting efficiency in the railway system. The project comprises the first four years of CNR's 1982-86 Rehabilitation Program, and its major goal is to strengthen the institution's overall performance. The project is focussed upon essential investments and actions needed to produce safer, more reliable and faster railway service for carrying existing and potential traffic. It is divided into two parts, with Group I comprising the components urgently needed and Group II dependent upon potential traffic, including the signature of user agreements on two sections of the network (Section 3.01(e) and Schedule 1 of the draft Loan Agreement).

43. Group I of the project consists of:

- (a) Rehabilitation of 428 km of track in the Atlantic network where traffic demand is high, track conditions poor and derailments frequent;
- (b) Purchase of rails and switches, prestressed concrete and pretreated wooden sleepers, rail-screw fastenings, base plates, materials for drainage structures, bridges, and crushed ballast;
- (c) Purchase of four, high-horsepower locomotives to operate in the steep grades and sharp curves of the Facatativa-Bagazal section, and spare parts for the rehabilitation of 139 locomotives;
- (d) Purchase of 100 wagons (gondolas) for coal freight, spare parts for the reconditioning of 1,410 freight cars;

- (e) Acquisition of signalling and telecommunications equipment;
- (f) Procurement of machinery for workshops;
- (g) Rehabilitation of freight-handling equipment and purchase of 16 forklift trucks and six cranes; and
- (h) Technical assistance aimed at improving CNR's cost accounting, internal auditing, financial planning, tariff structure and statistical reporting; studies of a traffic demand model, reduction of operating costs, signalling and telecommunications, a locomotive scrapping program and the feasibility of linking Bogota with the port of Buenaventura and of the line capacity of the proposed Saboya-Carare Bypass, which would avoid the difficult gradient between Facatativa and Bagazal; and, overseas and local training of operational staff. This assistance is also expected to contribute to improved overall transport sector planning.

Group II of the project consists of:

- (a) Rehabilitation of another 83 km of track if agreements with potential coal and petroleum users can be reached;
- (b) Purchase of four additional, high-horsepower locomotives and related spares, after a year of testing the first batch of four in the difficult gradient section;
- (c) Purchase of 100 wagons (gondolas) for coal freight and spares, provided additional coal shipments from the Lenguazaque region develop; and
- (d) Purchase of additional signalling and telecommunications equipment.

#### Project Costs and Financing

44. Total project cost is estimated at US\$176.7 million equivalent, of which US\$110.2 million equivalent, or 62%, corresponds to the foreign exchange component. Project costs are based upon estimates prepared by CNR/ITALCONSULT and include physical contingencies amounting to 5% and price contingencies amounting to 23% of base costs (Loan and Project Summary). Consultant services for technical assistance and training are estimated to be US\$11,000 per man-month for expatriate staff and an average of US\$2,600 per man-month for local staff, including foreign and local travel and local subsistence. All such services would be provided by consultants whose qualifications, experience, and terms and conditions of employment would be satisfactory to CNR and the Bank (Sections 3.02, 3.03 and 3.04 of the draft Loan Agreement).

45. The proposed loan of US\$77 million represents about 43% of total project cost and would finance about 70% of the total foreign component of the project. The Government's contribution of about US\$79.5 million equivalent would finance 73% of the local costs of the project and 28% of the foreign element. CNR, the Colombian Coffee Federation and UNDP would finance the remaining local and foreign costs.

### CNR Organization, Management and Staff

46. CNR is a semi-autonomous, public enterprise headed by a five-member Board of Directors with the Minister of Public Works and Transport, ex-officio, as chairman. The other members are appointed by the President of the Republic from a list submitted by private interests representing trade, industry, banking and agriculture. The General Manager is also appointed by the President. The Board controls the railways operating and financial policies. Building or abandonment of railway lines and changes in personnel conditions rest with the Government. CNR is organized into five divisions headed by a manager: Atlantico (Santa Marta), Antioquia (Medellin), Central (Bogota), Pacifico (Cali) and Santander (Bucaramanga).

47. The strengthening of CNR's management is the central issue of the project. CNR has capable and dedicated people in its ranks, but staff morale overall, suffers from a severe lack of motivation. Both the Government and CNR are aware of this problem and are beginning to take corrective measures. CNR is now preparing proposals for revising the salary structure of key personnel to bring it in line with competitors, and enable it to attract and retain qualified staff. It has hired a labor attorney to review the legal implications of limiting salary increases to certain positions and enforcing disciplinary action. The Government has agreed to assist CNR in its dealings with the Railway Union during project implementation (Section 3.02(a) of the draft Guarantee Agreement). Further, CNR is preparing a program to increase staff in technical areas and gradually abolish redundant positions in the administrative area. In the short term this includes hiring pensioned mechanics on a contract basis to accelerate the reconditioning of locomotives. CNR is also preparing a program for foreign and local training, the latter to be undertaken possibly with the Colombian National Training Center - SENA (Section 3.06 of the draft Loan Agreement).

### Financial Forecast

48. Much of CNR's network is underused; the poor quality and reliability of its service limits the entity's ability to raise revenues. The proposed investments and Program of Action (paragraph 52) would enable CNR to improve its operations and, consequently, traffic and revenues. Even so, CNR would have to control its costs and also effect tariff increases in order to strengthen its finances. CNR has raised its tariffs every year but the increases have not kept pace with the growth of operating costs. (While operating costs increased by 587% between 1969 and 1979, freight tariffs increased by 519% and passenger fares by 448%). During negotiations, therefore, agreement was reached with CNR that it would (a) increase tariffs as shall be necessary to meet working and operating ratio targets and (b) raise tariffs by 10% in real terms in January 1983, 1984 and 1985, after the quality and reliability of its service has improved (Sections 5.05(a) and (b) of the draft Loan Agreement). It was also agreed that CNR would not incur any debt not provided for in the Financing Plan, a covenant which was not included under the previous Sixth Railway Project (Sections 5.06 and 7.01 of the draft Loan Agreement).

49. The financial forecast based on projected traffic and the above tariff increases, debt service charges and the financing plan, would result in an improvement in the working ratio from about 175 in 1981 to 96 in 1985,

before normalization payments (paragraph 51). In line with this, the Government's financial contribution to CNR would decline from an estimated US\$102 million in 1982 to about US\$48 million in 1986 or by 60%. The Government is already contributing 70-80% of CNR's pension and debt service payments.

50. Pensions represent about 40% of CNR's salary costs and are paid almost entirely by the Government. CNR has no adequate pension scheme. The Government would continue paying past pensions and indemnities to retired employees, but pension obligations to the existing employees would be the responsibility of CNR. Strong resistance from the Railway Union to a contributory pension scheme within the railways can be expected. The Government and CNR have, however, agreed to carry out a study with the assistance of actuaries with a view to establishing such a pension scheme no later than January 1, 1985 (Section 5.08 of the draft Loan Agreement).

51. A burden to CNR are the non-remunerative freight lines and passenger services. Since 1973, CNR has closed six branch lines and six passenger services as well as a number of stations. There are several services which do not cover their cost. CNR is being encouraged to increase fares and to reduce services where adequate alternative transport is available. Where non-remunerative passenger service is required for social reasons, the Government would subsidize them through a normalization payment scheme to encourage CNR to minimize the cost of providing such service. All freight services and four out of five existing passenger services in the Pacific Network are financially non-remunerative. As stated, traffic potential indicates that a transverse connection of the Atlantic and Pacific Networks between Ibaguè and Armenia (Bogota-Buenaventura Transport Corridor) may correct this situation. A decision, therefore, on the future of the Pacific Network would await the outcome of the study of this connection (Section 3.05 of the draft Loan Agreement).

#### The Program of Action

52. Success under the project depends upon integrated improvements in operations, management and finances. Delays in one area could affect action on the others; progress, therefore, would be followed closely and would be measured against time-phased targets (Program of Action). The targets have been set at six-month intervals and comprise: increases in locomotive and freight car availability, improvements in average net load per train and car, reduction in wagon turnaround time, track rehabilitation, staffing, management, operations and financial results (Annex 4). CNR has agreed to these targets and to prepare quarterly reports to help monitor progress (Section 3.01(b) and 3.11(b) and Schedule 5 of the draft Loan Agreement). Furthermore, on September 30, 1983, or when 40% of the loan would have been disbursed whichever comes first, commitments would be discontinued and the Government, CNR and the Bank would review the progress achieved, including the financial contributions the Government has made to CNR. Commitments/disbursements would resume if CNR reaches the June 1983 targets; if not, disbursements would resume only after CNR has prepared an acceptable plan aimed at bringing about corrective actions (Section 3.08 of the draft Loan Agreement and Section 3.03 of the draft Guarantee

Agreement).<sup>1/</sup> This arrangement is expected to contribute to sustained improvement in CNR's performance.

#### Procurement and Disbursement

53. All items to be acquired with the proceeds of the proposed loan would be subject to international competitive bidding, in accordance with Bank guidelines. These items include locomotives, freight cars, rails, fittings, track maintenance equipment, railway switches, workshop machinery, forklift trucks, signal and telecommunication equipment and spare parts for locomotives and freight cars. Local bidders would be granted a margin of preference by adding 15% or the relevant prevailing level of custom duties, whichever is lower, to the CIF value of foreign bids.

54. Disbursements would be made on the basis of: (a) 100% of foreign expenditures for imported equipment and material; and/or (b) 100% of ex-factory cost of locally manufactured equipment and material if local bidders are successful; and (c) 100% of the foreign component cost of technical assistance and training. In order to advance the improvement of locomotive availability, contracts for a total not exceeding US\$6.0 million equivalent for locomotives and spare parts would be eligible for retroactive financing (Schedule 1 of the draft Loan Agreement). The loan is expected to be fully disbursed by June 1986.

#### Benefits and Risk

55. The proposed project would support the rehabilitation of CNR and prepare the institution to assume a greater role in the future, particularly in facilitating development of mining. The six sections of track to be rehabilitated --- Facatativa-Mexico, Mexico-Garcia-Cadena, La Caro-Chiquinquira, La Caro-Belencito, Mexico-Buenos Aires and Medellin-Grecia --- are all located in the important Atlantic Network. Three segments have the potential for carrying substantial amounts of traffic resulting from the construction of a cement plant and the possibility to transport petroleum products (not transported via pipeline) and coal. However, two of these, La Caro-Chiquinquira and Mexico-Buenos Aires would be deferred to Group II of the project, until contracts are finalized with prospective shippers. The rates of return for the track investments range from 13% to 32%. The benefits include reduced track maintenance, less wear and tear of locomotives and rolling stock, fewer derailments and savings resulting from faster trains. The rates of return on the rehabilitation and purchase of locomotives and rolling stock range from 22% to 61%. The new locomotives and the rehabilitation and scrapping programs for the existing ones are crucial for CNR's strengthening. On this basis, the overall rate of return on the components of the project that can be quantified (86% of the

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<sup>1/</sup> By June 1983, CNR would have to have increased locomotive availability to 48%, freight car availability to 80% and average load per train to 307 tons, and reduced the wagon turnaround time to 15.5 days and the operating ratio before normalization to 159. Also, altogether CNR would have to have rehabilitated 231 km of track as well as taken several operational and administrative actions.

first three years of the 1982-86 Rehabilitation Program) is 26%, i.e., well above the estimated opportunity cost of capital in Colombia.

56. Sensitivity analysis carried out on the project showed that even under the adverse scenario, i.e., traffic would materialize less than projected, CNR would fail to adjust its tariffs and/or costs would increase by 10%, the rate of return of each of the components would still be above the estimated opportunity cost of capital in Colombia (11%). Moreover, the tranching of procurement into two groups would allow deletion of those items which as a result of deficient performance, would no longer be justified. Within the range of the sensitivity analysis, the remaining items would have satisfactory rates of return.

57. The project presents somewhat higher risks than are normally usual for railway projects. CNR's past performance is a checkered one, although with some salient, positive achievements. In view of this, the Government's commitment to the rehabilitation of CNR is of paramount importance. This commitment recently resulted in the passage of legislation which will provide the railways with revenues from the FVN (paragraph 37). Further, the appointment of a competent General Manager who has a proven record of accomplishment, the conditionality element of the loan and the close supervision of the project envisaged by the Bank, should all help to ensure the attainment of project objectives.

#### PART V: LEGAL INSTRUMENTS AND AUTHORITY

58. The draft Loan Agreement between the Bank and CNR, the draft Guarantee Agreement between the Republic of Colombia and the Bank and the report of the Committee provided for in Article III, Section 4(iii) of the Bank's Articles of Agreement are being distributed to the Executive Directors separately.

59. Special conditions of the loans are listed in Section III of Annex III.

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

#### PART VI: RECOMMENDATION

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

A. W. Clausen  
President

Attachments

Washington, D.C.  
January 27, 1982



COLOMBIA - SOCIAL INDICATORS DATA SHEET

LAND AREA (THOUSAND SQ. KM.)	COLOMBIA			REFERENCE GROUPS (WEIGHTED AVERAGES - MOST RECENT ESTIMATE) <sup>4</sup>	
	1960	1970	MOST RECENT ESTIMATE	MIDDLE INCOME	MIDDLE INCOME
				LATIN AMERICA & CARIBBEAN	EUROPE
TOTAL	1138.9				
AGRICULTURAL	232.0				
<b>GNP PER CAPITA (US\$)</b>	250.0	400.0	1010.0*	1616.2	2609.1
<b>ENERGY CONSUMPTION PER CAPITA</b> (KILOGRAMS OF COAL EQUIVALENT)	510.2	659.7	937.9	1324.1	2368.4
<b>POPULATION AND VITAL STATISTICS</b>					
POPULATION, MID-YEAR (THOUSANDS)	15754.0	21266.0	26122.0*	.	.
URBAN POPULATION (PERCENT OF TOTAL)	48.2	59.8	69.1	64.2	53.2
<b>POPULATION PROJECTIONS</b>					
POPULATION IN YEAR 2000 (MILLIONS)			39.9	.	.
STATIONARY POPULATION (MILLIONS)			61.0	.	.
YEAR STATIONARY POPULATION IS REACHED			2070	.	.
<b>POPULATION DENSITY</b>					
PER SQ. KM.	13.8	18.7	22.9	34.3	80.6
PER SQ. KM. AGRICULTURAL LAND	72.5	95.7	110.2	94.5	133.9
<b>POPULATION AGE STRUCTURE (PERCENT)</b>					
0-14 YRS.	46.8	46.2	38.2	40.7	30.1
15-64 YRS.	50.3	51.0	58.6	55.3	61.5
65 YRS. AND ABOVE	2.9	2.8	3.2	4.0	8.3
<b>POPULATION GROWTH RATE (PERCENT)</b>					
TOTAL	3.1	3.0	2.3	2.4	1.5
URBAN	5.7	5.2	3.9	3.7	3.1
<b>CRUDE BIRTH RATE (PER THOUSAND)</b>	45.5	36.3	30.1	31.4	22.9
<b>CRUDE DEATH RATE (PER THOUSAND)</b>	14.0	9.5	7.9	8.4	9.1
<b>GROSS REPRODUCTION RATE</b>	3.3	2.6	1.9	2.3	1.6
<b>FAMILY PLANNING</b>					
ACCEPTORS, ANNUAL (THOUSANDS)	..	115.4	142.1	.	.
USERS (PERCENT OF MARRIED WOMEN)	..	..	46.1	..	..
<b>FOOD AND NUTRITION</b>					
INDEX OF FOOD PRODUCTION PER CAPITA (1969=71=100)	100.0	99.0	124.0	108.3	119.8
<b>PER CAPITA SUPPLY OF CALORIES (PERCENT OF REQUIREMENTS)</b>	97.0	88.0	102.0	107.6	125.7
PROTEINS (GRAMS PER DAY)	54.0	48.0	52.0	65.8	92.5
OF WHICH ANIMAL AND PULSE	28.0	24.0	26.0	34.0	39.7
CHILD (AGES 1-4) MORTALITY RATE	19.8	12.0	8.3	7.6	3.4
<b>HEALTH</b>					
LIFE EXPECTANCY AT BIRTH (YEARS)	53.3	59.1	62.7	64.1	68.9
INFANT MORTALITY RATE (PER THOUSAND)	77.0	..	65.0	70.9	25.2
<b>ACCESS TO SAFE WATER (PERCENT OF POPULATION)</b>					
TOTAL	30.0/d	..	64.0	65.7	..
URBAN	54.9/d	..	73.0	79.7	..
RURAL	6.8/d	..	46.0	43.9	..
<b>ACCESS TO EXCRETA DISPOSAL (PERCENT OF POPULATION)</b>					
TOTAL	..	47.0	44.4	59.9	..
URBAN	..	75.0	60.0	75.7	..
RURAL	..	8.0	14.0	30.4	..
<b>POPULATION PER PHYSICIAN</b>	2638.9	2189.5	1966.7	1728.2	973.3
<b>POPULATION PER NURSING PERSON</b>	3740.0	1923.4	1250.0	1288.2	896.6
<b>POPULATION PER HOSPITAL BED</b>					
TOTAL	362.9	449.4	619.1	471.2	262.3
URBAN	..	377.5	340.3	558.0	191.8
RURAL	..	..	..	..	..
<b>ADMISSIONS PER HOSPITAL BED</b>	..	22.9	29.8	..	18.2
<b>HOUSING</b>					
<b>AVERAGE SIZE OF HOUSEHOLD</b>					
TOTAL	..	5.7/c	..	..	..
URBAN	..	5.5/c	..	..	..
RURAL	..	5.9/c	..	..	..
<b>AVERAGE NUMBER OF PERSONS PER ROOM</b>					
TOTAL	..	1.8/c	..	..	..
URBAN	..	1.6/c	..	..	..
RURAL	..	2.4/c	..	..	..
<b>ACCESS TO ELECTRICITY (PERCENT OF DWELLINGS)</b>					
TOTAL	47.0/d	58.1/c	..	..	..
URBAN	83.0/d	87.5/c	..	..	..
RURAL	8.0/d	13.2/c	..	..	..

COLOMBIA - SOCIAL INDICATORS DATA SHEET

	COLOMBIA			REFERENCE GROUPS (WEIGHTED AVERAGES - MOST RECENT ESTIMATE) <sup>/a</sup>	
	1960 <sup>/b</sup>	MOST RECENT		MIDDLE INCOME	MIDDLE INCOME
		1970 <sup>/b</sup>	ESTIMATE <sup>/b</sup>	LATIN AMERICA & CARIBBEAN	EUROPE
<b>EDUCATION</b>					
ADJUSTED ENROLLMENT RATIOS					
PRIMARY: TOTAL	77.0	103.0	124.0	101.7	105.9
MALE	77.0	101.0	122.0	103.0	109.6
FEMALE	77.0	105.0	127.0	101.5	102.2
SECONDARY: TOTAL	12.0	24.0	43.0	35.3	66.3
MALE	13.0	24.0	43.0	34.9	73.2
FEMALE	11.0	24.0	44.0	35.6	59.5
VOCATIONAL ENROL. (% OF SECONDARY)	31.0/ <sup>e</sup>	20.0	22.0	30.1	28.4
PUPIL-TEACHER RATIO					
PRIMARY	38.0	38.0	33.0	29.6	26.8
SECONDARY	11.0	17.0	21.0	15.7	23.6
ADULT LITERACY RATE (PERCENT)	63.0	80.8	..	80.0	75.4
<b>CONSUMPTION</b>					
PASSENGER CARS PER THOUSAND					
POPULATION	7.0	11.2	18.1	42.6	83.9
RADIO RECEIVERS PER THOUSAND					
POPULATION	125.1	104.3	117.1	215.0	181.6
TV RECEIVERS PER THOUSAND					
POPULATION	9.5	38.1	74.0	89.0	131.1
NEWSPAPER ("DAILY GENERAL INTEREST") CIRCULATION PER THOUSAND POPULATION					
	56.0	..	54.4	62.8	123.8
CINEMA ANNUAL ATTENDANCE PER CAPITA	..	..	4.1	3.2	5.7
<b>LABOR FORCE</b>					
TOTAL LABOR FORCE (THOUSANDS)	4726.5	6353.4	8652.7	..	..
FEMALE (PERCENT)	19.2	24.8	24.7	22.6	32.9
AGRICULTURE (PERCENT)	51.4	37.9	27.1	35.0	34.0
INDUSTRY (PERCENT)	19.2	21.0	21.1	23.2	28.7
<b>PARTICIPATION RATE (PERCENT)</b>					
TOTAL	30.0	29.9	33.1	31.8	42.3
MALE	48.8	45.1	49.8	49.0	56.5
FEMALE	11.5	14.8	16.4	14.6	28.5
ECONOMIC DEPENDENCY RATIO	1.7	1.6	1.2	1.4	0.9
<b>INCOME DISTRIBUTION</b>					
PERCENT OF PRIVATE INCOME RECEIVED BY					
HIGHEST 5 PERCENT OF HOUSEHOLDS	41.2/ <sup>d, f</sup>	31.9/ <sup>f</sup>	..	..	..
HIGHEST 20 PERCENT OF HOUSEHOLDS	67.7/ <sup>d, f</sup>	60.1/ <sup>f</sup>	..	..	..
LOWEST 20 PERCENT OF HOUSEHOLDS	2.1/ <sup>d, f</sup>	3.5/ <sup>f</sup>	..	..	..
LOWEST 40 PERCENT OF HOUSEHOLDS	6.8/ <sup>d, f</sup>	10.1/ <sup>f</sup>	..	..	..
<b>POVERTY TARGET GROUPS</b>					
ESTIMATED ABSOLUTE POVERTY INCOME LEVEL (US\$ PER CAPITA)					
URBAN	..	..	214.0	..	..
RURAL	..	..	197.0	187.6	..
ESTIMATED RELATIVE POVERTY INCOME LEVEL (US\$ PER CAPITA)					
URBAN	..	..	267.0	513.9	..
RURAL	..	..	122.0	362.2	385.1
ESTIMATED POPULATION BELOW ABSOLUTE POVERTY INCOME LEVEL (PERCENT)					
URBAN	..	..	34.0	..	..
RURAL	..	..	..	..	..

.. Not available  
. Not applicable.

NOTES

<sup>/a</sup> 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.

<sup>/b</sup> 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.

<sup>/c</sup> 1973; <sup>/d</sup> 1964; <sup>/e</sup> Including teacher training at the third level; <sup>/f</sup> Economically active population.

\* The updated 1980 GNP per capita and population estimates to be shown in the 1981 World Bank Atlas are \$1180 (at 1978-80 prices) and 26.7 million.

## 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 must 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 the country and reference groups.

**LAND AREA** (thousand sq. km.)

**Total** - Total surface area comprising land area and inland waters.  
**Agricultural** - Surface of agricultural area used temporarily or permanently for crops, pastures, market and kitchen gardens or to its fallow; 1978 data.

**GDP PER CAPITA (US\$)** - GDP 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  $w$  is estimated on the basis of the projected characteristics 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 populations 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 on all married women in same age group.

**FOOD AND NUTRITION**

**Index of Food Production per Capita (1969=100)** - Index of per capita annual production of all food commodities. Production includes 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 of 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 stock. 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 normal 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 USDA provide for minimum allowance of 50 grams of total protein per day and 20 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 waters 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 200 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 waste-water 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 custodial 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 inpatient accommodation and provide a limited range of medical facilities. For statistical purposes urban hospitals include WHO's 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 Ratios**

**Primary school - total, male and female** - Gross total, male and female enrollment of all ages at the primary level as percentages of respective primary school-age populations; normally includes children aged 6-11 years but adjusted 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, hearse 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; data for recent years may not be comparable since most countries abolished 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" if it appears 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 20 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.

**Series of 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 in 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".

ECONOMIC INDICATORS

ANNEX I  
Page 4 of 5

Population: 26,670,000 (mid-1980)  
GNP Per Capita: US\$1010 a/

Indicator	Amount (million US\$ at current prices) 1980 <u>b/</u>	Average Annual Increase (%) (at constant 1970 prices)			Share of GDP at Market Prices (%) (at current prices)						
		1960-70	1970-75	1975-80	1960	1970	1975	1980			
<b>NATIONAL ACCOUNTS</b>											
Gross domestic product <u>c/</u>	32,686	5.3	6.1	5.8	100.0	100.0	100.0	100.0			
Agriculture	8,197	3.5	5.2	4.0	34.1	28.6	29.3	25.2			
Industry	8,799	6.2	6.1	4.4	25.7	26.6	28.3	29.2			
Services	12,559	5.9	7.3	6.4	40.2	44.8	42.4	45.6			
Consumption	24,435	5.9	6.6	5.6	79.4	69.6	81.6	74.7			
Gross investment	7,994	5.1	0.6	8.5	20.5	22.0	17.8	24.4			
Exports of goods and NFS	5,648	3.1	5.9	10.0	15.6	14.2	15.1	17.4			
Imports of goods and NFS	5,391	4.3	1.1	12.7	15.5	15.8	14.5	16.5			
Gross national savings	8,103	5.2	5.3	10.8	19.4	18.0	16.8	24.8			
<b>Composition of Merchandise Trade (%) (at current prices)</b>											
					1960	1970	1975	1980			
<b>MERCHANDISE TRADE</b>											
Merchandise Exports (FOB)	4,428	3.3	1.4	10.8	100.0	100.0	100.0	100.0			
Major primary	2,871	2.8	-4.6	12.8	72.5	69.4	51.2	64.8			
Major manufactures	686	-	23.8	6.5	-	9.0	24.5	15.5			
Other	871	-	3.8	5.4	-	21.6	24.3	19.7			
Merchandise Exports (CIF)	4,533	3.5	-2.3	9.0	100.0	100.0	100.0	100.0			
Food	364	10.0	-0.1	13.4	2.4	4.5	4.8	8.0			
Petroleum	750	-21.4	70.6	43.5	2.0	-	2.0	16.5			
Machinery and equipment	1,750	5.2	-8.5	11.0	42.7	50.6	36.4	38.6			
Other	1,669	1.8	2.4	5.4	52.9	44.9	56.8	36.9			
					1974	1975	1976	1977	1978	1979	1980 <u>b/</u>
<b>PRICES AND TERMS OF TRADE</b>											
GDP deflator	27.6	20.8	23.6	28.3	17.1	23.9	24.5				
Exchange rate	27.1	31.2	35.0	36.9	39.3	42.6	47.3				
Export price index	155.4	159.7	214.5	303.6	260.2	262.2	294.9				
Import price index	210.3	217.3	233.5	254.3	202.0	220.6	252.2				
Terms of trade index	73.9	73.5	91.9	119.4	128.8	118.8	117.0				
<b>As % of GDP (at current prices)</b>											
					1970	1975	1980 <u>f/</u>				
<b>PUBLIC FINANCE <u>d/</u></b>											
Current revenue						10.6	11.1	12.1			
Current expenditure						5.7	6.6	8.2			
Surplus (+) or deficit (-)						4.9	4.5	3.9			
Capital expenditure						1.8	4.6	4.6			
Foreign financing <u>e/</u>						3.3	2.9	3.2			
<b>OTHER INDICATORS</b>											
					1960-70	1970-75	1975-80				
GNP growth rate (%)						5.10	6.30	6.00			
GNP per capita growth rate (%)						2.00	3.90	3.70			
Energy consumption growth rate (%)						5.00	4.00	4.00			
ICOR <u>g/</u>						3.54	3.43	4.00			
Marginal savings rate <u>h/</u>						0.13	0.13	0.16			
Import elasticity						1.17	0.16	2.20			

a/ World Bank Atlas Method.

b/ Estimated.

c/ At market prices; Components are expressed at factor cost and will not add because of exclusion of net indirect taxes and subsidies.

d/ Central Government.

e/ Gross disbursements of external loans to the entire public sector.

f/ Includes Social Security and Fondo Vial.

g/ Lagged one year.

h/ Increment to gross domestic savings/increment to gross domestic product.

April 24, 1981

Population : 26,670,000 (mid-1980)  
GNP Per Capita: US\$1010 a/ (1979)

**BALANCE OF PAYMENTS, EXTERNAL CAPITAL AND DEBT**

(million US\$ at current prices)

	1974	1975	1976	Actual 1977	1978	1979	1980 b/	1981	1982	Projected 1983	1984	1985
<b>BALANCE OF PAYMENTS</b>												
Exports of goods and non-factor services	1000	2165	2782	3404	4059	4910	5327	4932	5660	6367	7323	8193
Imports of goods and non-factor services	1149	2030	2302	2730	3722	4191	5376	6361	7369	8401	9446	10415
<b>Resource Balance</b>	-149	-135	480	674	337	719	-49	-1429	-1709	-2034	-2123	-2222
Net factor payments	-180	-263	-279	-235	-247	-127	-172	331	143	-1	-175	-319
Net unrequited transfers	27	48	21	16	7	4	26	35	40	45	50	45
<b>Current Account Balance</b>	-302	-80	222	455	97	596	-195	-1063	-1526	-1990	-2248	-2496
Net direct foreign investment	39	32	14	43	56	124	234	150	175	300	450	600
Medium and long term loans (net)	202	308	131	192	72	703	838	713	951	1240	1448	1596
to public sector	(160)	(234)	(109)	(195)	(92)	(603)	(781)	(691)	(912)	(1164)	(1335)	(1463)
to private sector	(42)	(54)	(22)	(-3)	(-20)	(100)	(57)	(22)	(39)	(76)	(113)	(133)
Other capital	55	-121	195	162	391	-158	264	-	-	-	-	-
<b>Capital Account Balance</b>	296	219	340	397	519	659	1336	863	1126	1540	1898	2196
<b>Change in Reserves (- = increase)</b>	6	-139	-562	-852	-616	-1265	-1141	200	400	450	350	300
International Reserves (official)	152	547	1166	1830	2482	4106	5416	5216	4816	4366	4016	3716
Reserves as months of imports	1.6	3.2	6.1	8.0	8.0	11.8	12.1	9.8	7.8	6.2	5.1	4.3
<b>GROSS DISBURSEMENTS c/</b>												
Official grants	-	-	-	-	-	-	-	-	-	-	-	-
Gross disbursements of MLT loans	235	390	262	371	319	1036	1131	-	-	-	-	-
Concessional	102	39	47	27	60	36	53	-	-	-	-	-
Bilateral	(100)	(37)	(44)	(21)	(53)	(28)	(16)	-	-	-	-	-
IDA	(-)	(-)	(-)	(-)	(-)	(-)	(-)	-	-	-	-	-
Other Multilateral	(2)	(2)	(3)	(6)	(7)	(8)	(37)	-	-	-	-	-
Non-concessional	133	351	215	345	260	1000	1078	-	-	-	-	-
Official export credits	(26)	(14)	(0)	(14)	(19)	(47)	(113)	-	-	-	-	-
IBRD	(58)	(106)	(76)	(85)	(82)	(138)	(218)	-	-	-	-	-
Other multilateral	(14)	(19)	(27)	(31)	(33)	(31)	(82)	-	-	-	-	-
Private	(35)	(212)	(112)	(214)	(125)	(783)	(665)	-	-	-	-	-
<b>EXTERNAL DEBT (end of period) c/</b>												
Debt outstanding and disbursed	1249	2348	2453	2670	2803	3426	4295	-	-	-	-	-
Official	1074	1716	1785	1862	1999	2151	2446	-	-	-	-	-
IBRD	(354)	(634)	(672)	(716)	(751)	(838)	(1035)	-	-	-	-	-
IDA	(20)	(22)	(22)	(22)	(22)	(22)	(21)	-	-	-	-	-
Other	(700)	(1060)	(1019)	(1124)	(1225)	(1291)	(1390)	-	-	-	-	-
Private	174	632	668	808	804	1275	1849	-	-	-	-	-
Undisbursed Debt	602	663	908	1040	1516	1993	2409	-	-	-	-	-
<b>DEBT SERVICE c/</b>												
Total debt service payments of which	119	249	278	313	398	664	568	-	-	-	-	-
Interest	44	114	129	137	171	231	268	-	-	-	-	-
Payments as % exports of goods and all Services	11.6	11.1	9.5	8.8	9.5	12.5	9.9	-	-	-	-	-
Payments as % GNP	1.7	1.9	1.9	1.6	1.8	2.4	1.7	-	-	-	-	-
Average interest rate on new loans (%)	5.8	7.4	6.5	7.4	7.9	10.3	10.2	-	-	-	-	-
Official	(5.1)	(6.1)	(5.8)	(7.3)	(7.6)	(7.8)	(-)	-	-	-	-	-
Private	(6.9)	(8.2)	(7.5)	(7.6)	(8.6)	(12.0)	(12.3)	-	-	-	-	-
Average maturity of new loans (years)	22.4	15.1	14.8	16.0	14.1	12.6	13.7	-	-	-	-	-
Official	(30.1)	(26.1)	(20.0)	(17.9)	(16.2)	(16.8)	(-)	-	-	-	-	-
Private	(9.7)	(8.2)	(7.4)	(7.6)	(9.1)	(10.0)	(10.2)	-	-	-	-	-
<b>BANK GROUP EXPOSURE (%) c/</b>												
IBRD DOD/total DOD	28.4	27.0	27.4	26.8	26.8	24.5	24.1	-	-	-	-	-
IBRD disbursements/total gross disbursements	24.6	27.1	28.9	22.9	25.7	13.3	19.3	-	-	-	-	-
IBRD debt service/total debt service	34.4	28.9	13.7	14.3	8.8	13.1	25.4	-	-	-	-	-
IDA DOD/total DOD	1.6	1.0	0.9	0.8	0.8	0.6	0.5	-	-	-	-	-
IDA disbursements/total gross disbursements	-	-	-	-	-	-	-	-	-	-	-	-
IDA debt service/total debt service	-	0.1	0.1	0.1	0.1	0.0	0.0	-	-	-	-	-

a/ World Bank Atlas Method  
b/ Preliminary  
c/ Public and publicly guaranteed debt

THE STATUS OF BANK GROUP OPERATIONS IN COLOMBIA

A. STATEMENT OF BANK LOANS AND IDA CREDITS (as of September 30, 1981)

<u>Loan Number</u>	<u>Year</u>	<u>Borrower</u>	<u>Purpose</u>	(US\$ million)		
				<u>Amount Bank</u>	<u>(less Cancellation IDA</u>	<u>Undisbursed</u>
57 fully disbursed loans and one IDA credit				1,070.6	23.5 /1	--
849	1972	Instituto Colombiano de la Reforma Agraria	Irrigation	2.2		.6
920	1973	Colombia	Education	21.2		7.6
1072	1975	Instituto Nacional de Fomento Municipal	Water Supply	27.0		6.3
1118	1975	Colombia	Rural Settlement	19.5		4.1
1163	1975	Colombia	Agriculture	21.0		10.8
1223	1976	Banco de la Republica	Industrial Cr.	80.0		2.0
1352	1977	Colombia	Rural Dev.	52.0		16.5
1357	1977	Banco de la Republica	Agricultural Cr.	64.0		14.9
1450	1977	Empresa Nacional de Telecomunicaciones	Communications	58.3		50.1
1451	1977	Banco de la Republica	Industrial Cr.	15.0		1.0
1471	1977	Colombia	Highways	90.0		39.6
1487	1978	Colombia	Nutrition	25.0		18.2
1523	1978	Empresas Municipales de Cali	Water Supply	13.8		11.6
1558	1978	Colombia	Urban Develop- ment	24.8		22.3
1582	1978	Interconexion Electrica, S.A.	Power	126.0		87.3
1583	1978	Colombia	Power	50.0		15.9
1593	1978	Zona Franca Industrial y Comercial de Cartagena	Industrial Export	15.0		9.8
1598	1978	Banco de la Republica	Industrial Cr.	100.0		14.4
1624	1979	Colombia	Airports	61.0		32.9
1628	1979	Empresa de Energia Electrica de Bogota	Power	84.0		41.3
1694	1979	Colombia	Urban Develop- ment	13.5		12.6
1697	1979	Empresa de Acueducto y Alcantarillado de Bogota	Water Supply	30.0		27.9

/1 Includes exchange adjustment of US\$4.0 million.

A. STATEMENT OF BANK LOANS AND IDA CREDITS (as of September 30, 1981) (Continued)

<u>Number</u>	<u>Year</u>	<u>Borrower</u>	<u>Purpose</u>	<u>Bank</u>	<u>IDA</u>	<u>Undisbursed</u>
1725	1979	Interconexion Electrica, S.A.	Power	72.0		72.0
1726	1979	Instituto Nacional de Fomento Municipal	Water Supply	31.0		31.0
1737	1979	Instituto Colombiano de la Reforma Agraria	Agriculture Cr.	20.0		18.6
1762	1979	Cerro Matoso, S.A.	Mining-Nickel	80.0		18.3
1807	1980	Empresa de Energia Electrica de Bogota	Power	87.0		87.0
1825	<u>/1</u> 1980	Empresas Publicas de Medellin	Communications	44.0		44.0
1834	1980	Banco de la Republica	Industrial Cr.	32.0		29.6
1857	1980	Banco de la Republica	Industrial Cr.	150.0		150.0
1868	1980	Empresas Publicas de Medellin	Power	125.0		125.0
1953	<u>/2</u> 1981	Empresas Publicas de Medellin	Power	85.0		85.0
1966	<u>/1</u> 1981	Colombia	Rural Roads	33.0		33.0
1996	<u>/2</u> 1981	Instituto Colombiano de Hidrologia	Irrigation	37.0		37.0
1999	<u>/2</u> 1981	Corporacion Electrica de la Costa Atlantica	Power	36.0		36.0
2008	<u>/2</u> 1981	Empresa de Energia Electrica de Bogota	Power	<u>359.0</u>		<u>359.0</u>
		TOTAL		3,254.9	23.5	
		Of which has been repaid		<u>561.5</u>	<u>2.3</u>	
		Total now outstanding		2,693.4	21.2	
		Amount sold	51.0			
		Of which has been repaid	45.1	<u>5.9</u>		
		Total now held by Bank and IDA		<u>2,687.5</u>	<u>21.2</u>	
		Total undisbursed				<u>1,573.2</u>

/1 Not yet effective.

/2 Not yet signed.

B. STATEMENT OF IFC INVESTMENTS (as of September 30, 1981)

<u>Year</u>	<u>Obligor</u>	<u>Type of Business</u>	<u>Amount in US\$ million</u>		
			<u>Loan</u>	<u>Equity</u>	<u>Total</u>
1959	Laminas del Caribe, S.A.	Fiber-board	.50	-	.50
1960-1965	Industrias Alimenticias Noel, S.A.	Food products	1.99	.08	2.07
1961	Envases Colombianos, S.A.	Metal cans	.70	-	.70
1961-1968	Morfeo-Productos para el Hogar, S.A.	Home furniture	.08	.09	.17
1961	Electromanufacturas, S.A.	Electrical equipment	.50	-	.50
1962	Corporacion Financiera Colombiana	Development financing	-	2.02	2.02
1962-1963	Corporacion Financiera Nacional	Development financing	-	2.04	2.04
1963-1967	Compania Colombiana de 1968-1969 Tejidos, S.A.	Textiles	1.98	.15	2.13
1964-1970	Corporacion Financiera de Caldas	Development financing	-	.81	.81
1964-1968	Forjas de Colombia, S.A.	Steel forging	-	1.27	1.27
1966	Almacenes Generales de Deposito Santa Fe, S.A.	Warehousing	1.00	-	1.00
1966	Industria Ganadera Colombiana, S.A.	Livestock	1.00	.58	1.58
1967-70-74	ENKA de Colombia, S.A.	Textiles	5.00	2.60	7.60
1969	Compania de Desarrollo de Hoteles y Turismo, Ltda. (HOTURISMO)	Tourism	-	.01	.01
1969-1973	Corporacion Financiera del Norte	Development financing	-	.45	.45
1969	Corporacion Financiera del Valle	Development financing	-	.43	.43
1970	Promotora de Hoteles de Turismo Medellin, S.A.	Tourism	.23	.11	.34
1970-1977	Pro-Hoteles, S.A.	Tourism	.80	.25	1.05
1973-1975	Corporacion Colombiana de Ahorro y Vivienda	Housing	-	.46	.46
1974	Cementos Boyaca, S.A.	Cement	1.50	-	1.50
1975	Cementos del Caribe, S.A.	Cement	3.60	-	3.60
1976	Las Brisas	Mining	6.00	-	6.00
1977	Promotora de la Interconexion de los Gasoductos de la Costa Atlantica S.A.	Utilities	13.00	2.00	15.00
1977	Compania Colombiana de Clinker, S.A.	Cement and Construction Material	2.43	.30	2.73
1980	Leasing Bolivar	Leasing	9.00	.19	9.19
1981	Petroleos Colombianos Ltd.	Chemicals and Petrochemicals	<u>12.15</u>	<u>3.42</u>	<u>15.57</u>
Total Gross Commitments			61.46	17.26	78.72
Less cancellations, terminations, repayments and sales			<u>46.65</u>	<u>8.91</u>	<u>55.56</u>
Total commitments now held by IFC			<u>14.81</u>	<u>8.35</u>	<u>23.16</u>
Total undisbursed			<u>8.54</u>	<u>.42</u>	<u>8.96</u>

C. STATUS OF PROJECTS IN EXECUTION

As of September 30, 1981 1/

1. Ln. No. 849 Second Atlantico Development; US\$2.2 million, June 30, 1972.

Effective date: November 14, 1972  
Closing Date: original - March 31, 1978  
current - September 30, 1981

The project is the second phase of a scheme to develop about 17,000 ha of seasonally inundated land for agricultural production. At the request of the Government, US\$2.8 million of the loan of US\$5.0 million was cancelled in February 1977 and as of September 30, 1981, US\$0.6 million remained undischarged. Settlement of farmers within the project areas was only partially carried out and the provision of technical assistance/farm credit needs improvement. Because heavy seasonal rainfall in 1979 resulted in severe flooding in the project area, a study is being carried out to reassess the flood protection and drainage requirements of the area. The project completion mission will take place in March 1982, once the report by the hydrologic consultants has been completed.

2. Ln. No. 920 Education III; US\$21.2 million, July 19, 1973.

Effective date: January 9, 1974  
Closing Date: original - June 30, 1977  
current - December 31, 1981

Project execution was suspended in mid-1975 pending redefinition of sector priorities by the Government. It resumed in 1977 after the Bank agreed to redimension of the project to give greater emphasis to primary education, but suffered continuous delays. In June 1978, the Government proposed to the Bank to reduce the scope of the project and to cancel a large portion of the loan. However, the new administration, which came to office in August 1978, retracted the proposal and decided to proceed with the project as modified in 1977. Since reactivating the project, the Borrower has made progress in planning, construction, educational programming and personnel training, and project execution is proceeding normally. Nevertheless, because of the delay and higher costs, the scope of the project has been reduced. The closing date of the loan will be extended by an additional three months.

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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 this sense, and with the understanding that they do not purport to present a balanced evaluation of strengths and weaknesses in project execution.

3. Ln. No. 1072 Second Multi-City Water Supply and Sewerage Project; US\$27 million, January 16, 1975.

Effective date: April 14, 1975  
Closing Date: December 31, 1981

Project implementation slower during the first semester of 1981 because of managerial problems and the ground water component and subprojects in Bananquilla, Cartagena and Villavicencio are now expected to be completed by the end of 1982. Despite the delays, works on the other four subprojects are expected to be completed before December 31, 1981. INSFOPAL's management has been urged to strengthen project supervision and to accelerate project execution and disbursements. As of September 30, 1981, US\$20.7 million or 77% of the loan has been disbursed.

4. Ln. No. 1118 Caqueta Rural Settlement Project; US\$19.5 million, June 2, 1975.

Effective date: April 1, 1976  
Closing Date: Original - October 31, 1979  
Current - December 31, 1981

Project implementation is behind schedule and the closing date will need to be extended by one year to December 31, 1982 in order to complete project targets. A recurring problem, which imposes serious operational constraints, is the slow transfer of counterpart funds to the project. As of September 30, 1981, US\$4.1 million or 21% of the loan remained undisbursed. To facilitate the completion of the project, the closing date of the loan will be extended for one year.

5. Ln. No. 1163 Cordoba 2 Agricultural Development Project; US\$21 million, September 12, 1975.

Effective Date: March 30, 1976  
Closing Date: June 30, 1983

A few months after effectiveness, the Government decided to give responsibility for project civil works to another agency. This decision delayed the initiation of the project and implementation is still behind schedule. One of the project's main problems continues to be inadequate budget allocations to carry out project works and to provide sub-loans to farmers. Maintenance of roads and drains constructed under the loan, technical assistance to farmers and rate of land transfer to beneficiaries are inadequate; the executing agencies are taking corrective measures. The project's social component, schools, domestic water supply and health, is progressing satisfactorily. As of September 30, 1981, US\$10.2 million or about 49% of the loan amount had been disbursed.

6. Ln. No. 1223 Sixth Development Finance Companies Project; US\$80.0 million, March 31, 1976.

Effective Date: September 1, 1976

Closing Date: June 30, 1981

The project is proceeding satisfactorily and virtually all loan funds are committed. As of September 30, 1981, about 98% of the loan had been disbursed.

7. Ln. No. 1352 Integrated Rural Development Project; US\$52.0 million, January 7, 1977.

Effective Date: August 26, 1977

Closing Date: December 31, 1982

The project is now in its fifth year of implementation and proceeding satisfactorily in spite of its complexity. The project's components of credit, technical assistance and training are proceeding satisfactorily, and institutional coordination continues to be effective. The forestry and water supply components have suffered some delays. Administrative procedures, such as procurement and disbursement, continue to present some difficulties, but they are much less serious than initially. Control and monitoring of project execution is comprehensive, and first stage evaluation is currently underway. As of September 30, 1981, US\$35.5 million, or 68% of the loan had been disbursed.

8. Ln. No. 1357 Second Agricultural Credit Project; US\$64.0 million, February 4, 1977.

Effective Date: September 6, 1977

Closing Date: December 31, 1981.

The US\$25 million assigned to medium and large farmers has been fully committed and disbursed. However, only 39% of subloans allocated to small farmers have been committed, and no satisfactory arrangement has yet been found to speed up commitments. Concern over possible diversion and substitution of subloan funds led the Borrower to increase substantially its end-use supervision. About 85% of loan funds for credit to agroindustries have been committed for 160 subprojects. As of September 30, 1981, US\$49.1 million, or 77% of the loan had been disbursed.

9. Ln. No. 1450 Telecommunications IV; US\$58.3 million, July 7, 1977.

Effective Date: October 3, 1977.

Closing Date: June 30, 1982.

The project had been delayed as a result of several key personnel changes in the Borrower. Current activities are concentrated on the procurement of project goods, the planning of cable networks, trunk exchange expansion, and design of buildings to house equipment. Satisfactory progress is being made in the acquisition program of smaller local telephone companies. As of September 30, 1981, US\$50.1 million, or 86% of the loan, remained undisbursed.

10. Ln. No. 1451 Second Small-Scale Industry Project; US\$15 million, September 27, 1977.

Effective Date: February 14, 1978.  
Closing Date: September 30, 1981

After initial delays in loan effectiveness mainly due to management changeover, project implementation is proceeding well and loan funds are fully committed. As of September 30, 1981, 93% of the loan had been disbursed.

11. Ln. No. 1471 Highways VII; US\$90 million, July 5, 1977.

Effective Date: November 28, 1977.  
Closing Date: December 31, 1982

The Project comprises three main programs: rehabilitation, maintenance, and vehicle weight control. After initial delays, the project is now developing satisfactorily. All rehabilitation works have been contracted and 25% of the roads completed. The maintenance program began in March 1980; consultants to assist MOPT in carrying out the program have been retained and the bulk of the maintenance equipment has been purchased. The vehicle weight control program is about to begin after a 28-month delay. As of September 30, 1981, about US\$50.4 million had been disbursed.

12. Ln. No. 1487 Integrated Nutrition Improvement Project; US\$25 million, November 10, 1977.

Effective Date: March 9, 1978  
Closing Date: June 30, 1982

Progress has been achieved in the major components of health, nutrition education and water supply but execution is running about a year behind schedule. Initial delays occurred in two subsidiary components--home food production and food quality control--but activities are now underway. Project management and coordination have been sound, flexible and effective. Project monitoring and evaluation systems are operating effectively.

13. Ln. No. 1523 Second Cali Water Supply and Sewerage Project; US\$13.8 million, June 20, 1978.

Effective Date: January 31, 1979  
Closing Date: June 30, 1982

Because of EMCALI's failure to comply with some of its obligations under the Loan Agreement dealing with the finances of its Water and Sewerage Division, on January 29, 1981, the Bank suspended disbursements under this loan. Disbursements were resumed on September 4, 1981 once EMCALI has taken corrective measures. As of September 30, 1981, US\$11.6 million or 84% of the loan remained undisbursed.

14. Ln. 1558 Urban Development Project; US\$24.8 million, July 21, 1978.

Effective Date: December 1, 1978  
Closing Date: June 30, 1982

While project execution and coordination has recently improved, overall progress is still running behind schedule. Project implementation plans in 16 of the 23 cities have been approved by the Bank. The new General Manager of SIP intends to accelerate project implementation and has established a working unit to monitor progress and evaluate the project. For some time, the Bank has been recommending a review of the project scope to ensure its completion on time and recently SIP has presented a proposal which, while not changing the basic concept of the project, involves design modifications in most components. This proposal is currently being reviewed by the Bank.

15. Ln. No. 1582 San Carlos I Hydro Power Project; US\$126 million, July 14, 1978.

Effective Date: April 5, 1979  
Closing Date: June 30, 1984

Project works are proceeding on schedule and main contracts for equipment have been signed. As of September 30, 1981, US\$38.7 million or 31% of the loan had been disbursed.

16. Ln. No. 1583 500 kV Interconnection Project; US\$50 million, July 14, 1978.

Effective Date: October 17, 1978  
Closing Date: June 30, 1982

Project works have recently been initiated. The Bank-financed component (transmission line) is proceeding on schedule, at lower-than-anticipated cost. However, project completion is likely to be delayed by about two years as a result of KfW's objection to the contract award for substations (KfW was originally to finance this component). The Government is obtaining other sources of finance. The line is to be energized temporarily at 220 kV in 1982, pending full completion of the works.

17. Ln. No. 1593 Cartagena Industrial Export Processing Zone; US\$15 million, August 1, 1978.

Effective Date: January 30, 1979  
Closing Date: December 31, 1983

After an initial delay due to procurement problems, project implementation is now running smoothly. Construction and the promotional campaign are both well under way, but there have been delays in contracting the water supply works and in construction of a portion of the access road. Difficult soil conditions encountered at the site require that substantial soil investigations be carried out before site preparation is initiated.

18. Ln. No. 1598 Seventh Development Finance Companies Project;  
US\$100 million, July 27, 1978.

Effective Date: November 28, 1978  
Closing Date: December 31, 1982

The project is proceeding satisfactorily and loan funds are virtually fully committed. As of September 30, 1981, 87% of the loan, or about US\$85.6 million, had been disbursed.

19. Ln. No. 1624 Airports Project; US\$61 million, December 29, 1978.

Effective Date: July 24, 1979  
Closing Date: December 31, 1984

Project works are well under way. Because of poor soils, there is a construction delay at the future Rio Negro airport and instrumentation has been installed in order to estimate amount of camber necessary to compensate for future settlement. As of September 30, 1981, about 54% of the loan had been disbursed.

20. Ln. No. 1628 Mesitas Hydroelectric Power Project; US\$84 million,  
April 9, 1979.

Effective Date: August 21, 1979  
Closing Date: December 31, 1982

Project works are well advanced, although with a 3-6 month delay. Higher-than-anticipated costs (estimated at US\$62 million) are expected as a result of higher bids than forecast at appraisal. As of September 30, 1981, 49% of the loan had been disbursed.

21. Ln. No. 1694 Second (Cartagena) Urban Development; US\$13.5 million,  
August 31, 1979.

Effective Date: June 20, 1980  
Closing Date: December 31, 1984

The project is about 18 months behind schedule, with cost overruns, which are mainly due to inflation, of about 39%. As of September 30, 1981, US\$12.6 million, or 97% of loan funds remained undisbursed.

22. Ln. No. 1697 Third Bogota Water Supply; US\$30 million, November 30, 1979.

Effective Date: April 22, 1980  
Closing Date: June 30, 1983

Significant progress has been made on the Bogota River sewage treatment and rectification study, the construction of water and sewerage systems in low-income barrios, the purchase of meters and of maintenance equipment. Implementation of major civil works, however, has been slow. Loan disbursements are only

8% of appraisal projections and project completion is now scheduled for December 31, 1983, one year later than the scheduled appraisal completion date. EAAB is presently taking adequate measures to implement all project components and further delays are not anticipated.

23. Ln. No. 1725 San Carlos II Hydro Power; US\$72 million, November 30, 1979.

Effective Date: June 19, 1981

Closing Date: June 30, 1985

Project works are proceeding well, with good performance by the Borrower.

24. Ln. No. 1726 Third Water and Sewerage; US\$31 million, November 30, 1979.

Effective Date: February 28, 1980

Closing Date: June 30, 1984

Project implementation is under way with the final designs for 21 of the 23 subprojects approved and with designs for the remaining subprojects in final stages of preparation. INSFOPAL has agreed on a master contract amendment for subsidiary loan agreements which, when executed, will allow accelerated construction and loan disbursements. The general performance of the Borrower (INSFOPAL) is not yet fully satisfactory. Corrective measures will need to be taken and a supervision mission is scheduled to review the problem. As of September 30, 1981, the loan remained undisbursed.

25. Ln. No. 1737 Third Agricultural Credit; US\$20 million, November 30, 1979.

Effective Date: October 1, 1980

Closing Date: June 30, 1985

Disbursements are lagging, even taking into account the one year delay in effectiveness, mostly because of slow on-lending commitments. The revolving fund for credit is working well, but overall financial management of INCORA needs strengthening. As of September 30, 1981, 9% of the loan had been disbursed.

26. Ln. No. 1762-CO Cerro Matoso Nickel; US\$80 million, December 20, 1979.

Effective Date: July 3, 1980

Closing Date: June 30, 1983

The project is expected to be completed by April 1982. Cost overruns will require a revision of the financing plan and, possibly, additional commitments from the sponsors.

27. Ln. No. 1807-CO Bogota Power Distribution; US\$87 million, February 6, 1981.

Effective Date: September 25, 1981

Closing Date: December 31, 1983

This loan became effective on September 25, 1981 and project implementation is underway.

28. Ln. No. 1825-CO Fifth Telecommunications; US\$44 million,  
December 19, 1980.

Effective Date: October 30, 1981  
Closing Date: June 30, 1985

This loan became effective on October 30, 1981 and is proceeding satisfactorily.

29. Ln. No. 1834-CO Third Small-Scale Industry; US\$32 million,  
December 10, 1980.

Effective Date: July 9, 1981.  
Closing Date: June 30, 1981.

This loan became effective on July 9, 1981, and project implementation is underway.

30. Ln. No. 1857-CO Eighth DFC; US\$150 million, December 10, 1980.

Effective Date: July 9, 1981.  
Closing Date: December 31, 1984.

This loan became effective on July 9, 1981 and is proceeding satisfactorily. As of September 30, 1981 US\$8.9 million had been committed to sub-projects.

31. Ln. No. 1868-CO Guadalupe IV Hydro Power; US\$125 million,  
December 19, 1980.

Effective Date: June 29, 1981.  
Closing Date: June 30, 1985.

The project is proceeding satisfactorily.

32. Ln. No. 1953-CO Playas Hydro Power; US\$85 million, November 6, 1981.

This loan is not yet effective.

33. Ln. No. 1966-CO Rural Roads; US\$33 million, September 24, 1981.

This loan is not yet effective.

34. Ln. No. 1996-CO Irrigation Rehabilitation US\$37 million.

This loan was approved on May 19, 1981 but is not yet signed.

35. Ln. No. 1999-CO Village Electrification; US\$36 million.

This loan was approved on May 21, 1981 but is not yet signed.

36. Ln. No. 2008-CO Guavio Power; US\$359 million.

This loan was approved on May 28, 1981 but is not yet signed.

COLOMBIA  
RAILWAYS VII  
SUPPLEMENTARY DATA SHEET

Section I: Timetable of Key Event

- |                                      |   |
|--------------------------------------|---|
| (a) Time taken to prepare project:   | 12 months   |
| (b) Agency which prepared project:   | Colombian National Railways<br>(ITALCONSULT (Consultant)) |
| (c) First presentation to Bank:      | October 1978  |
| (d) First mission to review project: | February 1979   |
| (e) Departure of Appraisal Mission:  | September 1980  |
| (f) Completion of Negotiations:      | December 1981   |
| (g) Planned date of Effectiveness:   | September 1982  |

Section II: Special Bank Implementation Actions

The project would be monitored closely and the targets included in the Program of Action (Annex IV) would be reviewed every six months with disbursements linked to the achievement of targets. A mid-project review would be undertaken in September 30, 1983 before proceeding with Group II of the project.

Section III: Special Conditions

During negotiations, assurances were obtained that:

- (a) CNR would reduce further its passenger services in order to free locomotives for freight traffic (paragraph 36).
- (b) Group II of the project is conditional upon signing contracts with potential shippers (paragraph 42).
- (c) The terms and conditions of employment for consultants would be satisfactory to CNR and the Bank (paragraph 44).
- (d) The Government would assist CNR in its dealings with the Labor Union (paragraph 47).

- (e) CNR would carry out improvements in its conditions of employment in order to retain and attract qualified staff (paragraph 47).
- (f) CNR would increase tariffs in order to meet agreed working and operating ratio targets, including an increase of 10% in real terms in January 1983, 1884 and 1985 (paragraph 48).
- (g) CNR would set up a contributory pension scheme (paragraph 50).
- (h) Loan disbursements would be conditioned to CNR achieving agreed targets of the Program of Action (paragraph 52).

## Annex IV

### Summary Description of the Program of Action 1982-1986

The main features of the Program of Action are the:

Achievement of quantitative targets in accordance with the table given below

	1979	1980	1981	1982		1983		1984		1985		1986	
				JUNE	DECEMBER	JUNE	DECEMBER	JUNE	DECEMBER	JUNE	DECEMBER	JUNE	DECEMBER
1.1 Availability of diesel locomotives as a % of total fleet	58	32	30	36	39	48	53	58	64	67	73	76	80
1.2 Availability of freight cars as a % of total fleet	75	75	75	77	78	79	80	81	82	84	85	86	87
1.3 Average net load per train (tons)	301	322	N/A	305	305	307	307	308	308	309	309	309	309
Average net load per car (tons)	29.5	30.3	30.5	32.8	32.8	32.8	32.8	32.9	32.9	33.0	33.0	33.0	33.0
1.4 Wagons turnaround time (days)	15.6	18.2	N/A	16.5	16.0	15.5	15.0	14.5	13.5	13.0	12.0	11.5	11.0
1.5 Procurement of Ties													
1.5.1 Wooden treated ties	N/A	N/A	N/A	100,000	101,700	120,000	134,700	130,000	124,900	160,000	162,257	160,000	162,480
1.5.2 Concrete ties	N/A	N/A	N/A	15,000	18,400	24,000	26,000	26,000	32,500	12,000	13,000	12,000	13,000
1.6 Track Rehabilitation (km)	N/A	N/A	-	70	71	90	92	90	98	100	108	100	108
1.7 Average Staff													
1.7.1 Administration	N/A	N/A	N/A	2,027	1,987	1,952	1,922	1,887	1,857	1,822	1,792	1,757	1,727
- Administration	N/A	N/A	N/A	123	123	123	123	123	123	123	123	123	123
- Engineers Operations	N/A	N/A	N/A	2,150	2,110	2,075	2,045	2,010	1,980	1,945	1,915	1,880	1,850
1.7.2 Operations:	N/A	N/A	N/A	1,813	1,813	1,968	1,968	2,011	2,011	2,011	2,011	2,011	2,011
- Workshops	N/A	N/A	N/A	2,938	2,938	3,088	3,088	3,238	3,238	3,288	3,288	3,338	3,338
- Way and works	N/A	N/A	N/A	3,285	3,285	3,285	3,285	3,305	3,305	3,355	3,355	3,370	3,370
- Transportation	N/A	N/A	N/A	422	422	444	444	466	466	466	466	466	466
- Telecommunications	N/A	N/A	N/A	8,458	8,458	8,785	8,785	9,020	9,020	9,120	9,120	9,185	9,185
Subtotal Operations													
<b>Total Average Staff</b>	<b>10,345</b>	<b>10,392</b>	<b>10,328</b>	<b>10,608</b>	<b>10,568</b>	<b>10,860</b>	<b>10,830</b>	<b>11,030</b>	<b>11,000</b>	<b>11,065</b>	<b>11,035</b>	<b>11,065</b>	<b>11,035</b>
1.8 Before Normalization													
1.8.1 Working Ratio (%)			175	170		143		112		96		86	
1.8.2 Operating Ratio (%)			181	175		159		124		107		94	
1.9 After Normalization													
1.9.1 Working Ratio (%)			-	148		127		104		91		82	
1.9.2 Operating Ratio (%)			-	153		142		115		101		90	
1.10 Freight tariff increase (in real terms) %						10 (Jan.)		10 (Jan.)		10 (Jan.)			
1.11 Implementation of Staff Improvement Plan							January 1, 1983						
1.12 Commencement of Training Program				October 1, 1982									
1.13 Completion of Actuarial Studies							December 31, 1983						
1.14 Implementation of Pension Plan								January 1, 1985					
1.15 Implementation of Improved Procurement Procedures				October 1, 1982									
1.16 Implementation of Disciplinary Actions				October 1, 1982									
1.17 Revaluation and Updated Depreciation of Fixed Assets							December 31, 1983						

Actual: 1979-1981  
Forecast: 1982-1986

Source: ITALCONSULT, CNR and Mission

January 1982



