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Report No. P-2122-CO

REPORT AND RECOMMENDATION
OF THE
PRESIDENT OF THE
INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT
TO THE
EXECUTIVE DIRECTORS
ON A
PROPOSED LOAN TO
THE REPUBLIC OF COLOMBIA
FOR AN INTEGRATED NUTRITION IMPROVEMENT PROJECT

August 30, 1977

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SEP 05 1978

CURRENCY EQUIVALENTS

(As of February 1977, and used in this report)

Currency Unit - Colombian Peso (Col\$)	
Col\$1	- US\$0.0277
Col\$1,000	- US\$27.77
Col\$1,000,000	- US\$27,770
US\$1	- Col\$36.01

WEIGHTS AND MEASURES

Metric System

GLOSSARY OF ABBREVIATIONS

AID	- Agency for International Development
CARE	- Cooperative American Relief for Everywhere
CARITAS	- Charity (an organization of Catholic charities)
CNAN	- Consejo Nacional de Alimentación y Nutrición (National Food and Nutrition Council)
CONPES	- Consejo Nacional de Política Económica y Social (National Council for Economic and Social Policy)
CRS	- Catholic Relief Services
DNP	- Departamento Nacional de Planeación (National Planning Department)
DRC	- Development Research Center
FAO	- Food and Agriculture Organization (United Nations)
FONADE	- Fondo Nacional de Desarrollo Económico (National Fund for Economic Development)
GDP	- Gross Domestic Product
IBRD	- International Bank for Reconstruction and Development
ICA	- Instituto Colombiano Agropecuario (Colombian Agricultural Institute)
ICBF	- Instituto Colombiano para el Bienestar Familiar (Colombian Institute for Family Welfare)
IDA	- International Development Association
IDB	- Inter-American Development Bank
IIT	- Instituto de Investigación Tecnológica (Institute for Technological Research)
INAS	- Instituto Nacional de Salud (National Institute of Health)
IRD	- Integrated Rural Development Program
MOH	- Ministry of Health
PAHO	- Pan-American Health Organization
PAN	- Plan Nacional de Alimentación y Nutrición (National Food and Nutrition Plan)
PCM	- Protein-calorie-malnutrition
UNICEF	- United Nations Children's Fund
UNDP	- United Nations Development Programme
USAID	- United States Agency for International Development
WFP	- World Food Program
WHO	- World Health Organization (United Nations)

GOVERNMENT OF COLOMBIA FISCAL YEAR

January 1 to December 31

COLOMBIA

NUTRITION IMPROVEMENT PROJECT

LOAN AND PROJECT SUMMARY

Borrower: The Republic of Colombia.

Amount: US\$25 million equivalent.

Terms: Repayment in 17 years including 4 years of grace and interest of 8% per annum.

Project Description:

The project seeks to improve nutritional levels of the poorest parts of the populations in seven departments and Bogota and to strengthen the Government's nutrition program. Within project areas, a community based health service system would be established and nutrition education would be provided for 1.8 million people mostly among the poorest 30% of the population. Potable water supply systems and latrines would be installed for a portion of beneficiaries, while 20,000 families would receive technical and material assistance for home garden production of nutritious foods. At the national level, the project would develop new food technology, improve quality control of processed foods, strengthen project management and monitor and evaluate the overall program. The project would result in increased work and schooling efficiency, reduced infant mortality, increased vegetable production and improved efficiency in the processing and preservation of food. Achievement of the project's benefits would be dependent upon effective coordination of the activities of the various agencies charged with carrying out the project. The Government's strong commitment to the nutrition program and the monitoring and evaluation systems being proposed in the project should help ensure that coordination will indeed be effective.

Estimated
Cost:

	<u>Local</u>	<u>Foreign</u>	<u>Total</u>
	----- (US\$ Million) -----		
Health Services	13.0	2.1	15.1
Water Supply and Sanitation	14.7	3.7	18.4
Nutrition Education	5.4	.7	6.1
Family Gardens	1.4	-	1.4
Applied Food Technology and Quality Control	3.0	.8	3.8
Monitoring and Evaluation	2.9	.1	3.0
Test of Nutrition System	2.1	1.3	3.4
Program Coordination	<u>3.0</u>	<u>.9</u>	<u>3.9</u>
<u>Base Costs</u>	45.5	9.6	55.1
Physical Contingencies	4.5	1.0	5.5
Price Contingencies	<u>6.0</u>	<u>2.3</u>	<u>8.3</u>
<u>Total Project Costs</u>	<u>56.0</u>	<u>12.9</u>	<u>68.9</u>

Financing
Plan:

	<u>Local</u>	<u>Foreign</u>	<u>Total</u>
	----- US\$ Million -----		
Bank	12.1	12.9	25.0
Government	39.1	-	39.1
Beneficiaries	<u>4.8</u>	<u>-</u>	<u>4.8</u>
<u>Total Project Cost</u>	<u>56.0</u>	<u>12.9</u>	<u>68.9</u>

Estimated
Disbursements:

<u>Bank FY</u>	1978	1979	1980	1981	1982
	----- (US\$ Million) -----				
Annual	.5	3.8	6.0	7.8	6.9
Cumulative	.5	4.3	10.3	18.1	25.0

Appraisal
Report:

Report No. 1583a-C0, dated August 26, 1977.

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

REPORT AND RECOMMENDATION OF THE PRESIDENT
TO THE EXECUTIVE DIRECTORS
ON A PROPOSED LOAN TO
THE REPUBLIC OF COLOMBIA
FOR AN INTEGRATED NUTRITION IMPROVEMENT PROJECT

1. I submit the following report and recommendation on a proposed loan to the Republic of Colombia for the equivalent of US\$25 million to help finance a nutrition improvement project. The loan would have a term of 17 years, including 4 years of grace with interest at 8% per annum.

PART I: THE ECONOMY

2. The latest economic report on Colombia (1548-C0) was distributed to the Executive Directors in May 1977. It assesses current developments and provides a medium-term perspective of the Colombian economy. Country data sheets are provided in Annex 1.

Background

3. During the past two decades substantial structural transformation has taken place in the Colombian economy. The country has made impressive progress in the transition from a predominantly rural and agricultural economy made up of largely self-contained regions to an urban industrial economy, more oriented toward international trade. Broadening of the country's productive base has been accompanied by rapid growth of nontraditional exports (those other than coffee) and development of a modern sector which relies to a considerable extent on imported inputs. From 1967 to 1975 GDP rose by an average 6.4% per annum in real terms, well above the historical average of less than 5% (1950-67). The accelerated economic growth coupled with a decline in population growth (2.7% in recent years compared with 3.2% during the 1951-64 period) brought about a rapid increase in per capita incomes. Two mutually dependent phenomena, increased investment and relaxation of the foreign exchange constraint, have been the major factors in bringing about this acceleration. Merchandise exports have expanded more than three-fold since 1967 and, most significantly, nontraditional exports have become an increasingly important source of foreign exchange earnings, growing from 27% of merchandise exports to about 50% at present. Much of this increase was the result of both product and market diversification but also of the Government's implementation of a comprehensive set of programs designed to increase and diversify exports. Despite the substantial progress, Colombia still remains essentially an underdeveloped country with a limited modern sector superimposed on a large, traditional, and poor base.

4. When the present Government took office in August 1974, the country was faced with several adverse developments -- weakening balance of payments situation, impending loss of self-sufficiency in petroleum production, inflation, deterioration of public finances, and reduction in public investment -- which threatened to interrupt the high growth rate achieved by Colombia in recent years. The new administration embarked upon an economic stabilization program with the aim of restoring the basis for sustained economic growth. In line with this, it implemented basic reforms of the fiscal, monetary and price systems.

5. To help strengthen public finances, the new Government undertook a tax reform which covered almost every important component of the tax system and represented a significant improvement in terms of progressivity and elasticity. The Government also made certain changes in the financial system with the purpose of stimulating private savings and improving the system's allocational efficiency. The action included a restructuring of interest rates, simplification of the complex reserve system, and elimination of many of the more rigid and cumbersome controls.

6. The Government also took steps to correct major distortions which existed in the price system. Price controls on a number of important agricultural products were removed. In May 1976, the Government introduced far-reaching modifications in its petroleum pricing policy which aim at regaining self-sufficiency in production of crude petroleum by improving incentives for exploration and exploitation. Under the new policy, foreign oil companies are now paid the international price of crude CIF Cartagena for new petroleum produced in association with the government petroleum corporation. (Previously the foreign oil companies received less than US\$7 per barrel for new crude.) The Government is also encouraging incremental production from existing fields and, in this connection, eliminated the special petroleum exchange rate, effectively increasing the price of crude oil by about 20%. Furthermore, retail prices of gasoline have been raised in successive steps from US\$0.11/gallon in August 1975 to US\$0.27/gallon in January 1977, or by almost 150%. The Government proposes to continue this policy until the prices of gasoline and other petroleum derivatives approach international levels.

7. Economic growth slowed in 1975 (from 6% in 1974 to about 5%) and unemployment increased, reflecting both the impact of the stabilization measures adopted at the end of 1974 and the effects of the world recession. Towards the end of the year the economy began to recover, stimulated by increased exports, larger agricultural output and heightened industrial activity. The recovery continued in 1976 with real GDP growing by about 6%. During 1974-76 National Government savings increased substantially; due to the 1974 Tax Reform, tax revenues increased by over 40% a year while nominal GDP grew at an annual rate of about 30%. Private savings mobilized through the financial system also increased rapidly, growing by almost 50% a year during 1974-76. Moreover, the balance of payments turned favorable in 1975 as a result of the sharp increase in world coffee prices and expansion of

non-coffee agricultural exports. The improved balance of payments performance continued in 1976 with foreign exchange reserves reaching almost US\$1,150 million, sufficient to cover over 5 months' imports. With increased export earnings, the public debt-service ratio declined from 17.0% in 1974 to about 11.4% in 1976. However, despite strengthening of the Government's monetary and fiscal policies (which had reduced inflation from 27% in 1974 to 18% in 1975), the rate of inflation increased to 26% in 1976. Colombia, through a combination of domestic policies and fortuitous external developments, has come through the period of world recession and economic adjustment with a strong foreign exchange reserve position and a rapidly recovering domestic economy.

Recent Economic Performance

8. The economic forces have continued to be favorable. Coffee prices are high and the balance of payments remains strong; foreign exchange reserves stood at about US\$1,700 million at the end of the first half of 1977, the highest level in Colombia's history. The increased demand generated by the higher incomes of the coffee producers has been a powerful stimulus to the economy. Real GDP growth in 1977 is projected at 7%. As a result, urban unemployment, down from about 13% in 1974 to about 9% by end-1976, is expected to decline further.

9. The inflow of foreign exchange from coffee sales has, however, led to a resurgence of inflation and this has prompted the Government to continue to give priority to short-term management of demand. Several measures have been taken. Legal reserve requirements have been increased and limitations on private external borrowing have been established. Import duties have been drastically reduced to shift part of the inflationary pressures to the external sector. Fiscal management was quite restrictive in 1976; the Treasury accounts had a surplus, which was used for repayment of the Government's short-term domestic debt. Almost two-thirds of coffee earnings are being kept from increasing the monetary base by measures adopted recently. /1 The Government's liberalized import policy will (although with a lag) increase the supply of goods, thus dampening pressure on domestic prices. Nevertheless, inflationary pressures are likely to persist. Even after the sterilization measures taken, the record coffee export receipts will add to the monetary expansion. Furthermore, current price and cost trends as well as "corrective" adjustments in public-service prices make substantial deceleration of price

/1 The measures are: 15% of payments to coffee producers to be made in three-year compulsory savings certificates; an increase in the coffee retention tax from 23% to 46%, and investment of a substantial portion of this tax, including the four percentage points received by the Coffee Federation, in Government bonds. Also foreign exchange receipts from coffee exports are to be surrendered to the monetary authorities in exchange for 90 day foreign exchange certificates. The certificates are freely tradeable but carry a penalty charge of 15% if converted into pesos before the 90 days are up.

increases unlikely during 1977 (the Government is attempting to hold wage increases in the public sector to 18%, but private sector wages will probably increase substantially more). Nevertheless, the rate of inflation is expected to decline over the medium term as the Government remains strongly committed to reducing inflation and its monetary, fiscal and trade measures begin to take effect. Although the reserves being built up during the "coffee boom" strengthen Colombia's longer-term prospects, the rapid increases in liquidity add to the difficulties of short-term economic management and illustrate the special problems facing economies with a heavy reliance on a single export commodity. Although inflation needs to be brought under control, the economy seems now poised for a period of rapid growth.

Development Strategy and Prospects

10. The Government's development strategy is embodied in the 1975-78 development plan. The plan aims at creating the conditions necessary for substantially reducing unemployment through increased capital accumulation in the private sector, improvement in the efficiency of the price system in order to encourage more labor-intensive production techniques and expansion of public investment. The plan places increased emphasis on the strengthening of public sector institutions to help carry out effectively the economic development program. Public investment is to be concentrated on expanding and improving infrastructure to stimulate rapid growth and employment in industry and agriculture, as well as on socially oriented projects to help eradicate rural and urban poverty. Within infrastructure, special priority has been assigned to the development of domestic energy sources to help reduce the country's impending dependence on imported energy. Also, the Government continues to stress small farmer agriculture because it is in the rural areas where the greatest concentration of poverty exists and in agricultural activities where increases in employment can be most quickly achieved. Commercial agriculture is to receive support due to its strong contribution to export as well as employment growth. A substantial portion of public expenditures have been reoriented toward nutrition and primary education programs which affect the poorest 50% of the population. The Government is also starting projects to help eradicate urban poverty, placing emphasis on integrated projects which are likely to contribute to increased productivity and employment. This effort is being complemented by policies and programs to encourage decentralization of industry away from the largest cities to accelerate integration of more backward areas into the modern sector of the economy.

11. Looking back over the last two years, it is clear that the Government's development activities have concentrated principally on increasing the access of the poorest 50% of the population to education, health and other public services. A direct reflection of this is the fact that in 1976 37% of total Central Government outlays went to support programs in education, health and water supply. Over the last fifteen months, the Government also started ambitious programs in nutrition, urban and rural development, which when fully implemented would benefit more than one-half of the country. While these activities proceed to an advanced stage of implementation, the Government now proposes to concentrate on the development of the country's energy resources (hydro-electricity, gas and coal) and on further expanding the productive sectors to provide for a higher level of income and employment.

12. Colombia's strong balance-of-payments prospects for the immediate future should make it possible in 1977 for the country to resume the high rate of growth of GDP (6-7%) achieved in the early 1970s. Export prospects for the next several years are excellent, as world coffee prices remain strong and economic growth is resuming in the industrialized countries. With the continuation of appropriate incentives, minor exports should grow very rapidly once again. Manufactured exports--textiles, chemicals, pharmaceuticals, mechanical and electrical equipment, and paper products--are over the long-term expected to lead this recuperation, along with non-coffee agricultural exports. Given the improved outlook for coffee, Colombia is likely to maintain a favorable trade balance throughout the late 1970s. Under these circumstances an annual growth rate of GDP of 7.4% during 1977-82 is feasible and would be accompanied by a 10% annual increase of import in real terms. In light of favorable external economic conditions and domestic policies the marginal savings rate over this period is projected to be about 30% and public sector savings are projected to be about 8% of GDP. However, to achieve both economic and social objectives, capital expenditures would need to be maintained at about 10% of GDP. Consequently, Colombia will continue to require substantial capital inflows to bridge the savings/ investment gap of the public sector. Furthermore, since the projected foreign exchange requirements associated with the public investment program would be greater than the foreign exchange component of the "projectizable" portion of it, external lenders would need to provide some local currency financing in their loans. In view of Colombia's progressive development policies and domestic resource mobilization efforts, local-cost financing by external financing agencies is considered justified in those cases where such financing is required to give the agencies a meaningful role in high priority social projects.

13. Colombia is expected to require gross capital inflows of US\$4.2 billion during the five-year period 1977-82, of which almost US\$350 million will be disbursed from commitments made through the end of 1976. To attain this level, annual gross capital inflow will have to increase from US\$421 million in 1976 to US\$990 million in 1982. Direct foreign investment is expected to provide only a small part (8%) of the required capital inflow, with approximately 50% being provided by official multilateral and bilateral sources and the remainder by suppliers', financial and other credits from private sources.

14. Colombia's public external debt repayable in foreign currency amounted to US\$3.3 billion at the end of 1976, or about US\$2.6 billion excluding undisbursed commitments. The Bank Group's share of this external debt (disbursed only) as of the end of 1976 was about 28% and is expected to decline to about 25% by 1982. Service on this debt was about 11.4% of exports of goods and non-factor services in 1976, and is projected to remain at that level, assuming recovery of minor exports and the favorable outlook for coffee over the next few years. Balance-of-payments prospects beyond 1980 will depend to a significant extent on the timely development of domestic energy sources and on progress made in implementation of several resource-based export projects currently under preparation. The Bank's share of public debt service in 1976 was about 26% and is expected to decline marginally to

25% by 1982. With the maintenance of sound economic and financial policies, Colombia should have no difficulty securing or servicing the external capital it needs.

PART II: BANK GROUP OPERATIONS IN COLOMBIA

15. The proposed loan, the 69th to be made to Colombia, would bring the total amount of Bank loans to Colombia to US\$1,548.6 million (net of cancellations). Of this amount, US\$1,022.7 million is now held by the Bank; IDA made one credit of US\$19.5 million for highways in Colombia in 1961. Disbursements have been completed on 43 loans and the IDA credit. IFC has made effective investments and underwriting commitments of US\$53.7 million in 24 enterprises and now holds US\$28.1 million. Annex II contains a summary statement of Bank loans and the IDA credit as of June 30, 1977, and IFC investments as of July 31, 1977. The Annex also contains summaries on the execution of the 22 on-going projects.

16. Since FY68, Bank lending in Colombia has become more diversified and has been concentrated on production-oriented programs and activities which carried social as well as economic benefits. Eight of the eleven agricultural loans have been made since then, seven of the ten loans for industry, all three loans in the education sector and all six loans for water supply and sewerage. This compares with only seven loans since FY68 in the power and transport sectors.

17. Bank lending to Colombia in FY77 consisted of loans for rural development, agricultural credit, telecommunications, highways and small-scale industry, totalling US\$281 million equivalent. In addition to the proposed nutrition improvement project, the FY78 program includes proposed loans for water supply and sewerage, power, and urban development. Work is also under way in development finance companies, slum improvement, transportation, power, mining and small farm development for possible consideration by the Executive Directors during the next two years.

18. The proposed Bank lending conforms closely with the Government's revised development strategy. To help Colombia develop domestic sources of energy, a substantial part of the proposed lending would be for hydro-power. The Bank would also assist the development of small coal mines, which hold potential in helping Colombia meet part of its energy requirements. Bank involvement in the energy sector would help mobilize additional external financing as some of the projects would require co-financing. Other future loans would finance agriculture and industry to assist the Government in its efforts to raise overall productivity, income and employment and to strengthen and diversify exports. Closely related to these objectives would be the proposed Bank lending for transport infrastructure in more backward areas of the country to integrate them into the modern economy. In this context, we are proceeding with a project to improve domestic airports. Finally, we are preparing a relatively large number of loans in support of the Government's

efforts to help the lowest 50% of the Colombian population. The proposed integrated nutrition project, and urban development, slum improvement and water supply and sewerage projects are to improve the poor's standard of living, while providing some additional employment and raising labor productivity.

19. The operations of external lenders in Colombia are shown in Annex I. While IBRD, IDB, and AID provided about 75% of total external financing to Colombia in the 1961-72 period, their share has decreased since then to approximately 40%. Like the Bank, IDB and AID have given increased emphasis to social projects. For instance, the IDB has assisted projects in low cost housing, rural development, agrarian reform, university education, water supply, and land erosion; in the future IDB proposes to assist Colombia in its plans to develop sources of domestic energy and to expand the activity of the productive sectors to help generate increased employment. AID has supported programs in education, urban development and small farm development. More recently, it has moved to small project loans aimed chiefly at improving the distribution of income. It is expected to phase out its aid program in Colombia in 1979 with the commitment of a US\$6 million nutrition loan.

PART III - NUTRITION CONDITIONS AND PROGRAMS

Background

20. Over the last two decades, Government strategy and policies have focused on diversifying and expanding exports while increasing employment, and simultaneously on improving living standards and opportunities for the population as a whole. Between 1960 and 1976 GNP per capita in current dollars rose from US\$210 to US\$640, while employment increased by nearly one-half in that period. Significant progress was also made in a variety of social service areas including the expansion and consolidation of the education sector and the spread of potable water supply and health services. Primary school enrollment of 4 million in 1975 was double that of 1963 while the 1.3 million enrollment at the secondary level in 1975 was nearly four times that of 1963. Potable water supply services were spread such that they reached over 70% of the households in medium and large urban areas and to almost 15% (from virtually no facilities in the 1950s) in rural areas in 1974. The spread of health services and water supply and sewerage was one of the factors behind the fall in infant mortality from 88 per 1,000 live births in 1963 to about 70 in 1970. Improvement in the standard of living of a large number of Colombians is also evidenced by reduced population growth rates (see paragraph 3 above).

21. As part of the development strategy, the Government has implemented programs and policies directed at the poor and at improving their employment possibilities. In the rural areas, for example, land reform efforts begun in 1961 have thus far benefitted nearly 200,000 families. Additionally, the principal source of agriculture credit, Caja Agraria, has lent a significant share of its portfolio (in 1975 about 50%) to hundreds of thousands

of small farmers. In the urban areas the Government has encouraged the expansion of small-scale labor-intensive manufacturing and industry through increased credit and technical assistance. In order to increase employment and opportunities where most of the poverty exists, the Government has more recently been expanding infrastructure and productive investments in regions outside the major metropolitan centers.

22. Though these efforts have benefitted and are continuing to benefit a large number of the poor, they cannot in the short run eradicate the significant levels of poverty which persist. According to a recent study, ^{/1} per capita incomes in rural areas in 1974 averaged US\$173 per annum, with 60% of the rural population living below the poverty level which is estimated to be an annual US\$150 per capita. Approximately two-thirds of the 900,000 rural families below the poverty level are either landless or own less than 1 hectare of land. The poorest quarter of the population as a whole and 37% of the rural population had per capita incomes of below US\$100 per annum. Towns with populations below 30,000 have income distribution patterns similar to those in rural areas. Unemployment remains high especially in provincial areas where it was estimated at about 15% in 1973.

23. The persistence of poverty in the face of rapid economic development is in large part due to the inability of large numbers of the poor to avail themselves of the new opportunities created. The poorest are at times too malnourished and sick to be fully employed and productive, while malnourishment amongst children in poor families affects their ability to learn effectively and to better their lots as adults. So the recurrent cycle of low productivity, poverty, malnutrition, low productivity continues regardless of the increased opportunities available.

Nature and Extent of Malnutrition

24. Major malnutrition problems fall into three classes: (a) protein-calorie malnutrition (PCM), (b) iron-deficiency anemia, and (c) other vitamin and mineral deficiencies, particularly vitamin A and calcium. An estimated 4 million, or about two-thirds of the population under five years of age, and about 1.5 million women of child-bearing age suffer from PCM. About 880,000 or 22% of these children suffer from serious malnutrition. A recent study showed that 86% of the children surveyed in low-income areas of Bogota suffered from PCM. For the population of Colombia as a whole, it is estimated that deficiencies of greater than 40% of minimum recommended amounts of calories and proteins occur in one-fifth and one-fourth of the population, respectively. For calcium, vitamin A and some other minerals and vitamins, particularly those whose primary sources are vegetables, the deficits are even greater. Intakes of calcium and vitamin A average in rural areas 40% and 50%, respectively, of minimum recommended levels. The incidence and degree of malnutrition are even more striking than suggested above, if considerations of nutritional loss due to disease and to wastage in food preparation and storage are taken into account.

^{/1} The Distribution of Public Services by Income Groups: A Case Study of Colombia (RPO-296) by Marcelo Selowsky, DRC, World Bank. Data given use 1974 official exchange rates.

Causes of Malnutrition

25. Malnutrition in Colombia as in other developing countries is caused by a combination of factors. Despite increases over time, low incomes continue to limit effective food demand among the poorest. Additionally, insufficient education on nutritional needs and sound feeding practices severely limit a poor family's opportunities to improve its nutritional status within existing income constraints. Lack of safe water supplies and poor sanitation facilities often result in diseases which go uncured because of inadequate health facilities preventing individuals from deriving maximum nutrition from their diets. Insufficient facilities for safe and hygienic storage of food crops, poor roads, and a domestic food distribution system which tends to favor urban consumers exacerbate the problem in rural areas.

Effects of Malnutrition

26. Research in Colombia and other parts of the world has demonstrated the relationship between malnutrition and, inter-alia, infant mortality, the physical and mental development of children and the productive capacity of adults. Studies have concluded that infant birth weight and health are directly related to the nutritional intake of the mother. About one-third of the yearly 80,000 deaths of children under five in Colombia are attributed directly or indirectly to PCM. Malnutrition is also considered an important concomitant cause in almost 80% of the childhood deaths in Colombia due to communicable diseases. Furthermore, malnutrition is an important contributor to illness which results in the loss to individual workers of an estimated 96 million work days each year in Colombia. Malnutrition also results in low labor productivity. The preliminary conclusion of a Bank financed study in Kenya is that undernourished road construction workers were 15% less productive than those well nourished. Similar studies carried out with sugarcane cutters in Colombia point to a possibly even greater difference in productivity between undernourished and well nourished workers. Though not specifically documented in Colombia, children's learning capacity is hampered by impaired brain development, fatigue, and apathy which result from malnutrition. The net impact of malnutrition on the economy in terms of the quality of the labor force, the agricultural products not harvested in time because of illness and lack of energy, the high medical costs, the resources spent on children who never become fully productive, and the educational inefficiency, though unmeasured, are clearly large. The resulting human suffering and misery are enormous and need no elaboration.

Previous Actions to Reduce Malnutrition

27. Recognizing that direct action to reduce malnutrition was essential if the poor were to make better use of economic opportunities and contribute to the country's economic development, the Government introduced various programs to increase nutrient intake and improve consumption habits. The major programs have focused on food distribution, the development of enriched processed foods and processing facilities and the education of the population as a whole regarding better eating habits. An early nutrition program,

fortifying salt with iodine, was responsible for eradicating goiter in Colombia. Another successful effort was the development of a vegetable protein mixture for children and the construction of a processing plant to supply a portion of an infant and school feeding program. The rapid spread of water supply and sewerage facilities as well as costly curative health facilities, principally in urban areas, has also had an impact on nutritional status. The spread of such services to rural areas where a large portion of the malnourished live, however, has not been as notable. The Government has also attempted, although with less success, a program combining education of families in schools and clinics regarding nutrition with health services, training and minor agricultural and home gardens assistance. The program was hampered by insufficient cooperation from agencies whose assistance was essential, but who were not responsible for the program, and by inadequate budgetary and manpower support for the program.

28. Free food distribution to vulnerable groups in the population has been an important part of Government efforts to reduce malnutrition. The major program, begun in 1968, relies on food aid donated principally by foreign private and bilateral sources, and distributes foods along with nutrition education at schools and health clinics to children and pregnant/nursing mothers. The program reached about one million beneficiaries nationwide in 1976. However, many of the beneficiaries came from middle income groups and from the urban areas. The limitations and expensiveness of the program were fully recognized when the decision was made to phase out food aid by 1978. This decision also helped stimulate Government's formulation of a national strategy to reduce malnutrition.

National Food and Nutrition Plan

29. By the early 1970's, a large body of opinion in Colombia perceived the importance of mobilizing adequate and coordinated resources to improve the nutritional status of the poorest half of the population. While permanent improvements in nutritional standards would result from increases in employment and income, it was recognized that the process would be slow and take some time before reaching the poor. At the same time, the malnourished were often prevented from taking advantage of the opportunities offered by the expanding economy. With these considerations in mind, in March 1975 the Government approved the National Food and Nutrition Plan (PAN). PAN was premised on the importance of complementing the Government's more general efforts to provide the economic and social base for development in communities of high poverty concentrations with a set of coordinated policies and programs to reduce malnutrition. Drawing on the experience of programs in agriculture and nutrition, PAN proposes measures to increase the supply, demand and utilization of nutrients, to phase out food aid by 1978 and to reduce future dependence on food imports. PAN also seeks to link efforts to increase food production with measures to ensure better nutrition utilization of existing foods as well as efficient distribution of foods to the malnourished. Programs for accomplishing the goals of PAN include the Integrated Rural Development Program (IRDP), the Nutrition Program and expanded credit facilities to the commercial agriculture sector, primarily for food crops. The latter aims to expand the supply of food nationally, while IRDP aims simultaneously to

increase food production and to raise the incomes and consequently nutritional levels of small and generally poor landholders. IRDP concentrates initially on regions with large numbers of small farmers, providing a spectrum of agricultural services, along with social service investments. Although IRDP would increase employment primarily for benefitting small farmers, the nutritional impact on the poorest 40% of the rural population, the landless and the virtually landless, is likely to be limited to the results of health and water supply investments.

30. While IRDP's nutritional impact is expected to be principally on the upper end of the poorest 50 percent of the population, the Nutrition Program seeks to improve nutritional status among the poorest 30% of the population. The nutrition program includes activities aimed at (a) reducing nutrient losses by reducing illness; (b) improving nutrient consumption patterns within existing income constraints; (c) providing for limited food production increases; and (d) increasing food consumption by improving purchasing power. The program, which is already under way with AID's support in three departments, involves a range of nutrition activities integrated at the department level. The program is to be expanded country-wide by 1985.

31. The nutrition program consists of the elements described in Part IV and a subsidized food distribution system, financed by the Colombian Government. Under the distribution system, families with children 3-24 months, malnourished children 2-4 years and/or pregnant and nursing mothers, who satisfy income criteria, receive coupons to be exchanged in the local market for a specific range of nutritious processed foods produced domestically, with the purchaser paying only about 40% of the normal price. The program marks a significant shift away from public sector free distribution to subsidized purchase in the market place in order to reduce wastage and encourage proper use. While as yet tested only on a limited scale, the coupon system has been developed and refined to the point where it is expected to be a relatively efficient system for achieving its goals. The private sector is the primary producer of nutritious processed foods and is expected to expand its output significantly as the nutrition program expands. Credit lines are already available for the purpose. A small amount of free distribution of nutritious food through primary schools and day care centers will be continued until the coupon system reaches full national coverage. By providing an increased and reliable market for domestically processed foods, the food distribution system also aims to provide a boost to the food processing industry and the agriculture sector.

Bank and Other Donor's Role in Nutrition

32. Over the past two decades, various international and bilateral agencies /1 have assisted Colombia's nutrition improvement efforts. These efforts have provided Colombia with the foundation for its present national program. A number of agencies (UNICEF, UNDP, the Netherlands Government and USAID) are continuing to support this program and the Bank has coordinated its

/1 UNICEF, UNDP, PAHO/WHO, FAO, USAID, CRS/CARITAS, WFP, CARE. Complete names are listed on the inside cover of the report.

efforts with theirs. At Government request, the Bank has played an active role, since the launching of PAN, in the refinement and development of the various PAN programs. Both IRDP and the proposed nutrition project provide mechanisms for bringing the poor closer to the economic development process, and complement ongoing programs financed by the Bank and other external lenders aimed at increasing productivity, employment and income of the poor in Colombia. Furthermore, the proposed nutrition project would help improve the poor's ability to contribute to and benefit from expanded output, while supporting the Government's other objectives of strengthening social sector management and eliminating the country's dependence on food aid.

PART IV - THE PROJECT

Background and Objectives

33. The proposed nutrition project aims to break the recurrent cycle of malnutrition, low productivity and poverty among the poorest 30% of the population in seven departamentos and Bogota. By reducing malnutrition the project would thereby increase the ability of the poor to benefit from and contribute to economic development and growth. The proposed project would provide a bridge for the poorest and most severely malnourished until economic development reaches them while simultaneously developing the infrastructure to help ensure that increased incomes lead to permanent improvement in nutritional levels.

34. The proposed project is designed to improve the nutritional status of about 1.8 million primarily low-income people and improve and refine the national nutrition program. The first objective would be accomplished through a set of investments directed at the beneficiary population. Improvement of the national program would be brought about through intensive monitoring and evaluation and through strengthening of its managerial base.

35. The project was conceived and prepared by the Government of Colombia. Mr. Gabriel Turbay Marulanda, Director General of Public Credit, led the Colombia delegation in negotiations which were held in Bogota in July, 1977. A project Appraisal Report entitled "Colombia: Appraisal of an Integrated Nutrition Improvement Project" (Report No. 1583a-CO dated August 26, 1977) is being circulated separately to the Executive Directors. The main features of the loan and project are summarized in the Loan and Project Summary and in Annex III.

Project Description

36. The project consists of an integrated set of action programs at the community level, pilot programs and research and development and activities to support the development and improvement of the national program. The action programs would utilize community health posts as the agent for the delivery of nutrition education, food coupons, improved environmental sanitation as well as improved health services. The project consists of the following components:

Investments at the Community Level

- (i) Health Services - the construction of 56 and reconstruction of 225 health posts and the equipping and operation of those posts.
- (ii) Water Supply - The construction of potable water supply systems for about 372 rural communities.
- (iii) Sanitation - The installation of about 112,000 household latrines.
- (iv) Nutrition Education - The production and dissemination of nutrition messages through the mass media and through village level workers and the training of the village workers.

Pilot Programs, Research and Development

- (v) Family Gardens - Provision of inputs and technical assistance for about 20,000 family gardens and 100 school demonstration gardens.
- (vi) Applied Food Technology - The support of 26 research, development and feasibility studies related to the manufacturing, processing, storage and marketing of nutritious foods.

Program Development

- (vii) Monitoring and Evaluation - Support for regular monitoring of each component, and for evaluation of the nutritional impact and other important aspects of the program including an intensive evaluation of the program's effectiveness in one department.
- (viii) Quality Control - The equipping and operation of a food quality control laboratory.
- (ix) Program Coordination - Support for the operating unit which is responsible for coordinating and refining the project and the nutrition program.

Project Area and Beneficiaries

37. The proposed project would be implemented in seven of Colombia's 22 departments and the Federal District of Bogota. Four departments form a contiguous block in the west-central region, and three form a similar block in the Northern Coastal region, thus representing the two major heavily populated regions of the country. The departments were selected to avoid overlap between IRDP and the Nutrition Program in their initial stages. The Government decided to implement the two programs independently at first in order to spread the benefits of the two programs to as many regions as possible and to avoid overburdening regional administrations by initiating two such complex programs simultaneously.

38. Within departments where the Nutrition project would be executed areas were chosen on a relative standard of living basis. Communities were assigned a composite index based on levels of per-capita income and access to public services including education. Communities in the selected departments which were ranked in the bottom 30% of all communities in the nation were selected for nutrition project implementation. The procedure ensures that project communities would have high concentrations of Colombia's poorest. The study determined that in the departments selected project implementation would range from 25% of the rural communities in Valle to 60% in Bolivar.

39. Communities selected would automatically benefit from the health and nutrition education components of the project. Total beneficiaries of those components would be 1.8 million of which about 70% are in rural areas of the seven departments. Around 372 communities, or 231,000 people, would benefit from access to potable water, bringing the total population with access to potable water supplies to about 416,000 of the project areas' 1.25 million rural population. Latrines would be installed in about 112,000 homes or for roughly one-third of project beneficiaries. Communities with high incidence of intestinal diseases would have priority access. Twenty thousand rural families in communities selected for availability of support manpower and ecological diversity would benefit from the family gardens component. Beneficiaries of the food coupon system in Bolivar, estimated to average about 20,000 per year, would be limited to pregnant and nursing mothers and small children in families whose income per capita falls below US\$6 per month.

40. The long run aim of the nutrition program is to spread potable water supply and latrine facilities as well as the home gardens programs to all project beneficiaries. The project expands access to such services to the extent that is organizationally and manageably feasible at the present time.

Detailed Project Features

Direct Nutrition Investments

41. The project would accelerate and strengthen the development of the community level health care portion of a recently introduced national health system. At the community level the new system emphasizes preventive rather than primary curative care nutrition education, family planning along with maternal and child health services and environmental sanitation. Community level health workers (promotoras) selected by the community maintain contact and provide education and basic nutrition, health and family planning services. Six promotoras, each serving 180 families, would be supervised by two auxiliary nurses who, along with a part-time doctor and part-time dentist, would staff a community health post in rural areas. Urban community health posts would have attached a half-time physician and half-time dentist. The health posts would be linked to regional and university hospitals which would handle serious medical cases. It is estimated, however, that about 85% of health problems would be handled at the local level. The project includes the construction of 56 and renovation of 225 health posts which would serve 1.8 million people.

It also provides equipment and medical supplies, staff training, along with the operation of the posts until project completion.

42. The health component of the proposed project is both novel and ambitious in scope. In order to ensure that the health post system functions as a community based system providing health and nutrition education and preventive care, all community level health workers would receive intensive training in community health, family services and nutrition. Assurances were obtained that revised curricula and programs, satisfactory to the Bank, would be prepared by January 1, 1978 (Section 3.07 of the draft Loan Agreement). Additionally, because the system is new and initially will increase workloads, health administrators at both the national and regional levels will require management and technical assistance to implement the program. Assurances were, therefore, obtained that the Government would fill local consultant positions in the regions by January 1, 1978 with persons whose qualifications and terms and conditions are acceptable to the Bank (Section 3.03 (b) of the draft Loan Agreement).

43. Potable water supply systems would be constructed to serve about 231,000 people in 372 rural communities covered by health posts. About 15% of the rural population in project areas currently have potable water supplies. By completion of the project, one-third, or over 400,000 rural project beneficiaries would be supplied with potable water supplies. The systems would serve an average of 100 households, each through individual house connections. Installation would be carried out by the National Institute of Health (INAS), a semiautonomous agency under the Ministry of Health, which has in the past worked efficiently and closely with local communities.

44. Under the sanitation component, about 112,000 household latrines would be installed, which would about double the number of latrines in project areas. An MOH sanitary promoter attached to each health post would encourage families to install latrines and would coordinate their installation and maintenance.

45. The nutrition education component uses techniques of group discussions and mass media to guide families in better use of their incomes in food purchase and in more nutritional food preparation. Radio messages, short nutrition films and television programs would complement the efforts of health and community development workers, community leaders and shopkeepers in the project areas. The themes of the various forms of communication would include breast feeding, weaning, food supplementation during illness, food preparation and the use of food coupons. The project would provide training to the project area educators, would develop educational materials and mass media messages, and disseminate the messages. Five man-years of technical assistance would be provided for developing and improving production techniques of educational materials. The Colombian Institute of Family Welfare (ICBF), which has extensive experience with nutrition education, would coordinate this effort, while the National Planning Department (DNP) would execute mass media efforts.

Pilot Programs, Research and Development

46. The family gardens component would be a pilot effort to increase home production and consumption of vegetables and legumes by 20,000 families. Existing gardens at 100 schools would serve as demonstration centers for the program. ICBF with the assistance of the Colombian Agricultural Institute (ICA) and other agriculture agencies would develop suitable technical and nutritional packages for small home plots. Inputs would be supplied during the first year, while farmers would gradually pay full costs by the fourth year. Preliminary estimates suggest that almost one-half the vegetable requirements which a family of six requires for a balanced diet can be produced in most project areas from a 12 by 6 meter plot. ICBF in coordination with agriculture agencies and the schools would carry out the initial program and would expand the program to the entire project area in the next phase of the nutrition program.

47. The applied food technology component would support about 26 research and development subprojects on small-scale storage, preservation and processing of farm produce, on diversifying raw materials and processes for commercial food manufacture and on improving systems of quality control. The subprojects would concentrate on technologies that can produce potentially large economic and individual savings. Included in the list of subprojects is the substitution of cotton seed waste for soy in processed foods and village level preparation of nutritious pre-cooked doughs and flours. The Institute of Technological Research (IIT), the principal implementing agency, has a history of success in developing food processing technology. Short-term international technical assistance estimated to average US\$4,500 per month and fellowships would be provided in specialized areas, where local expertise does not currently exist. The National Fund for Economic Development (FONADE), an autonomous intermediary financed by the National Planning Department (DNP), would contract the studies with the implementing agencies after a DNP technical committee approved the technical proposal.

48. A small Project Management Fund would be established to carry out pilot programs, feasibility studies and other such activities that are unforeseen now and presumed to result from studies and monitoring and evaluation. The list and scope of subprojects eligible for financing under the fund would be agreed upon by the Borrower and the Bank (Section 3.11 and Part G(b) of Schedule 2 of the draft Loan Agreement).

Program Development

49. Monitoring and evaluation plays a key role in this project. The outcomes of this component would serve as a basis for further revision and refinement of the project and program. All aspects of the nutrition project and the national program would be monitored on a regular basis and would be reviewed quarterly at the policymaking level. In addition, changes in nutritional status would be regularly measured. Studies also would be undertaken on the economic effects of the nutrition project and on the effectiveness of the nutrition delivery system. A four-year intensive evaluation of the nutrition system, including food coupons, would be carried out in one department to test out variations in the system, to identify shortcomings and to

refine the system. A detailed evaluation of the community health system would take place to determine the pace of future health system improvements. Because of this study's importance for project implementation in the latter years, assurances were obtained that the evaluation of the community health system, under terms of reference satisfactory to the Bank, would be completed by September 30, 1978. The pace and scope of health post development would be revised on a basis acceptable to the Bank (Section 3.08 of the draft Loan Agreement). Local and foreign consultants would assist in the design, execution and analysis of results of the monitoring and evaluation system. A monitoring and evaluation unit in DNP would implement this component.

50. A quality control laboratory would be constructed to ensure that processed foods meet prescribed standards established by the MOH. INAS would run the laboratory and perform the analyses, while the MOH's division of environmental sanitation would collect samples to be tested.

51. Program Coordination would be carried out by the PAN Group within DNP. The PAN Group also would be responsible for mass media and monitoring and evaluation. It plays a central role in the project as the agency responsible for coordinating, developing and refining the program. Assurances were obtained that key persons in the PAN Group would have adequate qualifications and job descriptions and that the PAN Group would be adequately staffed through 1985 (Section 3.10 of the draft Loan Agreement).

Project Cost and Financing

52. The cost of the project is estimated at about US\$68.9 million (Col\$ 2,481 million). Foreign exchange expenditures are estimated at US\$12.9 million, or 19% of the total project cost. Cost estimates are based on July 1977 prices. A 10% physical contingency was applied to all project costs. Price contingencies amount to 14% of base costs and physical contingencies and are based on estimates of yearly domestic and international price increases.

53. The proposed Bank loan of US\$25 million equivalent or about 36% of total project costs would cover all foreign exchange costs and US\$12.1 million of local project costs. With the exception of US\$4.8 million to be contributed by beneficiaries for the health, water supply and sanitation components (see paragraph 57 below), the remaining US\$39.1 million (57%) would be financed by the Government. A breakdown of project costs by component is presented in the Project Summary.

54. On the basis of the justifications presented in paragraph 12, local cost financing is recommended in order to ensure that the Bank maintains a meaningful role in a project with low foreign exchange costs. Low foreign exchange costs are characteristic of social projects in Colombia, where equipment requirements are few and civil works are for small local structures which can be built most inexpensively at the local level with indigenous materials. In addition, the Bank share of 36% of project costs represents a much smaller share of the costs of the entire nutrition program, to which the Government has committed substantial resources over and above the project, including US\$17 million for the food coupon system.

Procurement and Disbursement

55. International competitive bidding, in accordance with Bank guidelines, would be required for the procurement of water pipes and pumps, estimated to total about US\$1.7 million and for vehicles and other equipment, when orders are estimated to cost more than US\$100,000. Domestic manufacturers would receive a preferential margin in bid evaluation equal to the prevailing tariff, or 15% of the c.i.f. cost of imports, whichever is lower. Purchases of vehicles and equipment which cost less than US\$100,000 and of latrine equipment and fixtures would be made in accordance with local competitive procedures which are acceptable to the Bank. Construction of health posts and potable water systems are small and widely disbursed geographically and, therefore, would be carried out by self-help and force account or local competitive procedures acceptable to the Bank. Service contracts for the production and dissemination of mass media messages would be procured through local shopping.

56. The Bank would disburse at the rates of: (a) 100% for consultants, fellowships and training and the foreign costs of imported vehicles, water pipes, equipment and supplies; (b) 75% for locally manufactured water pipes and pumping equipment; (c) 55% for civil works, monitoring and evaluation, project management fund and mass media production and dissemination; and (d) 50% for vehicles and equipment assembled in Colombia, and vehicles, equipment, water pipes and pumps imported and procured locally. Retroactive financing not exceeding US\$300,000 is proposed for expenditures incurred from February 1, 1977 for baseline surveys and for initial development and training costs of the nutrition education and family gardens components.

Cost Recovery and Fiscal Feasibility

57. Beneficiary communities would provide US\$4.8 million in project financing and US\$2.7 in repayments for portions of investment and operating costs of the two largest components of the project, health and water supply, and a portion of the installation costs of latrines. In accordance with present Government policy, communities would contribute initially an average of at least 10% of health investment costs through labor, materials or cash. Additionally, community contributions would total an estimated 10-60% of total project investments in water supply, though the contributions of individual communities will vary according to an established formula determining the community's capacity to pay. The balance of investment costs will be borne by the Central Government and/or other Government agencies. Communities would also pay for all operating, maintenance and administration costs of their respective water supply systems. Total water charges currently average about US\$1 per household per month which is considered reasonable in light of the low average incomes in the communities to be covered. Assurances were obtained that the Government will maintain the above arrangements for the recovery of costs for beneficiaries (Section 4.06(a) and (b) of the draft Loan Agreement).

58. The Government has also agreed to add two additional cost recovery elements to the project. In order to reduce possible excessive use of medicines and simultaneously to reduce the Government's burden of recurrent expenditures on health, assurances were obtained that a system of charges would be applied to obtain from beneficiaries at least the cost of medicines provided at the health posts (Section 4.06(d) of the draft Loan Agreement). Assurances were also obtained that families would contribute in materials or cash a percentage of not less than 50% of the costs of installing each latrine and shelter (Section 4.06(c) of the draft Loan Agreement).

59. Recurrent expenditures associated with the nutrition program are not expected to become a substantial burden on the Government budget. Total program costs including the food coupon system would rise from less than 1.4% of current expenditures to about 3.3% in 1985, when the program would reach complete national coverage. In absolute terms, the per capita cost of the nutrition program is estimated to be about US\$2.25 in 1985 compared to a projected GDP per capita of about US\$1,000. After 1985, as the percentage of poor falls and as the economy continues to grow substantially faster than the population, expenditures on the program are expected to fall as a percentage of current expenditures.

Project Management and Execution

60. Nutrition policy is set by the National Council for Economic and Social Policy (CONPES), a cabinet level council chaired by the President. The chief of DNP chairs a subcommittee of CONPES, the National Food and Nutrition Council (CNAN) which oversees the development and execution of the Nutrition program and reports to CONPES on its progress. The PAN Group, a division of DNP, is responsible for overall coordination, including budgeting, programming and evaluating the activities of the nutrition project and program and serves as secretariat to CNAN. At the regional level, project and program activities are coordinated by a regional PAN committee. The committee is chaired by the Governor of the region and consists of the regional directors of the ministries and agencies implementing the program together with representatives of regional agricultural institutions and the regional planning office. The regional PAN director, assigned by the PAN group of DNP, serves as executive secretary of the committee. The regional PAN committees coordinate and monitor regional activities of the various implementing agencies and arrange for prompt submission of yearly and quarterly work programs and investment budgets to the PAN Group.

61. Project execution of the various components would be the responsibility of the following institutions:

<u>Responsible Agency</u>	<u>Project Activity</u>
Ministry of Health (MOH)	- Health services, latrines, food coupon distribution to beneficiaries.
National Institute of Health (INAS)	- Water supply, food quality control laboratory and studies.
Colombian Institute of Family Welfare (ICBF)	- Nutrition education, family gardens.
Institute for Technological Investigation (IIT) and	- Applied food technology.
The National Fund for Economic Development (FONADE)	
National Planning Department (DNP)	- Project coordination, monitoring and evaluation; mass media.

Each of the institution's responsibilities under the project would be covered by an agreement, satisfactory to the Bank, with the Borrower. Because of the importance of the activities of DNP, MOH, INAS and ICBF, signed subsidiary agreements of INAS and ICBF with the Borrower and an agreement of DNP with the MOH would be made a condition of effectiveness (Section 6.01 of the draft Loan Agreement) while the remaining agreements would be conditions for disbursement of funds pertaining to each of their activities (Paragraph 4(b), Schedule 1 of the draft Loan Agreement).

Benefits, Justification and Risks

62. The project is justified as an effective and relatively inexpensive method of improving the nutrition conditions, well-being and productive capacity of a large portion of the 1.8 million beneficiaries. By reducing the incidence of disease through investments in health, potable water supply and sanitation, and by providing nutrition education, the project would facilitate more efficient consumption of nutrients and thereby increase the potential of the beneficiaries to be more productive members of society. In addition, a portion of the beneficiaries would also benefit from increased production and consumption of home grown foods, while pregnant and nursing mothers and small children in one department would increase their nutritious food consumption. Without the project, a large percentage of the 1.8 million beneficiaries would remain limited in their ability to avail themselves of the long-run opportunities presented by overall economic development. The project would thereby provide a bridge for the malnourished to the employment opportunities and increased production potential of the 1980s and 1990s.

63. Increased nutrition and better health would result in increased immediate productive potential for adults and in future productive potential of children. Reduction of malnutrition and disease would result in better physical and mental growth and consequently in a better educated and more able and productive adult population. Apart from the eventual benefits resulting from reduced costs associated with producing educated and skilled manpower, immediate economic benefits would result during periods or in regions where labor shortages exist. In quantitative terms, it is estimated that the health and nutrition education components (the components that apply to all project beneficiaries) would reduce the number of sick days of the beneficiary population by 20% and the infant mortality rate by 25%. If only one-fourth of adult sick days saved by project beneficiaries are translated into employment, which does not substitute for the work of others, the increased income to the society would be US\$2.4 million annually or about one-third the annual operating costs of the community health posts in project areas. Where beneficiaries receive access to water supply and/or sanitation, the reduction in sick-days is expected to be even greater and would result in further income and production increases. An additional US\$0.5-1.0 million is expected to be saved as the new health system substitutes for present unnecessary expenditures by beneficiaries for medical expenses.

64. Various smaller components are expected to yield additional economic benefits. The family gardens component is estimated to provide each family an annual net return of about US\$20.50. Without including benefits that would accrue to families where the component is expanded beyond its pilot phase, this component would achieve an economic rate of return of 20%, even if only 16,000 families, rather than the projected 20,000 families participate. The potential economic returns of the food technology component are quite large. Present agricultural losses due to lack of storage and preservation techniques at the local level are estimated at US\$20 million annually. Even if those losses were reduced by only a small percentage as a result of the outcomes of studies in this component, the component would pay for itself many times over. Given IIT's impressive past record, achievement of such returns are considered reasonable.

65. The overall nutrition program, of which this project forms a part, is expected to achieve additional benefits for the economy. By increasing the demand for domestically produced and processed foods, the program would establish a firm market for investments in agriculture production. Likewise, the spurt in the food processing industry resulting from the increased demand, as well as improved technology, would provide the basis for increasing Colombia's comparative advantage in the sector and thus augmenting exports. The program itself contributes to the Government policy of phasing out food aid and reducing dependence on food imports.

66. The project would also improve and refine the national nutrition program and increase the capacity of the various agencies to implement it on a national scale. The project would develop and execute training programs and prepare additional personnel needed for future program expansion. A technical package for small house gardens would be developed and an implementation process refined after pilot testing of the package. Intensive monitoring

and evaluation would provide the basis for refining the program, streamlining the implementation procedures, and increasing the cost-effectiveness of the package. The project would thus benefit future program beneficiaries and increase the efficiency and reduce the costs of future nutrition program interventions.

67. The proposed project has inherent risks in that it requires effective implementation on the part of a number of agencies and is a project with few precedents. The Government, however, is deeply committed to the national nutrition program and has formulated and developed the project over the past two years. Furthermore, the Government recognizes the need to strengthen interagency coordination and has developed a management system for the project which is already in place. With a monitoring and evaluation system which allows for changes in program design as the project proceeds and with extensive Bank supervision, the risks would be minimized and are acceptable in view of the substantial benefits expected of the project.

PART V - LEGAL INSTRUMENTS AND AUTHORITY

68. The draft Loan Agreement between the Republic of Colombia and the Bank, the report of the Committee provided for in Article III, Section 4 (iii) of the Articles of Agreement, and the text of the draft resolution approving the proposed loan are being distributed to the Executive Directors separately.

69. Special conditions of the loan are listed in Section III of Annex III. A special condition of effectiveness would be that subsidiary agreements have been entered into with the Government by ICBF and INAS and between DNP and the MOH (Section 6.01 of the draft Loan Agreement). In addition, a condition of disbursement for activities carried out by IIT and FONADE would be that the relevant subsidiary agreement has been entered into between the Government and the implementing agency (Paragraph 4(b) of Schedule 1 of the draft Loan Agreement).

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

PART VI - RECOMMENDATIONS

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

Robert S. McNamara
President

by I. P. M. Cargill

Attachments
August 30, 1977

LAND AREA (THOU KM ²)	COLOMBIA - SOCIAL INDICATORS DATA SHEET					
	COLOMBIA			REFERENCE COUNTRIES (1970)		
	1960	1970	MOST RECENT ESTIMATE	TURKEY	BRAZIL	MEXICO ***
TOTAL	1138.9					
AGRIC.	227.8					
GNP PER CAPITA (US\$)	210.0*	350.0*	640.0 ^a	500.0*	550.0*	690.0*
POPULATION AND VITAL STATISTICS						
POPULATION (MID-YR, MILLION)	15.4	20.6	24.2 / ^a	35.6	92.8	50.4
POPULATION DENSITY						
PER SQUARE KM.	14.0	18.0	21.0 / ^a	46.0	11.0	26.0
PER SQ. KM. AGRICULTURAL LAND	..	92.0	106.0 / ^a	67.0	66.0	52.0
VITAL STATISTICS						
CRUDE BIRTH RATE (/THOU, AV)	46.1**	44.3**	40.6**	40.6	38.4	43.8
CRUDE DEATH RATE (/THOU, AV)	14.7	11.0	8.8	14.4	9.9	10.2
INFANT MORTALITY RATE (/THOU)	100.0/ ^a	70.0/ ^a	..	145.0	110.0	68.5
LIFE EXPECTANCY AT BIRTH (YRS)	54.7	58.5	60.9	54.4	59.7	61.0
GROSS REPRODUCTION RATE	3.2	3.2	3.1	2.6 / ^{a,b}	2.6	3.1
POPULATION GROWTH RATE (%)						
TOTAL	3.2	2.9	2.7	2.5	2.9	3.4
URBAN	6.0/ ^b	5.5/ ^b	4.9	4.9/ ^c	5.0	4.8
URBAN POPULATION (% OF TOTAL)	53.0/ ^c	60.0	63.0	38.5	56.0	58.7
AGE STRUCTURE (PERCENT)						
0 TO 14 YEARS	46.6/ ^c	46.6	44.1	41.8	42.0	46.2
15 TO 64 YEARS	50.4/ ^c	50.4	52.7	53.9	55.0	50.1
65 YEARS AND OVER	3.0/ ^c	3.0	3.2	4.3	3.0	3.7
AGE DEPENDENCY RATIO	1.0/ ^c	1.0	0.9	0.9	0.8	1.0
ECONOMIC DEPENDENCY RATIO	1.8/ ^c	1.6/ ^c	1.6/ ^b	1.1/ ^d	1.5	2.0
FAMILY PLANNING						
ACCEPTORS (CUMULATIVE, THOU)	0.5	306.9	955.1	..	250.0	55.5
USERS (% OF MARRIED WOMEN)	..	..	31.0	8.2	1.6	..
EMPLOYMENT						
TOTAL LABOR FORCE (THOUSAND)	5100.0/ ^c	6200.0	6800.0	14500.0 / ^e	29600.0	13000.0
LABOR FORCE IN AGRICULTURE (%)	47.0/ ^c	39.0	..	67.0	44.0	40.0
UNEMPLOYED (% OF LABOR FORCE)	8.0/ ^{d,e}	7.0	14.3	4.0/ ^f	..	..
INCOME DISTRIBUTION						
% OF PRIVATE INCOME REC'D BY-						
HIGHEST 5% OF HOUSEHOLDS	41.2/ ^{c,f}	31.9/ ^d	..	32.8 / ^g	35.0 / ^a	37.8
HIGHEST 20% OF HOUSEHOLDS	67.7/ ^{c,f}	60.1/ ^d	..	60.6 / ^g	62.0 / ^a	63.2
LOWEST 20% OF HOUSEHOLDS	2.1/ ^{c,f}	3.5/ ^d	..	2.9 / ^g	3.0 / ^a	4.2
LOWEST 40% OF HOUSEHOLDS	6.8/ ^{c,f}	10.1/ ^d	..	9.4 / ^g	10.0 / ^a	10.2
DISTRIBUTION OF LAND OWNERSHIP						
% OWNED BY TOP 10% OF OWNERS	..	..	80.0 / ^c	53.0	45.0	37.1
% OWNED BY SMALLEST 10% OWNERS	..	..	0.2 / ^c	0.9	1.5	0.3
HEALTH AND NUTRITION						
POPULATION PER PHYSICIAN	2400.0	2110.0	2100.0/ ^d	2250.0	1910.0	1480.0
POPULATION PER NURSING PERSON	3520.0/ ^g	..	1450.0/ ^d	1770.0/ ^h	3220.0/ ^b	1620.0
POPULATION PER HOSPITAL BED	580.0	430.0	460.0/ ^c	500.0	260.0	960.0
PER CAPITA SUPPLY OF -						
CALORIES (% OF REQUIREMENTS)	94.0	97.0	95.0/ ^e	110.0	109.0	110.0
PROTEIN (GRAMS PER DAY)	50.0	51.0	51.0/ ^e	78.0	64.0	65.0
-OF WHICH ANIMAL AND PULSE	28.0/ ^h	29.0/ ^e	..	22.0 / ⁱ	39.0	28.0/ ^a
DEATH RATE (/THOU) AGES 1-4	16.3	8.4	..	15.0/ ^b	..	9.8
EDUCATION						
ADJUSTED ENROLLMENT RATIO						
PRIMARY SCHOOL	77.0	102.0	114.0/ ^d	111.0	87.0	106.0
SECONDARY SCHOOL	12.0	23.0	28.0/ ^d	28.0	28.0	23.0
YEARS OF SCHOOLING PROVIDED (FIRST AND SECOND LEVFL)	11.0	11.0	11.0	11.0	13.0	12.0
VOCATIONAL ENROLLMENT (% OF SECONDARY)	31.0/ ⁱ	20.0/ ^f	21.0 / ^{d,f}	14.0	17.0	24.0
ADULT LITERACY RATE (%)	..	73.0	74.0 / ^d	55.0 / ^j	68.0	76.0
HOUSING						
PERSONS PER ROOM (URBAN)	..	..	..	1.9	1.0	2.2
OCCUPIED DWELLINGS WITHOUT PIPED WATER (%)	59.0/ ^{c,i}	..	..	64.0	73.0/ ^c	61.0/ ^b
ACCESS TO ELECTRICITY (% OF ALL DWELLINGS)	47.0 / ^c	..	..	41.0	48.0	59.0
RURAL DWELLINGS CONNECTED TO ELECTRICITY (%)	8.0 / ^c	..	..	18.0	8.0	28.0
CONSUMPTION						
RADIO RECEIVERS (PER THOU POP)	139.0	105.0	120.0	89.0	60.0	276.0
PASSENGER CARS (PER THOU POP)	7.0/ ^e	11.0	14.0	4.0	25.0	24.0
ELECTRICITY (KWH/YR PER CAP)	244.0	414.0	499.0	247.0	491.0	567.0
NEWSPRINT (KG/YR PER CAP)	2.4	2.8	1.8	0.7	2.7	3.2

SEE NOTES AND DEFINITIONS ON REVERSE

NOTES

Unless otherwise noted, data for 1960 refer to any year between 1959 and 1961, for 1970 between 1968 and 1970, and for Most Recent Estimate between 1973 and 1975.

* GNP per capita are based on the World Bank Atlas methodology (1974-76).

** Official estimates based on registrations, show crude birth rate for 1960 as 39, average crude birth rate for 1961-70 as 36 and for 1971-74 as 31.

*** Mexico has been selected as an objective country because Colombia is now in the stage of economic development that Mexico was in ten years ago. Both countries aim at a GDP growth rate of about 7 percent and at a substantial reduction of unemployment.

<u>COLOMBIA</u>	<u>1960</u>	<u>/a</u> Registered only; <u>/b</u> 1951-64; <u>/c</u> 1964; <u>/d</u> Bogota only; <u>/e</u> 1963; <u>/f</u> Economically active population; <u>/g</u> 1965; <u>/h</u> 1961-63; <u>/i</u> Total secondary includes teacher training at the third level; <u>/j</u> Water piped inside.
	<u>1970</u>	<u>/a</u> Rate based on burial permits; <u>/b</u> 1964-70; <u>/c</u> Ratio of population under 15 and 65 and over to total labor force; <u>/d</u> Economically active population; <u>/e</u> 1964-66; <u>/f</u> Total secondary includes teacher training at the third level.
	<u>MOST RECENT ESTIMATE:</u>	<u>/a</u> 1976; <u>/b</u> Ratio of population under 15 and 65 and over to total labor force; <u>/c</u> 1971; <u>/d</u> 1972; <u>/e</u> 1969-71 average; <u>/f</u> Total secondary includes teacher training at the third level.
<u>TURKEY</u>	<u>1970</u>	<u>/a</u> Excludes 17 Eastern provinces; <u>/b</u> 1965-67; <u>/c</u> 1965-70; <u>/d</u> Ratio of population under 15 and 65 and over to labor force age 15 years and over; <u>/e</u> 15 years and over, excludes unemployed; <u>/f</u> Registered only; <u>/g</u> Disposable income; <u>/h</u> Including assistant nurses and midwives; <u>/i</u> 1964-66; <u>/j</u> Persons six years old and over who tell the census takers that they can read and write.
<u>BRAZIL</u>	<u>1970</u>	<u>/a</u> Economically active population; <u>/b</u> Hospital personnel; <u>/c</u> Inside only.
<u>MEXICO</u>	<u>1970</u>	<u>/a</u> 1964-66; <u>/b</u> Inside only.

R10, July 25, 1977

DEFINITIONS OF SOCIAL INDICATORS

Land Area (thou km²)

Total - Total surface area comprising land area and inland waters.

Agric. - Most recent estimate of agricultural area used temporarily or permanently for crops, pastures, market & kitchen gardens or to lie fallow.

GNP per capita (US\$) - GNP per capita estimates at current market prices, calculated by same conversion method as World Bank Atlas (1973-75 basis); 1960; 1970 and 1975 data.

Population and vital statistics:

Population (mid-year million) - As of July first; if not available, average of two end-year estimates; 1960, 1970 and 1975 data.

Population density - per square km - Mid-year population per square kilometer (100 hectares) of total area.

Population density - per square km of agric. land - Computed as above for agricultural land only.

Vital statistics

Crude birth rate per thousand, average - Annual live births per thousand of mid-year population; ten-year arithmetic averages ending in 1960 and 1970, and five-year average ending in 1975 for most recent estimate.

Crude death rate per thousand, average - Annual deaths per thousand of mid-year population; ten-year arithmetic averages ending in 1960 and 1970 and five-year average ending in 1975 for most recent estimate.

Infant mortality rate (/thou) - Annual deaths of infants under one year of age per thousand live births.

Life expectancy at birth (yrs) - Average number of years of life remaining at birth; usually five-year averages ending in 1960, 1970 and 1975 for developing countries.

Gross reproduction rate - Average number of live 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 1975 for developing countries.

Population growth rate (%) - total - Compound annual growth rates of mid-year population for 1950-60, 1960-70 and 1970-75.

Population growth rate (%) - urban - Computed like growth rate of total population; different definitions of urban areas may affect comparability of data among countries.

Urban population (% of total) - Ratio of urban to total population; different definitions of urban areas may affect comparability of data among countries.

Age structure (percent) - Children (0-14 years), working-age (15-64 years), and retired (65 years and over) as percentages of mid-year population.

Age dependency ratio - Ratio of population under 15 and 65 and over to those of ages 15 through 64.

Economic dependency ratio - Ratio of population under 15 and 65 and over to the labor force in age group of 15-64 years.

Family planning - acceptors (cumulative, thou) - Cumulative number of acceptors of birth-control devices under auspices of national family planning program since inception.

Family planning - users (% of married women) - Percentages of married women of child-bearing age (15-44 years) who use birth-control devices to all married women in same age group.

Employment

Total labor force (thousand) - Economically active persons, including armed forces and unemployed but excluding housewives, students, etc.; definitions in various countries are not comparable.

Labor force in agriculture (%) - Agricultural labor force (in farming, forestry, hunting and fishing) as percentage of total labor force.

Unemployed (% of labor force) - Unemployed are usually defined as persons who are able and willing to take a job, out of a job on a given day, remained out of a job, and seeking work for a specified minimum period not exceeding one week; may not be comparable between countries due to different definitions of unemployed and source of data, e.g., employment office statistics, sample surveys, compulsory unemployment insurance.

Income distribution - Percentage of private income (both in cash and kind) received by richest 5%, richest 20%, poorest 20%, and poorest 40% of households.

Distribution of land ownership - Percentages of land owned by wealthiest 10% and poorest 10% of land owners.

Health and Nutrition

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, "trained" or "certified" nurses, and auxiliary personnel with training or experience.

Population per hospital bed - Population divided by number of hospital beds available in public and private general and specialized hospital and rehabilitation centers; excludes nursing homes and establishments for custodial and preventive care.

Per capita supply of calories (% 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 distributions of population, and allowing 10% for waste at household level.

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 Economic Research Services provide for a minimum allowance of 60 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.

Per capita protein supply from animal and pulse - Protein supply of food derived from animals and pulses in grams per day.

Death rate (/thou, ages 1-4) - Annual deaths per thousand in age group 1-4 years, to children in this age group; suggested as an indicator of malnutrition.

Education

Adjusted enrollment ratio - primary school - Enrollment of all ages as percentage of primary school-age population; includes children aged 6-11 years but adjusted for different lengths of primary education; for countries with universal education, enrollment may exceed 100% since some pupils are below or above the official school age.

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

Years of schooling provided (first and second levels) - Total years of schooling; at secondary level, vocational instruction may be partially or completely excluded.

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

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

Housing

Persons per room (urban) - Average number of persons per room in occupied conventional dwellings in urban areas; dwellings exclude non-permanent structures and unoccupied parts.

Occupied dwellings without piped water (%) - Occupied conventional dwellings in urban and rural areas without inside or outside piped water facilities as percentage of all occupied dwellings.

Access to electricity (% of all dwellings) - Conventional dwellings with electricity in living quarters as percent of total dwellings in urban and rural areas.

Rural dwellings connected to electricity (%) - Computed as above for rural dwellings only.

Consumption

Radio receivers (per thou pop) - 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.

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

Electricity (kwh/yr per cap) - Annual consumption of industrial, commercial, public and private electricity in kilowatt hours per capita, generally based on production data, without allowance for losses in grids but allowing for imports and exports of electricity.

Newsprint (kg/yr per cap) - Per capita annual consumption in kilograms estimated from domestic production plus net imports of newsprint.

ECONOMIC DEVELOPMENT
(In Millions of US Dollars)

	Actual		Estimated		Projected		Average Annual Growth Rates			As Percent of GDP		
	1967-69 Average	1974	1975	1976	1977	1982	(1967-69)-74	1974-76	1976-82	1974	1976	1982
1976 Prices and Exchange Rates												
National Accounts												
Gross Domestic Product	9,785	14,405	15,061	15,900	17,063	24,459	6.7	5.2	7.4	100.0	100.0	100.0
Less: Depreciation	-751	-390	-458	-	715	-141	-	-	-	2.7	-	0.6
Gains from Terms of Trade (+)	9,034	14,015	14,603	15,900	17,778	24,318	7.6	6.7	7.3	97.3	100.0	99.4
Gross Domestic Income												
Import (Incl. NPS)	1,491	2,323	2,229	2,436	2,806	4,325	7.7	2.5	10.0	16.1	15.3	17.7
Exports " (Import Capacity)	1,419	2,114	2,249	2,781	3,665	4,360	6.9	14.7	7.8	14.7	17.5	17.8
Resource Gap	72	209	-20	-345	-859	-35	19.4	-	-	1.5	2.2	0.1
Consumption Expenditures	7,445	11,429	12,389	12,513	13,451	18,012	7.4	4.6	6.3	79.3	78.7	73.6
Investment " (Incl. Stocks)	2,101	3,268	2,526	3,145	3,383	6,291	7.6	-3.3	12.3	22.7	19.8	25.7
Domestic Savings	1,589	2,586	2,214	3,441	4,327	6,306	8.5	15.4	10.6	20.0	21.6	25.8
National Savings	1,865	2,853	2,353	3,387	3,986	6,187	7.3	6.1	10.6	19.8	21.3	25.3
Merchandise Trade												
Annual Data at Current Prices												
As Percent of Total												
Imports	290	525	540	655	834	1,753	10.4	11.7	17.8	34.8	36.1	32.3
Capital Goods	254	811	758	872	1,087	2,437	21.4	3.7	18.7	53.7	48.1	45.0
Intermediate Goods (Excl. Fuels)	3	6	14	73	153	716	12.3	500.0	46.3	0.4	4.0	13.2
Fuels and Related Materials	(-)	(-)	(14)	(73)	(153)	(716)	-	-	(46.3)	(-)	(4.0)	(13.2)
of Which: Petroleum	61	167	168	214	267	515	18.3	13.2	15.8	11.1	11.8	9.5
Consumption Goods	608	1,509	1,480	1,814	2,341	5,421	16.4	9.6	20.0	100.0	100.0	100.0
Total Merch. Imports (FOB)												
Exports	418	1,001	1,179	1,683	2,716	4,137	15.7	29.7	16.2	67.0	74.6	72.8
Primary Products (Excl. Fuels)	71	95	87	87	102	214	5.0	-1	16.2	6.4	3.8	3.8
Fuels and Related Materials	(56)	(4)	(-)	(-)	(-)	(-)	(-35.5)	-	-	(0.3)	(-)	(-)
of Which: Petroleum	117	398	428	488	569	1,333	22.5	10.7	18.2	26.6	21.6	23.4
Manufactured Goods	606	1,494	1,694	2,258	3,387	5,684	16.2	23.0	16.6	100.0	100.0	100.0
Total Merch. Exports (FOB)												
Tourism and Border Trade	-	-	-	-	-	-	-	-	-	-	-	-
Merchandise Trade Indices												
Export Price Index	21.2	72.4	74.5	100.0	141.5	151.1						
Import Price Index	34.0	90.0	93.0	100.0	108.9	157.4						
Terms of Trade Index	62.3	80.4	80.1	100.0	129.9	96.0						
Exports Volume Index	126.6	92.2	100.7	100.0	106.0	166.6						
Value Added by Sector												
Annual Data at 1976 - Prices and Exchange Rates												
Average Annual Growth Rates												
As Percent of Total												
Agriculture	2,951	3,828	4,080	4,239	4,451	5,745	4.4	5.2	5.2	28.6	26.5	23.3
Industry and Mining	2,444	3,811	3,877	4,518	4,925	7,759	7.7	8.9	9.4	28.5	28.3	31.5
Services	4,439	5,746	6,055	7,228	7,236	11,112	4.4	12.2	7.4	42.9	45.2	45.2
Total	9,834	13,385	14,012	15,985	17,110	24,616	5.3	9.3	7.5	100.0	100.0	100.0
Public Finance												
Annual Data at Current Prices												
As Percent of GDP												
(Central Government)												
Current Receipts	413	1,194	1,402	1,551	1,924	2,944	19.4	13.9	11.3	9.5	9.9	9.6
Current Expenditures	262	640	702	734	933	1,428	16.0	7.1	11.7	5.1	4.7	4.6
Budgetary Savings	151	554	700	817	991	1,516	24.2	21.5	10.9	4.4	5.2	5.0
Other Public Sector Savings	434	150	394	334	390	810	-16.2	49.0	15.9	1.2	2.1	2.6
Public Sector Investment	612	1,189	1,382	1,496	1,753	2,995	11.7	12.2	12.3	9.4	9.5	9.7
Selected Indicators												
1965-70 1970-73 1973-76 1976-82												
Detail on Public Sector Investment Program and Financing												
(Calculated from 3-year averaged data)												
Average ICOR	3.17	3.02	3.22	2.93						As % of Total		
Import Elasticity	1.16	0.28	0.32	1.42						1975-76	1977-82	
Marginal Domestic Savings Rate	0.20	0.12	0.23	0.33						33.5	38.2	
Marginal National Savings Rate	0.14	0.17	0.24	0.33						10.2	12.0	
										9.5	9.7	
										6.5	9.5	
										20.2	14.8	
										20.1	15.8	
										100.0	100.0	
Labor Force and Output per Worker												
Total Labor Force												
	In Millions		% of Total		Growth Rate							
	1964	1973	1964	1973	1964-73							
Agriculture	2,427	2,057	47.3	30.2	-1.9							
Industry	0,958	1,212	18.7	17.8	2.7							
Service	1,749	3,542	34.0	52.0	8.2							
Total	5,134	6,812	100.0	100.0	3.2							
Value Added per Worker (1976 Prices and Exchange Rates)												
	In US Dollars		% of Average		Growth Rate							
	1964	1973	1964	1973	1964-73							
Agriculture	903	1,517	66.4	88.4	5.9							
Industry	1,837	2,552	135.2	148.6	3.7							
Service	1,730	1,546	127.3	90.0	-1.2							
Total	1,359	1,717	100.0	100.0	2.6							
Financing												
Public Sector Savings										62.7	68.5	
Foreign Project Aid										13.4	24.6	
Other										23.9	6.9	
Total Financing										100.0	100.0	

BALANCE OF PAYMENTS, EXTERNAL ASSISTANCE AND DEBT
(Amounts in Millions of US Dollars at Current Prices)

	Actual					Estimated 1976	Projected					
	1971	1972	1973	1974	1975		1977	1978	1979	1980	1981	1982
Summary Balance of Payments												
Exports (Incl. NFS)	974	1,207	1,548	1,858	2,100	2,781	3,988	4,547	4,648	5,057	5,863	6,828
Imports (Incl. NFS)	1,285	1,236	1,424	2,072	2,082	2,436	3,053	3,613	4,237	5,040	5,903	6,773
Resource Balance (X-M)	-311	-29	124	-214	18	345	935	934	411	17	-40	55
Factor Services	-176	-197	-215	-192	-241	-258	-275	-292	-327	-371	-399	-430
Profits	(-70)	(-73)	(-74)	(-60)	(-66)	(-82)	(-100)	(-117)	(-137)	(-164)	(-172)	(-180)
Other	(-106)	(-124)	(-141)	(-132)	(-175)	(-176)	(-175)	(-175)	(-190)	(-207)	(-227)	(-250)
Current Transfers (Net)	34	35	35	55	47	100	112	125	138	152	167	184
Balance on Current Account	-453	-191	-56	-351	-176	187	772	767	222	-202	-272	-191
Private Direct Investment	40	17	23	36	43	45	32	39	57	65	74	72
Public M< Loans												
Disbursements	222	351	447	364	383	376	412	518	583	635	799	917
Repayments	-92	-96	-132	-211	-134	-181	-173	-215	-250	-298	-386	-477
Net Disbursements	130	255	285	153	249	195	239	303	333	337	413	440
Other M< Loans												
Disbursements	145	139	60	50	76	-	-	-	-	-	-	-
Repayments	-79	-84	-58	-58	-87	-	-	-	-	-	-	-
Net Disbursements	66	55	2	-8	-11	-	-	-	-	-	-	-
Capital Transactions n.e.i.	135	28	-41	-219	13	157	-	-	-	-	-	-
Change in Net Reserves (- = Increase)	82	-164	-213	389	-118	-584	-1,043	-1,109	-612	-200	-215	-321
Grant and Loan Commitments												
Official Grants and Grant-like	-	-	-	-	-	-	Debt and Debt Service					
Public M< Loans							Public Debt					
IBRD	153	74	162	8	88	80	Outstanding and Disbursed					
IDA	-	-	-	-	-	-	1,385.6	1,650.0	1,936.0	2,117.4	2,360.8	2,560.0
Other Multilateral Governments	42	41	29	64	-	26	Interest in Pub.					
Suppliers	110	114	67	55	65	131	49.2	57.9	78.5	103.7	112.3	136.9
Private Banks	35	37	31	45	75	32	Repayments on					
Bonds	38	84	190	58	162	162	92.0	95.9	131.9	211.4	134.4	180.9
Public Loans n.e.i.	-	8	1	4	1	-	Public Debt					
Total Public M< Loans	378	358	525	234	391	431	141.2	153.8	210.4	315.1	246.7	317.8
							Other Debt					
							Service (Net)					
							133.1	155.1	126.6	118.6	108.0	160.0
							Total Debt					
							274.3	308.9	337.0	433.7	354.7	477.8
							Service (Net)					
							Burden on Export Earnings (%)					
							Public Debt Service					
							14.5	12.7	13.6	16.9	11.7	11.4
							Total Debt Service					
							28.2	25.6	21.8	23.3	16.9	17.2
							Total Debt Service Plus Foreign Inv. Income					
							35.3	31.6	26.5	26.6	20.0	20.1
							Average Terms of Public Debt					
							Interest as % Prior Year DO&D					
							3.9	4.2	4.8	5.3	5.3	5.8
							Amortization as % Prior Year DO&D					
							7.4	6.9	8.0	10.9	6.3	7.7
							IBRD Debt Outstanding and Disbursed					
							390.8	453.4	504.5	561.7	633.5	706.9
							IBRD as % Public Debt					
							28.2	27.5	26.1	26.5	26.8	27.6
							IBRD as % Public Debt Service					
							29.4	30.9	28.9	23.6	32.3	25.8
							IDA Debt Outstanding and Disbursed					
							19.4	20.9	23.0	22.8	22.5	22.3
							IDA as % Public Debt					
							1.4	1.3	1.2	1.1	1.0	0.9
							IDA as % Public Debt Service					
							0.2	0.3	0.2	-	0.2	0.1

Outstanding on 12/31/76

External Public Debt (Repayable in Foreign Curr.)	Disbursed	
	Only	Percent
World Bank	706.8	27.6
IDA	22.3	0.9
Other Multilateral Governments	188.3	6.6
Suppliers	977.3	38.2
Private Banks	169.4	6.6
Bonds	435.7	17.0
Public Debt n.e.i.	48.6	1.9
Public Debt n.e.i.	31.6	1.2
Total Public M< Loans	2,560.0	100.0

THE STATUS OF BANK GROUP OPERATIONS IN COLOMBIA

A. STATEMENT OF BANK LOANS AND IDA CREDITS (As of June 30, 1977)

Loan Number	Year	Borrower	Purpose	(US\$ million)		
				Amount Bank	(less IDA	Cancellation) Undisbursed
Fully disbursed loans and credits				667.3	23.5	<u>/1</u> --
575	1968	Interconexion Electrica, S.A.	Power	18.0		.2
680	1970	Colombia	Roads	32.0		3.9
681	1970	Interconexion Electrica, S.A.	Power	52.3		.3
682	1970	Empresas Municipales de Cali	Water Supply	18.5		.1
738	1971	Empresas Municipales de Palmira	Water Supply	2.0		.3
740	1971	Empresa Nacional de Telecomunicaciones	Communications	15.0		.1
741	1971	Empresa de Acueducto y Alcantarillado de Bogota	Water Supply	88.0		28.9
849	1972	Instituto Colombiano de la Reforma Agraria	Irrigation	2.2		1.6
860	1972	Instituto de Fomento Municipal	Water Supply	9.1		4.2
874	1973	Empresas Publicas de Medellin	Power	56.0		21.5
903	1973	Banco de la Republica	Industry	60.0		7.8
920	1973	Colombia	Education	21.2		13.2
926	1973	Ferrocarriles Nacionales	Railways	25.0		1.8
971	1974	Colombia	Pre-Investment Studies	8.0		6.6
1071	1975	Banco de la Republica	Industry	5.5		1.1
1072	1975	Instituto Nacional de Fomento Municipal	Water Supply	27.0		23.2
1073	1975	Empresa Nacional de Telecomunicaciones	Communications	15.0		6.1
1118	1975	Colombia	Rural Settlement	19.5		16.4
1163	1975	Colombia	Agriculture	21.0		20.7
1223	1976	Banco de la Republica	DFC	80.0		69.7
1352	1977	Colombia	Rural Development	52.0		52.0 <u>/2</u>
1357	1977	Banco de la Republica	Agricultural Credit	64.0		64.0 <u>/2</u>
Total <u>/3</u>				1,358.6	23.5	343.2
Of which has been repaid				323.0	1.3	--
Total now outstanding				1,035.6	22.2	343.2
Amount sold			31.3			
Of which has been repaid			18.4	12.9		
Total now held by Bank and IDA				1,022.7	22.2	
TOTAL UNDISBURSED						<u>343.2</u>

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

/2 Not yet effective.

/3 The figures do not include US\$60 million Fourth Telecommunications Loan, US\$90 million Seventh Highways Loan and US\$15 million Second Small-Scale Industries Loan which were signed in July and August of 1977.

B. STATEMENT OF IFC INVESTMENTS (as of July 31, 1977)

<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	0.50	-	0.50
1960-1965	Industrias Alimenticias Noel, S.A.	Food products	1.98	0.08	2.06
1961	Envases Colombianos, S.A.	Metal cans	0.70	-	0.70
1961-1968	Morfeo-Productos para el Hogar, S.A.	Home furniture	0.08	0.09	0.17
1961	Electromanufacturas, S.A.	Electrical equipment	0.50	-	0.50
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	Textiles	1.98	0.15	2.13
1968-1969	Tejidos, S.A.				
1964-1970	Corporacion Financiera de Caldas	Development financing	-	0.81	0.81
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	0.58	1.58
1967-70-74	ENKA de Colombia, S.A.	Textiles	5.00	2.61	7.61
1969	Compania de Desarrollo de Hoteles y Turismo, Ltda. (HOTURISMO)	Tourism	-	0.01	0.01
1969-1973	Corporacion Financiera del Norte	Development financing	-	0.45	0.45
1969	Corporacion Financiera del Valle	Development financing	-	0.43	0.43
1970	Promotora de Hoteles de Turismo Medellin, S.A.	Tourism	0.23	0.11	0.34
1970-1977	Pro-Hoteles, S.A.	Tourism	0.80	0.25	1.05
1973-1975	Corporacion Colombiana de Ahorro y Vivienda	Housing	-	0.46	0.46
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	-	2.43
	Total Gross Commitments		40.30	13.36	53.66
	Less cancellations, terminations, repayments and sales		19.89	5.63	25.52
	Total commitments now held by IFC		20.41	7.73	28.14
	Total undisbursed		21.33	0.74	22.07

C. PROJECTS IN EXECUTION /1

1. Ln No. 575 Electric Power (Interconnection); US\$18 million, December 1968.
Effective date: February 25, 1969
Closing Date: original - February 29, 1972
current - July 31, 1977

The original project was completed and commercially operational in 1971. The Bank agreed that an undisbursed balance could be used to finance a 220 kv transmission line, Guatape - Barrancabermeja. The cost of the line is estimated at US\$7.2 million of which about US\$4.1 million represents the foreign component. Work on the line is almost fully completed.

2. Ln No. 680 Highways VI; US\$32 million, June 1970.
Effective date: March 29, 1971
Closing date: original - November 30, 1974
current - November 30, 1978

The largest component of the project, the paving program, has experienced considerable cost increases and delays. As of this writing, seven sections in the program are still under construction and about 200 km still to be paved. Project completion is now expected for 1979. The other components of the project were completed with much less delay. The Ministry of Public Works has taken several steps to hasten project execution and strengthen the performance of contractors.

3. Ln No. 681 Chivor Hydroelectric Power; US\$52.3 million, June 1970.
Effective date: September 1, 1970
Closing date: Original - June 30, 1977
Current - December 31, 1977

The project has experienced considerable delay and project costs are expected to be 35% higher than originally estimated. Work is now proceeding satisfactorily and the first generating units are expected to be put into service in the next few weeks.

4. Ln No. 682 Cali Water Supply and Sewerage; US\$18.5 million, June 1970.
Effective date: September 2, 1970
Closing date: original - June 30, 1974
current - June 30, 1977

The loan is almost fully disbursed.

/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.

5. Ln No. 738 Palmira Water Supply and Sewerage; US\$2 million, May 1971.
Effective date: December 29, 1971
Closing Date: original - March 1, 1975
current - March 1, 1977

As of June 30, 1977, about 85% of the loan amount was disbursed. The Bank is now awaiting detailed proposals from the company as to the use of about US\$300,000 still undisbursed.

6. Ln No. 740 Telecommunications II; US\$15 million, May 1971.
Effective date: August 16, 1971
Closing Date: June 30, 1977

Contracts for all Bank-financed goods have been signed and technical and financial consultants have been retained. Due to initial delays in the procurement of project equipment, some of the project's works will be completed 18 months behind original schedule. The loan is almost fully disbursement.

7. Ln No. 741 Water Supply (Bogota II); US\$88 million, May 1971.
Effective date: August 16, 1971
Closing Date: June 30, 1978

Disbursements up to June 30, 1977 amounted to 67% of this loan. Slow progress in the construction of the vital Palacio - Rio Blanco Tunnel is the main reason for the project's delay; the original contractor was replaced by another firm which is performing satisfactorily.

8. Ln No. 849 Irrigation (Atlantico II); US\$5 million, June 1972.
Effective date: November 14, 1972
Closing Date: March 31, 1978

The project is the second and final phase of a scheme to develop about 17,000 ha of seasonally inundated land for agricultural production. Work is continuing satisfactorily on project roads and a main drainage canal; the final two main drainage canals are scheduled to be completed during 1977. Land clearing, tertiary drainage works and allocation to farmers are behind schedule, but improved in 1976. The organization and settlement of farmers within the project areas and the technical assistance and farm credit operations are not yet satisfactory. At Government request, the Bank has agreed to cancel US\$2.8 million of the original amount of the loan.

9. Ln No. 860 Medium-Size Cities Water Supply and Sewerage Project; US\$9.1 million, October 1972.
Effective date: March 7, 1973
Closing Date: original - September 30, 1976
current - September 30, 1978

As of June 30, 1977, about 50% of the loan amount was disbursed. Disbursements were delayed due to initial project management problems, but progress of works has since accelerated.

10. Ln No. 874 Guatape II Hydroelectric Power Project; US\$56 million, January 1973.

Effective date: March 13, 1973
Closing Date: December 31, 1978

The progress of the work is generally satisfactory except for delays in the resettlement of El Penol and Guatape villages, which means that filling the Santa Rita reservoir cannot be started before mid-1978, three years behind schedule. This would be likely to lead to an energy deficit in the interconnected system from 1978 to 1981. The revised project cost estimate is substantially above appraisal estimates, mainly due to higher costs of the works at El Penol and Guatape. The Borrower experienced serious financial problems but as a result of a series of tariff increases, the company is projected to achieve the covenanted rate of return in 1977. Financial gaps, however, remain to be met if the investment program is to be completed on schedule.

11. Ln No. 903 Development Finance Companies V; US\$60 million, May 1973.

Effective date: November 9, 1973
Closing Date: December 31, 1977

The loan is fully committed. Disbursements are expected to be completed by the Closing Date.

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

Effective date: January 10, 1974
Closing Date: original - June 30, 1977
current - December 30, 1979

Project implementation had been suspended in mid-1975 pending redefinition of sector priorities by the Government. Implementation has resumed recently after the Bank agreed to reallocate part of the loan to finance rural primary schools instead of rural secondary schools as originally proposed. As the number of primary school graduates increase, the primary schools will gradually become secondary school centers.

13. Ln No. 926 Sixth Railway Project; US\$25 million, August 1973.

Effective date: December 6, 1973
Closing Date: original - June 30, 1976
current - December 31, 1977

The operation of the railway has improved and for the first time since 1974 the 1976 traffic approximately equalled the previous year's level (in terms of ton-kms it was slightly higher). The financial condition of the

railway, however, continued to deteriorate as tariff increases have not kept pace with cost increases. In 1976, the operating ratio of 137 did not meet the appraisal target of 104. As a result, the railway has requested financial support from the Government. Track rehabilitation work and procurement have improved, but derailments and availability of rolling stock continue to be poor.

14. Ln No. 971 Preinvestment Studies Project; US\$8 million, March 1974.
Effective date: June 27, 1974
Closing Date: December 31, 1978

The Bank has approved 26 sub-projects. Commitments under the Bank loan are proceeding at a satisfactory rate.

15. Ln No. 1071 Small-Scale Industry; US\$5.5 million, January 1975.
Effective date: May 20, 1975
Closing Date: June 30, 1978

After a slow start due to a change of management in Corporacion Financiera Popular, the beneficiary institution, commitments are moving well and progress is satisfactory. The second tranche was released by the Bank in view of the satisfactory performance of CFP. It is expected that the loan will be fully committed by December 31, 1977.

16. Ln No. 1072 Second Multi-City Water Supply and Sewerage Project; US\$27 million, January 1975.
Effective date: April 14, 1975
Closing Date: June 30, 1980

There were substantial delays in making the eight subloans effective. The last subloan (Barranquilla) was made effective on September 9, 1976. After a slow start, project implementation has progressed steadily in most cities.

17. Ln No. 1073 Telecommunications III; US\$15 million, January 1975.
Effective date: April 14, 1975
Closing Date: December 31, 1978

Thus far, US\$8.9 million has been disbursed. Contracts for all Bank-financed goods have been awarded, and work is proceeding satisfactorily.

18. Ln No. 1118 Caqueta Rural Settlement Project; US\$19.5 million, June 1975.
Effective date: April 1, 1976
Closing Date: October 31, 1979

This loan became effective on April 1, 1976 after a six-month delay. Since then, implementation has proceeded rapidly and some of the lost time regained. Road and bridge construction is well ahead of schedule (79 km have been completed). School construction, however, is behind schedule, while the credit program is proceeding well.

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

Effective date: March 30, 1976
Closing Date: December 31, 1980

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. Implementation is now proceeding satisfactorily, but still behind schedule.

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

Effective date: September 1, 1976
Closing Date: June 30, 1980

This loan is proceeding satisfactorily and according to schedule.

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

This loan was signed on January 7, 1977 and has not yet become effective. Works, however, are proceeding as scheduled.

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

This loan was signed on February 4, 1977 and has not yet become effective.

COLOMBIA
NUTRITION IMPROVEMENT PROJECT
SUPPLEMENTARY DATA SHEET

Section I: Timetable of Key Events

- | | |
|--------------------------------------|--------------|
| (a) Time taken to prepare project: | 2 years |
| (b) Agency which prepared project: | DNP |
| (c) First presentation to Bank: | October 1975 |
| (d) First mission to review project: | January 1976 |
| (e) Departure of appraisal mission: | January 1977 |
| (f) Completion of negotiations: | July 1977 |
| (g) Planned Date of Effectiveness: | January 1978 |

Section II: Special Bank Implementation Actions

Intensive supervision of the health, family gardens and monitoring and evaluation components would be scheduled in the first year of project implementation to assist in the initial stages of implementation of those components.

Section III: Special Conditions

1. Assurances were obtained that:
 - (a) By January 1, 1978, the Borrower would prepare a health care training program satisfactory to the Bank (paragraph 42).
 - (b) By January 1, 1978, the Borrower would hire local consultants, whose qualifications and terms and conditions are satisfactory to the Bank, for positions in the MOH and the regional health offices (paragraph 42).
 - (c) The list and scope of activities to be financed under the Project Management Fund would be agreed upon by the Borrower and the Bank (paragraph 48).
 - (d) The Borrower would complete an evaluation, under terms of reference satisfactory to the Bank, of the community health care system by September 30, 1978 and revise the pace and scope for the system's development on a basis satisfactory to the Bank (paragraph 49).

- (e) The PAN Group would be adequately staffed through 1985 with key staff having adequate qualifications and job descriptions (paragraph 51).
 - (f) The Borrower would maintain existing arrangements for the recovery from beneficiaries of (i) a portion of investment costs of the health posts and the water supply system and (ii) the entire operating and maintenance costs of the water supply system (paragraph 57).
 - (g) The Borrower would recover at least the costs of drugs and medicines from beneficiaries of the community health system (paragraph 58).
 - (h) Beneficiaries would contribute at least 50% of the costs of installing latrines and their shelters (paragraph 58).
2. A condition of effectiveness would be that INAS and ICBF each sign subsidiary agreements with the Borrower and MOH sign a subsidiary agreement with DNP (paragraph 61).
3. Disbursements for activities undertaken by each of the remaining agencies would be made only after its subsidiary agreement with the Borrower had been signed (paragraph 61).

