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NICARAGUA

REFORMULATION BLANCO-SIUNA HIGHWAY PROJECT

(NI0023)

LOAN PROPOSAL

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NICARAGUA

REFORMULATION OF LOAN 546/SF-NI

RIO BLANCO-SIUNA HIGHWAY PROJECT

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REFORMULATION OF LOAN 546/SF-NI
RIO BLANCO-SIUNA HIGHWAY PROJECT

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NICARAGUA

REFORMULATION OF LOAN 546/SF-NI

RIO BLANCO-SIUNA HIGHWAY PROJECT

I. BACKGROUND INFORMATION

- 1.01 The Government of Nicaragua on April 25, 1977 submitted to the Bank an application for a loan in the amount of US\$35 million, chargeable to the Fund for Special Operations, to assist in financing the construction of the Rio Blanco-Siuna highway, 116 kilometers in length.
- 1.02 After the initial examination of the application, an IDB orientation mission was sent to Nicaragua. The IDB Mission reviewed the final engineering designs and cost estimates which were ready. Furthermore, the Mission acquired information as to the state of land tenure in the highway service area and it was found that additional information would be necessary on some economic and financial aspects of the project. This information was received at the end of 1977. Owing to the advance of the studies and of the design it was determined that an analysis mission would not be necessary.
- 1.03 The analysis of the project, given in Document PR-872-A and the associated loan proposal, given in Document PR-872, were submitted to the IDB Board of Executive Directors for consideration and a loan was granted in the amount of US\$32 million, pursuant to Resolution DE-77/78 of May 25, 1978. The total cost of the project had been estimated at US\$43 million.
- 1.04 Resolution DE-77/78 established, in clause 8, subsection (c), that before the signing of loan contract, the borrower should submit to the Bank legal evidence that deed of ownership to all land in the project service area had been irrevocably transferred to the Instituto Agrario de Nicaragua (IAN), in conformity with the provisions of the Agrarian Reform Act, No. 797 of 1963, in order that the IAN might award in the form of family farm units all land not yet titled.
- 1.05 The lack of timely compliance with the foregoing requirements and the state of armed conflict in Nicaragua precluded the signing of the contract for loan 546/SF-NI between the Republic of Nicaragua and the Bank and, therefore, the loan was suspended.
- 1.06 During the Special Mission to Nicaragua of August 1 to 3, the national authorities expressed special interest in the Rio Blanco-Siuna project. Hence, the Bank decided that, among the objectives of the Mission that visited Nicaragua as from August 13, a re-examination of the project in light of the current circumstances would be included.

- 1.07 The Government Council of National Reconstruction set forth a formal expression of its interest in the project in a letter from its Secretary General, which was addressed to the Bank on August 20, 1979 and which set forth as well the high order of priority attached to the project, thereby confirming the priority status previously granted.
- 1.08 The Secretary General of the Council, in the same note, verified its intention of setting aside the areas adjacent to the highway and, in general, the whole area, for projects of the Ministry of Agrarian Reform so as to achieve maximum benefit for farmworkers and obtain financial cooperation from the Bank for the performance of studies and programs for the integrated development of the area.
- 1.09 The Ministry of Transport and Public Works addressed a letter to the Bank, also dated August 20, in which it suggested the desirability of reformulating the loan, and allowing for a thoroughgoing review of costs and for some amendments to the systems originally called for to implement the project.

II. PRESENT STATE

A. Revision and Updating of Project Costs

Unit Costs

- 2.01 At the request of the Mission of August 13 to 24, a detailed review of all unit costs and the results thereof was done by MTOP technicians, engineers of the former consulting firm, CONSULNIC, who took part in the original design work of the project, as well as the special consultant in highway construction to the MTOP, Mr. Carlos Nogueira. The costs were reviewed taking into account several factors, including salaries and wages, social benefits, costs of materials, fuel and lubricants, depreciation, overhead expenses and equipment maintenance, operating costs, etc. All costs were updated and compared with the proposals received for similar work in Nicaragua during March 1979.
- 2.02 The review of unit costs showed that the consultants had included an allowance for contingencies and for cost escalation of 10% in each item payable. Inasmuch as the allowance for cost escalation and contingencies (15% according to the Bank) is included as a separate investment item, these factors were deleted in the category of direct costs of construction.
- 2.03 According to the MTOP and its consultants, adjustments were made to the construction costs by means of revising the specifications on overloading distances according to topography. These adjustments brought about insignificant savings.

- 2.04 Revision in the construction costs showed an overall increase in foreign exchange of 10% and of about 15% in local currency (córdobas) since the project was first evaluated.

Reduction in Costs by Design Modifications

- 2.05 The mission investigated possibilities for design modifications such as might reduce overall project costs. It was concluded that inasmuch as the project lay accross rolling and non-mountainous terrain, any down-grading of specifications on the increase in grade or reduction in the radius of curve, in the horizontal or vertical alignment, respectively, would result in only moderate savings. Furthermore, inasmuch as the Río Blanco-Siuna highway would be used by heavy vehicles, such modifications could reduce the carrying capacity and, therefore, limit the use of the road, which would then make it necessary to make improvements not much later on that would entail additional investments. The design characteristics of alignment and grade given to the Bank during the project analysis are op- timum for projects of this kind.
- 2.06 On the other hand, considerable saving in costs was found possible by substituting asphalt treatment for graded materials in the lining of drainage ditches. Although paving the drainage ditches with graded materials is an excelent means of preventing erosion and reducing maintenance, the materials necessary would have to be brought in from a considerable distance away from the project area at a high cost which would have to be added to the high installation cost. Asphalt-surfaced drainage ditches can be maintained by means of periodic treatments and could be supplemented by lining with graded materials only in road sections that showed marked erosion. This maintenance work would be done by force account. The cost saving by changing the lining is considerable (about US\$1,490,000) owing to the total length of drainage ditches along 160 km of the road.

Cost Escalation and Contingencies

- 2.07 A 15% allowance for contingencies has been applied to all direct costs of construction as well as to engineering and management and to the cost of the rights of way, as was done in analyzing the project in 1977.
- 2.08 The escalation factor applied previously to the project cost was 12% a year for the local and foreign exchange costs, which was the standard factor set by the Bank in 1977 when the project analysis was done. Following is a list of escalation factors currently used by the Bank and applicable to the project external costs:

1979	-	8.0%
1980	-	7.5%
1981	-	7.0%
1982	-	7.0%

Application of these new rates yielded a considerable reduction in the final project costs in foreign exchange. A 12% per annum cost escalation factor for local expenses was maintained, which should be adequate to meet any increases in salaries and wages, social benefits and materials costs.

Reduction in the Foreign Exchange Equivalent of Local Costs

- 2.09 In spite of the fact that local costs in cordobas have increased, as indicated above, the equivalent in foreign exchange has declined owing to the 43% currency devaluation enacted into law in April 1979 as a result of an agreement between the Government of Nicaragua and the International Monetary Fund (IMF) which was signed in April 1979 (the rate of exchange was modified from 7 cordobas to 10 cordobas = US\$1.00).

Revised Project Cost

- 2.10 Adding the effects of the changes in design, cost escalation from the date of the first analysis, and the new rate of exchange, the following adjustment in direct construction costs was arrived at. Figures are given in thousands of US\$:

	<u>Foreign Exchange</u>	<u>Local Expenses</u>	<u>Total</u>
Original cost of project construction	11,800	12,300	24,100
Cost escalation to date	<u>1,162</u>	<u>1,750</u>	<u>2,912</u>
Subtotal	12,962	14,050	27,012
Adjustment for exchange rate	<u>0</u>	<u>-4,277</u>	<u>-4,277</u>
	12,962	9,773	22,735
Changes in design	<u>- 730</u>	<u>- 760</u>	<u>-1,490</u>
Total construction costs of the amended project	12,232	9,013	21,245

Using the updated contingency factors and cost escalation rates, the total cost was US\$35,550,000, itemized by investment category and by currency as follows:

(Equivalent in US\$ 000)

Category	Expenses in		Total	%
	Foreign Exchange	Local Currency		
1. Engineering and Management	400	2,100	2,500	7.0
2. Direct Costs of Construction	12,232	9,013	21,245	59.8
3. Finance Charges	1,110	50	1,160	3.3
4. Associated Costs	-	30	30	0.1
5. Unallocable	<u>4,818</u>	<u>5,797</u>	<u>10,615</u>	<u>29.8</u>
Total	18,560 <u>1/</u> =====	16,990 =====	35,550 =====	100.0 =====
Percentage	52.2	47.8	100.0	

2.11 Financing would be as follows:

(Equivalent in US\$ 000)

Source	Source of Currencies		Use of Currencies		Total	%
	Foreign Exchange	Local Currency	Foreign Exchange	Local Currency		
IDB - FSO	29,500	2,500	18.340 <u>1/</u>	13,660 <u>2/</u>	32,000	90.0
Local Contribution	-	3,550	2203 <u>3/</u>	3,330	3,550	10.0
Total	<u>29,500</u> =====	<u>6,050</u> =====	<u>18,560</u> =====	<u>16,990</u> =====	<u>35,550</u> =====	<u>100.0</u> =====
Percentage	<u>83.0</u>	<u>17.0</u>	<u>52.2</u>	<u>47.8</u>	<u>100.0</u>	

1/ Includes US\$11,995,000 as indirect component in foreign exchange.

2/ Dollars to be used to defray local expenses account for 37.8% of the loan amount in foreign exchange.

3/ Represents the credit fee payable in foreign exchange.

Comparison of costs and financing operations

- 2.12 Following is a comparison of the costs and of the original and revised financing operations:

(Equivalent in US\$ thousands)

	<u>Previous Amounts</u>	<u>Revised Amounts</u>
Total cost of project	43,000	35,550
Costs in foreign exchange	20,600	18,560
Costs in local currency	22,400	16,990
% expenses in foreign exchange	47.9	52.2
% expenses in local currency	52.1	47.8
% IDB financing	74.4	90.0
% local contribution	25.6	10.0
% Use of foreign exchange for local expenses	30.9	37.8

B. Project Execution

Preliminary Execution Plan (PEP)

- 2.13 The preliminary execution plan was presented to Bank in December 1977 and requires no modifications. The important dates in project execution, set by the authorities as indicated by MTOP, are:
1. Invite contractors to prequalify and invite technical proposals from consultants: October 15, 1979.
 2. Invite bids for construction of the three sections to be done under contract: November 1, 1979.
 3. Retain consultants for supervision and construction work: November 10, 1979.
 4. Submit initial report to the Bank: December 15, 1979.
 5. Retain construction companies: January 1, 1980.
 6. Start Construction: February 1, 1980.

Requirements concerning irrevocable land transfers

- 2.14 As regards the special condition set forth in Resolution DE-77/78, clause 8, subsection (c) of May 25, 1978, the Special Group Mission organized to review and reformulate the Rio Blanco-Siuna project found, in documents and conversations with officials of the Ministry of Public Works, the following:
- (i) that the 15 km section on either side of the roadway was 70% composed of public land;

- (ii) that the remaining 30% of the 15 km long section on either side of the roadway, which was ejido property of the Rio Blanco, Siuna and Paiwas municipalities, was transferred by each of the municipalities to the National Government, by duly executed public deeds in conformity with the rules governing such transfers pursuant to the Agrarian Reform Act; and
- (iii) that all land in question is under the jurisdiction of the Instituto Nicaraguense de Reforma Agraria (INRA).

Investments Preceding the Signing of the Contract and the Recognition Thereof

- 2.15 Since the latter part of 1978 the MTOP has constructed by force account about 30 km of the road to afford access to the COPALAR hydroelectric project. Seven kilometers of this road follow the bearing of the Rio Blanco-Siuna highway and were constructed in conformity with the specifications given for this type of project, as the members of the IDB mission that inspected the section were able to verify on August 21, having found that it was well constructed. The Government of Nicaragua has requested that the Bank recognize, as part of the local contribution, the investments already made in an amount to be determined on the basis of the unit costs that have just been updated. 1/

Work by Force Account

- 2.16 The Government, through the Ministry of Transport and Public Works, has asked that the Dirección General de Caminos be allowed to:
- (a) complete by force account the construction of section C 2/ of the project (19.6 km) and 28 km of section B, up to the Tuma River. Payment for this work would be made in accordance with the unit prices approved, at a total estimated cost of US\$6.5 million; and
 - (b) along the length of the project to construct by force account a trail that will afford access to the whole project as well as enable it to be better studied by the prospective bidders who would take part in the invitations for bids, to which paragraph 2.17 herein refers, especially the bridges. This construction work would take from 2 to 3 months. The method of payment for this work would be by kilometer of trail or any other method found to be better suited.
- 2.17 Given the proved capacity of DGC to directly construct roads of this kind which, owing to their specifications, allow the use of intermediate technology, and given the reason for constructing the trail, there are no objections to these requests. 3/

1/ See recommendations, clause 8.

2/ The 7 km already constructed are part of this section.

3/ See Project Resolution, clause 8(e).

International Public Invitations for Bids

2.18 Construction of the rest of the project would be done by means of contracts awarded pursuant to international public invitations for bids, to be carried out for the following work-measures:

- (a) Section A - Siuna Caño Waspi, not including bridges (48.6 km)
- (b) The part of Section B that is not included in the work to be done by force account, mentioned in 3(b), measuring 20.5 km.
- (c) Bridges

Bidders would be allowed the option of presenting separate bids on one or more groups and for the work-measures as a whole.

Alternative Measures of Execution

2.19 The MTOP has also requested that if an international public invitation for bids should be declared void or the prices prove excessive, the Dirección General de Caminos will be allowed the option of choosing one of several alternative methods of execution, whichever is most desirable at the time, such as letting a new international public invitation for bids; resorting to a bidding competition among at least three prequalified firms; or constructing the work-measures by force account. This would be done by means of suitable clauses in the regulations governing invitations for bids and it would be set forth therein that in each case prior approval of the Bank must be obtained.

Capacity of the MTOP to Accomplish Work by Force Account

- 2.20 The MTOP has informed that it has virtually the same personnel it had before the change in government and therefore it would have no difficulty in doing the construction work by force account because of the basically technical and unpolitical character of the construction. The Bank was able to verify the quality of the work done by the Ministry on part of the local roads program financed through loan 491/SF-NI and in a recent visit to the already completed section of this project.
- 2.21 As regards equipment, the MTOP has that which was used in the construction of the access road to the COPALAR hydroelectric project. The equipment is now at a campsite located in the Rio Blanco-Siuna Project area.

Supervision of Construction Work

2.22 Supervision of all construction work, even the work done by force account, will be limited to specialized Nicaraguan consulting companies, working either alone or in consortium, and acceptable to the Ministry of Transport and Public Works and to the Bank as well. The need to retain foreign advisors, on a part or full time basis, shall be left to

the judgment of the national firms. In order to allow for that eventuality foreign exchange proceeds of the loan have been set aside in the Engineering and Administration category.

C. Land Settlement and Agricultural Development Plans in the Project Area

- 2.23 For some time the idea has been entertained in Nicaragua of developing the so-called agricultural frontier which is a large area located in the western part of the country and in the central part of the country. The Rio Blanco-Siuna Highway is located in this area.
- 2.24 As stated previously, the Council of Government of National Reconstruction has made known its firm intention of benefiting the rural population through agrarian reform projects in the service area of this road. Accordingly, the Minister of Agrarian Reform has presented an application for technical cooperation in the amount of US\$800,000, the plan of operations for which is presented together with this document.
- 2.25 The purpose of this technical cooperation is to do studies on production and social organization and to prepare an integrated rural development project in part of the area to be benefited by the highway. It is expected that international organizations will take part and aid will be given by several member countries of the Bank in the performance of the studies.

III. CONCLUSIONS

- 3.01 The technical and socio-economic justification of this project, set forth in document PR-872 and PR-872-A, is still entirely valid and is enhanced by the determination of a new Government of Nicaragua to undertake within a very short time a program of land settlement and agricultural development in the service area of the highway.
- 3.02 The reduction in project costs, and their equivalent in US dollars, is the result of changes in some specifications, in the elimination of cost overruns and duplicated contingencies and, mostly, of the effects of the devaluation of the Nicaraguan Cordoba on the local costs. All this was duly verified by the recent mission to Nicaragua. The reduction in cost made it possible to reduce the local contribution by the same amount as the readjustments, and in percentage terms, to 10% of the total required investment.
- 3.03 A combination of work-measures, to be constructed by contract and others by force account, under the direction of the Dirección General de Caminos, is planned. No major difficulties in doing so are expected. It must be added, as stated previously, that the DGC has already constructed 7 km of highway, and furthermore, is preparing to invite consulting firms and construction companies to prequalification proceedings in the month of October and to let international public invitations for bids for all works to be done by contract on November 1 this year.

3.04 In summation, it is considered that the project is justified and viable. The proposed resolution is given ahead as well as the Recommendations and Annex A to the prospective loan contract.

PROPOSED RESOLUTION

NICARAGUA. LOAN /SF-NI TO THE REPUBLIC OF NICARAGUA
(Río Blanco-Siuna Road Project)

The Board of Executive Directors

RESOLVES:

That the President of the Bank, or such representative as he shall designate, is authorized, in the name and on behalf of the Bank, to enter into such contract or contracts as may be necessary with the Republic of Nicaragua in order to grant it financing to cooperate in the execution of a project consisting of the construction of a road approximately 116 km long between the towns of Río Blanco and Siuna. This financing shall be subject substantially to the following conditions:

1. Amount and Currencies: Up to US\$32,000,000 or the equivalent in other currencies which are part of the Fund for Special Operations, of which amount: a) up to US\$29,500,000 or the equivalent thereof in other currencies (except that of Nicaragua) shall be disbursed to pay for goods and services acquired through international public bidding in the Bank member countries and for such other purposes as may be specified in the loan contract; and b) up to US\$2,500,000 equivalent shall be disbursed in cordobas to cover local costs. Payments of amortization and interest shall be made in the currencies disbursed.
2. Source of Funds: The Fund for Special Operations.
3. Guarantee: The general responsibility of the borrower.
4. Credit Fee: 1/2 of 1% per annum on the undisbursed portion of the amount indicated in subsection (a) of clause 1 of this resolution, commencing to accrue twelve months after the date of this resolution. Payment shall be made in dollars of the United States of America on the same dates as the interest.

5. Amortization: The borrower shall amortize the loan in a period of 40 years from the date of the contract, by means of semi-annual, consecutive and, insofar as possible, equal installments. The first installment shall be paid 10 1/2 years after the date of the contract.
6. Interest: 1% per annum for 10 years following the date of the contract and 2% per annum thereafter. Interest will be payable semiannually on principal amounts outstanding and the first payment shall be made 6 months after the date of the contract. At the request of the borrower, resources of the financing may be used to pay interest during the disbursement period.
7. Disbursement: Disbursement of the financing shall be completed within a period of 5 years from the effective date of the contract.
8. Special Conditions:
 - (a) The resources of the loan shall be used in their entirety by the Ministerio de Transporte y Obras Públicas (MTOP) through the Dirección General de Caminos (DGC). If modifications in the legal provisions or the basic regulations concerning the MTOP or the DGC are approved which, in the opinion of the Bank, may substantially affect the project, the Bank may take such measures as it deems appropriate, in accordance with provisions to be set forth in the loan contract.
 - (b) The resources of the loan shall be used to participate in the execution of a project estimated at the equivalent of US\$35,550,000, and in no case shall the participation of the loan resources exceed 90% of the total amount of the project. Consequently, the loan contract shall contain such provisions as the Bank deems appropriate to ensure that such national resources as may be necessary, in addition to the loan, for the complete execution of the project shall be duly provided in an amount estimated at the equivalent of US\$3,550,000, in accordance with a schedule of investments satisfactory to the Bank.

- (c) Prior to the first disbursement of the financing, the borrower, through the MTOP, shall submit evidence to the Bank's satisfaction that the MTOP has contracted for advisory services for the supervision and control of project construction pursuant to the procedures set forth in the pertinent annex to the loan contract.
- (d) In the acquisition of machinery, equipment and other goods related to the project and in the awarding of construction contracts, the system of public bids shall be followed in each case in which the value of such acquisitions or contracts exceeds the equivalent of US\$100,000. Invitations to bid shall be subject to procedures to be included as an annex to the loan contract.
- (e) The provisions of subsection (d) above notwithstanding, the DGC may construct on force account approximately 47 km of the highway (section A and part B), exclusive of bridges, representing an amount estimated at up to the equivalent of US\$6,500,000.
- (f) The Bank shall establish such inspection and supervision procedures as it deems necessary to assure the satisfactory execution of the project, and the borrower and the MTOP shall extend all cooperation required for the most effective accomplishment of this purpose. The sum of US\$295,000 and the equivalent of US\$25,000 in cordobas shall be allocated from the amount of the financing for credit to the general income accounts of the Bank to meet expenses of general inspection and supervision.

RECOMMENDATIONS

It is recommended that the following conditions, to be fulfilled to the Bank's satisfaction, be included in the loan contract in addition to those set forth in the proposed resolution:

1. Prior to each call for bids on construction work, the borrower shall undertake that the executing agency shall present:
 - (i) the plans, specifications and documents required for the construction in question and, if applicable, the documentation pertaining to the call for bids, including the pertinent model contract, and
 - (ii) evidence that the borrower has legal possession of the necessary land.
2. Within one year after the date of the last disbursement of the financing, and thereafter annually for a period of ten years, the borrower shall present evidence that the works are being adequately maintained in accordance with the stipulations in Section VI of Annex A to the loan contract and with generally accepted technical standards.
3. Within 18 months from the effective date of the loan contract, the borrower, through the MTOP, shall present to the Bank's satisfaction the following information for evaluating the socio-economic benefits of the project:
 - (i) the data specified in paragraphs 4.27 and 4.28 of the Project Report, corresponding to the year before the start of construction of the road, and
 - (ii) the system that will be utilized for collecting the data referred to in (i) above and for making the annual comparisons between the data for each immediately preceding year and that corresponding to the year before the start of construction of the road.
4. At the end of the second year from the effective date of the loan contract and of each subsequent year until four (4) years after the date of the last disbursement of the financing, the borrower, through MOP, shall present to the Bank the data specified in paragraphs 4.27 and 4.28 of the Project Report, corresponding in each case to the year immediately preceding.

5. Within two years from the effective date of the loan contract, the borrower, through the MTOP, must present to the Bank:
 - (i) the text of the agreement executed between MTOP and the INRA whereby the MTOP, according to the availability of its machinery and to periodic work programs mutually agreed upon with the INRA, and under the coordination of the INRA, shall use its own heavy equipment to perform the work necessary to clear the lots granted to low-income settlers within the project area of influence; and
 - (ii) the text of the agreements executed between the INRA, on the one hand, and the Banco Nacional de Desarrollo (BND) and the Instituto Nicaraguense de Tecnología Agropecuaria (INTA), a branch of the Ministerio de Desarrollo Agrícola, on the other, assuring the provision of technical assistance and credit facilities to low-income settlers located in that area.
6. Within one year after the date of the last disbursement of the financing, the borrower shall inform the Bank of the measures it has taken to collect real estate taxes or, alternatively, betterment taxes from project beneficiaries. The borrower shall annually inform the Bank of the amount of such tax collections during the ensuing four-year period.
7. The borrower shall undertake to adopt all measures within its reach so that in any settlement plans carried out by IAN in the project's area of influence, appropriate provisions will be included with respect to: erosion control, rational exploitation of forests, and environmental protection, including, inter alia, the establishment of forest reserves or the provision of land for forests.
8. The Bank may recognize as part of the national resources in addition to the loan the investments made by the MTOP for construction of approximately 7 km of the highway prior to signature of the loan contract but subsequent to May 25, 1978, up to the equivalent of US\$600,000, provided that requirements substantially similar to those established in the proposed resolution and the loan contract have been met.
9. Starting from the fiscal year ending on December 31, 1980, and throughout the execution of the project, the financial statements and supplemental information of the project shall be audited by an independent firm of public accountants acceptable to the Bank, in accordance with procedures agreed upon with the Bank. The firm shall be contracted by the borrower after consultation with the Tribunal de Cuentas.

10. An annex substantially similar in content to Appendix III (The Project) to the loan proposal shall be included in the loan contract.
11. Coincident with signature of the loan contract, the Bank and the borrower shall sign an agreement for nonreimbursable technical cooperation pursuant to the provisions of Resolution DE- /79 and the terms of reference stipulated in Appendix D to the Project Report.

THE PROJECT
(Annex A to Loan Contract)

I. Objectives

- 1.01 The Project, which consists of the construction of a road approximately 116 kilometers long between the localities of Rio Blanco and Siuna, has the following objectives:
- (a) Incorporation into the country's economy of new agricultural lands which, because of their climatic and soil conditions and topography, present favorable conditions for development; and
 - (b) Connection of the country's northeastern region, at present lacking means of overland communication with the rest of Nicaragua, with the existing national highway system. It should be noted that this road would complete the first overland transport link in Nicaragua between the two oceans.

II. Description

- 2.01 The road will be six meters wide, with two-lane bridges and gravel rolling surface. These characteristics are comparable to those of the sections of roads with which the two ends of the proposed highway would connect. Construction will begin simultaneously along two work fronts, one from Rio Blanco to Siuna and the other in the opposite direction, from Siuna to Rio Blanco.

III. Cost

- 3.01 The cost of the Project is estimated at the equivalent of US\$35,550,000 tentatively distributed as follows by investment categories.

(In US\$ thousands or its equivalent)

	B A N K						NATIONAL RESOURCES					
	FOREIGN EXCHANGE											
	Direct	Indirect	Local Costs	Subtotal Foreign Exchange	Local Currency Costs	Total Bank	Foreign Exchange Costs	Local Currency Costs	Sub-Total	TOTAL	%	
Engineering and Administration		180	220	2,000	2,400	-	2,400	-	100	100	2,500	7.0
Supervision	180	220	2,000	2,400	-	2,400	-	-	-	2,400	6.7	
Administration	-	-	-	-	-	-	-	100	100	100	0.3	
Construction Costs		3,788	8,444	5,388	17,620	1,590	19,210	-	2,035	2,035	21,245	59.8
Construction	3,788	8,444	5,388	17,620	1,590	19,210	-	2,035	2,035	21,245	59.8	
Material Costs		890	-	-	890	50	940	220	-	220	1,160	3.3
Interest during construction		595	-	-	595	25	620	-	-	-	620	1.8
Credit fee	-	-	-	-	-	-	220	-	220	220	0.6	
Inspection and supervision		295	-	-	295	25	320	-	-	-	320	0.9
Current Costs		-	-	-	-	-	-	-	30	30	30	0.1
Rights of way	-	-	-	-	-	-	-	30	30	30	0.1	
Specific Allocation		1,527	3,291	3,772	8,590	860	9,450	-	1,165	1,165	10,615	29.9
Contingencies	595	1,266	1,149	3,010	240	3,250	-	325	325	3,575	10.1	
Cost escalation	932	2,025	2,623	5,580	620	6,200	-	840	840	7,040	19.8	
TOTAL	6,385	11,995	11,120	29,500	2,500	32,000	220	3,330	3,550	35,550	100.0	
Percentages	18.0	33.7	31.3	83.0	7.0	90.0	0.6	9.4	10.0	100.0		

IV. Financing

4.01 The tentative financing scheme is as follows:

(In US\$ thousands or its equivalent)

	<u>Origin of Resources</u>		<u>Expenditures to be Incurred</u>		<u>Total</u>	<u>%</u>
	<u>Foreign Exchange</u>	<u>Local Currency</u>	<u>Foreign Exchange</u>	<u>Local Currency</u>		
Bank	29,500	2,500	18,380 a/	13,620 b/	32,000 b/	90.0
National Resources	-	3,550	220 c/	3,330	3,550	10.0
Totals	29,500	6,050	18,600	16,950	35,550	100.0
Percentage	83%	17%	52.3%	47.7%	100%	

a/ Includes US\$11,995,000 in indirect foreign exchange costs.

b/ The local costs to be financed with foreign exchange from the loan represent 37.8% of the total amount of the loan.

c/ Estimate of credit fee.

V. Bidding

5.01 When goods to be acquired or services to be contracted through public bidding are to be financed in whole or in part with foreign exchange from the loan, the bidding procedures and specific bidding requirements shall permit unrestricted participation of goods or contractors, respectively, from member countries of the Bank. Consequently, no conditions precluding or restricting the participation of contractors or the offer of goods from such countries shall be established in such procedures or specific requirements.

Selection and Hiring of Consultants

5.02 No provisions may be established, prior or subsequent to the performance of advisory services, that preclude or restrict the selection or hiring of consultants from any regional member country of the Bank, pursuant to the eligibility standards governing use of resources from the Bank's Fund for Special Operations.

VI. Maintenance of the Road

6.01 The basic purpose of the maintenance shall be to keep the road or section of road and related facilities financed with the loan in substantially the same condition as they were in at the time of completion of each of them.

- 6.02 The annual maintenance plan for the road shall be presented for the Bank's consideration prior to the November 30 preceeding each fiscal year. The plan shall include, as a minimum, detailed information on the organization responsible for maintenance; the personnel in charge of the maintenance; the number, type, and condition of the equipment to be used for maintenance; the location, size, and condition of repair and storage facilities and maintenance equipment; the control measures to be taken to limit the size and weight of vehicles using the road; and the number of kilometers and location of the section to be maintained.
- 6.03 The maintenance plan shall state the amount of funds available in the current maintenance budget as of November 30 of each year (excluding funds for improvement operations) and the amount to be assigned in the budget for the year for which the plan is submitted. The plan shall also specify separately the maintenance activities planned to be carried out on the road, quantifying the costs.
- 6.04 The plan shall also include a report on the maintenance conditions based on a system of adequacy evaluation. The system shall be so structured as to provide an overall rating of maintenance conditions of the road, such rating to be based on a numerical evaluation of the various components, such as pavement, shoulders, culverts, drainage structure, and signals.
- 6.05 The Bank will reserve the right to inspect the road periodically. Should it be determined on the basis of such inspections or of reports received by the Bank that the maintenance is below the agreed-- upon levels, the borrower and MOP shall take the necessary steps to correct all deficiencies.

APPENDIX D

INTER-AMERICAN DEVELOPMENT BANK
OPERATIONS SUBDEPARTMENT - REGION I
DIVISION 2
NICARAGUA

Plan of Operations for a Technical Cooperation Program to conduct studies on production and social organization in the area of influence of the Rio Blanco-Siuna highway and to formulate an Integrated Rural Development Project in part of that area.

I. Application

- 1.01 The Minister of Agrarian Reform requested the mission and, in a cable dated 27 August 1979, confirmed a contribution in the amount of US\$800,000 to prepare the studies and integrated rural development project in the area of the Río Blanco-Siuna highway.
- 1.02 The beneficiary of the technical cooperation would be the Republic of Nicaragua, and the executing agency would be the Instituto Nicaragüense de Reforma Agraria (INRA), one of the four basic institutions that now comprise the agricultural public sector; its organization and functions are described in Annex 1.
- 1.03 The proposed operation is included in the Bank's Nicaraguan reconstruction program.
- 1.04 The technical cooperation would entail approximately 18 months' work and an additional 6 months for termination.

II. Background

- 2.01 The Republic of Nicaragua, an area of approximately 139,000 km², is divided by the mountains that cross the country from northeast to southeast into two slopes, one to the Pacific and the other to the Atlantic. The Pacific slope constitutes the most developed region in the country and accounts for 82% of its population. Since only the remaining 18% inhabit the Atlantic area, this represents an extensive agricultural frontier region that will accommodate the population increase envisaged in the near future.
- 2.02 About 94% of the country's highway network is located in the Pacific and central regions. There are very few roads in the Atlantic zone: they include a penetration road from the Municipality of Chontales to El Rama, a small city in the southern part of Zelaya Department, 50 km from the coast; some short roads in the towns of Puerto Cabezas and Waspán, in the northern part of the Atlantic zone; and a penetration road that is passable in the dry season, linking the cities of Siuna, El Empalme, La Rosita, Manzanza and Puerto Cabezas.

- 2.03 The loan currently being processed by the Bank would finance construction of the Siuna-Río Blanco segment, the missing link that would provide the Department of Zelaya with overland communication to the more developed Pacific and Central regions.

The project to be financed by the Bank would comprise construction of a 116-km highway with 15 bridges between Río Blanco - which is now linked to Managua by highway - and the town of Siuna - which would be connected to Puerto Cabezas on the Atlantic side.

The total cost of this project is estimated at US\$35.5 million, of which the Bank would underwrite US\$32 million.

- 2.04 The program of the Government Junta for National Reconstruction of Nicaragua places high priority on agricultural production, particularly that intended for internal consumption, and to that end fosters the use of large areas of land suitable for cultivation and livestock production that are not presently being utilized, through the execution of agrarian reform programs.
- 2.05 The Government Junta's Program also envisages integrated development of the country's Atlantic coast region and accordingly plans to coordinate institution of a joint program by the corresponding state entities to establish health, education, technical assistance, financing and marketing services in conjunction with agrarian reform in that region.
- 2.06 With the collaboration of the Inter-American Institute of Agricultural Sciences (IAIAS), the Dirección de Planificación Agrícola of the Ministerio de Desarrollo Agropecuario (MIDA) has prepared a diagnostic report for the development of Nicaragua's agricultural frontierland.

The physical framework of this project is formed by the strip of land that crosses the center of the country from north to south. As may be seen in the map included as Annex 2, this consist of 18 zones with a total area of 5 million "manzanas" (Central American land measure, each of which equals 1.75 acres), 75% of which is suitable for agricultural pursuits.

- 2.07 The Río Blanco-Siuna highway crosses three of these 18 areas. Their area and priority rating is indicated below:

	Thousands of manzanas	Prioriting rating on on scale of 18
Siuna	842	One
Matiguas	422	Two
Rio Bijao	180	Five
	<u>1.444</u>	

The combined surface of these three areas that can be used for agriculture is over one million manzanas.

The nature of the soil here is such that preference should be given to such permanent crops as coffee, cocoa and African palm; grazing land for cattle; and food crops, primarily for local consumption, such as yucca, bananas, corn, beans, pineapple and other fruit.

- 2.08 The consortium of the consulting firms TAHAL and TECNOPLAN S. A. (National) has been working on an investment project - which has not yet been completed - for the development of three specific areas in the agricultural frontier zone, representing a total of 20,000 manzanas. Two of these, with a total of 13,000 hectares, are located in the highway zone of influence: one of them is Rio Blanco, in the area surrounding that terminal point, and the other is situated in the Siuna area of influence. The third is located at Nauawas, close to Rio Blanco. These projects envisage agricultural development of the area on the basis of the crops and livestock indicated in the preceding paragraph.
- 2.09 The information available points to the possibility of settling some 20,000 families in the Rio Blanco-Siuna highway area of influence. This would entail investments and programs designed to promote agricultural production in the area as a means of subsistence and income for the population settling there. At the same time infrastructure works - particularly roads - would be needed for population mobility and transportation of excess production to market outlets. All this would be supplemented by health, education, water supply, housing and other works and services to provide a suitable quality of life for these groups of human beings.
- 2.10 The special mission that visited Nicaragua August 13-24, 1979 established contact with representatives of the Organization of American States (OAS) the Inter-American Institute of Agricultural Science (IAIAS), the International Fund for Agricultural Development (IFAD) and governments of Bank member countries that had expressed interest in supplying both funds and technical personnel to conduct the studies and prepare the projects in the area earmarked for expansion of the agricultural frontier and Atlantic zones.

The Ministry of Agrarian Reform also expressed interest in the participation of the national firms that had already conducted studies in this area and thus had acquired experience there.

III. The Proposed Project

- 3.01 The objectives of this technical cooperation would be:

- a) To complete the basic studies that have already been started to determine the technical, economic and social feasibility of utilizing land that will be situated in the area of influence of

of increasing national agricultural production and particularly for settlement of sizeable groups of human residents in this area; and

- b) To formulate an integrated development project in part of that area: it would include the investments and programs needed to ensure attainment of the goals of production and population welfare which the project is designed to accomplish.

3.02 The basic studies and those relevant to the technical, economic and social feasibility of the project would be conducted in accordance with "Guide for the Formulation of Loan Applications for Agricultural Development and/or Integrated Rural Development" issued by the Bank, with special emphasis on the priorities indicated in Annex 3.

IV. Project Description

4.01 To accomplish the foregoing objectives, resources of this technical cooperation would be used to engage the services of consulting firms, individual consultants, and national or international institutions for periods of no more than 12 months.

4.02 To conduct the basic studies and prepare the project, it is estimated that a total of approximately 100 expert/month will be needed in the following areas of specialization:

Regional Planning; Rural Settlements and Organizations; Agricultural Economics; Rural Anthropology or Sociology; Water Supply; Farm Production; Credit; Rural Crafts and Industries; Forestry Production and Utilization and Conservation of Natural Resources; Fishery and Aquiculture; Highways; Electric Power Works; Education; Health; Environmental Sanitation; Architecture; and other specific fields.

4.03 In addition to the hiring of the experts indicated in the previous paragraph, external financing is anticipated for the completion of the following basic and feasibility studies:

- a) Soil surveys and analysis to determine the capacity for use.
- b) Inventories and plans for forest utilization.
- c) Aerial photography and/or procurement of photographs taken by planes or satellites for the above mentioned purposes.

that would be needed by the experts hired to conduct the studies and to prepare and publish the project.

V. Justification

- 5.01 Construction of the Rio Blanco-Siuna highway, amounting to US\$35.000.000 would make possible settlements in more than one million manzanas of farmland, adding another 20% to the area now being utilized (5.000.000 manzanas). It is hoped to achieve this in orderly fashion for optimal utilization of the potential of this land. At the same time, this would help to solve problems of land tenure by establishing settlements here of farmers that now have small landholdings in other parts of the country but lack sufficient income to maintain themselves and their families.
- 5.02 The incorporation of one million manzanas into agricultural production - 75% of which would be used for farms largely devoted to export crops - will have a noteworthy impact on future growth of the gross domestic product, employment and influx of foreign exchange.
- 5.03 Finally, settlement of this area by human nuclei will hasten the opening of the eastern part of the country, thus effectively contributing to the economic and cultural integration of the Atlantic zone, which national development has thus far bypassed.

VI. Project Cost, Financing and Terms

- 6.01 The cost of the project amounts to US\$880,000 equivalent, of which the Bank would finance up to US\$800,000 equivalent and the Instituto Nicaragüense de Reforma Agraria, US\$80.000 equivalent, in accordance with the following estimated budgets:

(In US\$ thousands)

<u>Cost Breakdown</u>	<u>IDB</u>	<u>Nicaraguan Government</u>	<u>Total</u>
1. Consulting firms and specialized institutions	<u>566</u>		<u>566</u>
1.1 Fees, direct cost (100 consultant/months at US\$2,000 each)	200	-	200
1.2 Overhead	300	-	300
1.3 International travel (15 tickets at US\$800 each)	12	-	12
1.4 Per diem (1,000 days at US\$56 each)	56	-	56
2. Specific Studies	<u>120</u>	-	<u>120</u>
Soil surveys and analysis; forestry inventory; aerial and satellite photography and preparation of plans and designs			
3. Vehicles, equipment, fuels and material	<u>40</u>	-	<u>40</u>
4. Program of support services	-	<u>80</u>	<u>80</u>
4.1 Rental of office space		20	-
4.2 Stationery and office supplies	-	10	-
4.3 Counterpart technical and secretarial staff	-	50	-
5. Contingencies	<u>72</u>	-	<u>72</u>
Total	<u>800</u> ===	<u>80</u> ===	<u>880</u> =====

Fund to which resources would be charged

- 6.02 The Bank's contribution, up to the equivalent of US\$800.000 on a nonreimbursable basis, would be charged to net income of the Fund for Special Operations.
- 6.03 The local counterpart for execution of the project would consist of the assigning of national technical and secretarial personnel, plus the facilities, material and supplies that would be provided by the Instituto Nicaraguense de Reforma Agraria.
- 6.04 The technical cooperation activity described in this plan would be conducted and the Government of Nicaragua is signed. This includes up to 18 months for the consulting firms or institutions that have been contracted to complete their activities, and six months to wind up the program and review the results. Any balances that have not been disbursed or committed within the 18-month period will automatically be cancelled.

VII. Disbursements

The Bank will disburse its contribution of up to the equivalent of US\$800,000 in the name of the Instituto Nicaraguense de Reforma Agraria in the following manner:

- 7.01 Within 90 days after signature of the corresponding agreement and upon receipt from the beneficiary of an application and a tentative budget of the expenses to be covered, together with the name of the person or persons that would represent the Ministry in all matters relevant to execution of the agreement and true copies of their signatures, a revolving fund of up to US\$160,000 will be established, to be replenished as needed for satisfactory execution of the project.
- 7.02 In order to set up the revolving fund, an application will be required from the Instituto Nicaraguense de Reforma Agraria, together with a breakdown, substantiated by documents, of outlays made chargeable to its contribution.
- 7.03 The last disbursement will be made not later than 24 months after signature of the corresponding agreement.

VIII. Reports

- 8.01 The Instituto Nicaraguense de Reforma Agraria shall submit a quarterly progress report to the Bank covering the present plan of technical cooperation.
- 8.02 The experts, consultants or consulting firms contracted will provide the Bank Field Office with all information it may reasonably request of them with regard to the performance of their work during the period for which they are contracted.

8.03 Within six months after completion of the project, the Instituto Nicaraguense de Reforma Agraria shall submit a final report to the Bank on the results that have been achieved.

8.04 Within 60 days after the last disbursement, the Instituto Nicaraguense de Reforma Agraria shall submit to the Bank a breakdown of expenditures made chargeable to the Bank's contribution, duly audited to the Bank's satisfaction.

IX. Supervision

9.01 General supervision of this project may be carried out by the Bank through its Field Office in Nicaragua or by supervisory missions sent when deemed appropriate as work on the project progresses.

X. Agreement

10.01 The technical cooperation agreement between the IDB and the Government of Nicaragua shall be signed 30 days after this plan of operations is approved by the Board of Executive Directors. This period may be extended for another 30 days.

XI. Evaluation Criteria

The following parameters shall be used in evaluating this operation:

11.01 The degree to which project objectives have been attained.

11.02 The measures adopted by the new Government of Nicaragua and the institutions thereof for utilization of studies and execution of the project to be implemented as a result of this technical cooperation.

11.03 Such evaluation shall be based on the progress and final reports scheduled, together with those received from the consultants and such specific reports as may be prepared by Bank technical missions.

XII. Bank Responsibility

12.01 Division 2 of the Operations Department will have basic responsibility for this project, with the collaboration of the Agricultural Development Division as the unit technically responsible.

THE AGRICULTURAL PUBLIC SECTOR IN NICARAGUA

The Public Sector of Nicaragua has been substantially reorganized by the new Government. In the past the agricultural public sector was organized to operate under the direction of the Ministry of Agriculture and Stockraising, 11 agencies, and three cooperating bodies.

There are at this time two subsectors:

- a. The reformed subsector, which is within the purview of the Instituto Nicaragüense de Reforma Agraria (INRA), which ranks as a Ministry of State; and
- b. The unreformed, or traditional, subsector, which is responsible for serving the middle and large-scale producers and is within the purview of the Ministry of Agricultural Development (MIDA).

The INRA has undertaken the duties that were being performed by:

- a. The Instituto Agrario Nacional, mainly in the field of awarding land, organization of and assistance to farmworker settlements, support for enterprise associations, and other land reform action.
- b. The Instituto de Bienestar Campesino (INVIERNO), the purpose of which is to promote the coordinated improvement of the low-income rural population. In order to achieve this purpose, the INRA organization unit charged with performing the functions assigned to INVIERNO shall now provide, either directly or through enterprise associations: agricultural credit and credit for handcraft activities, accompanied by technical assistance for agricultural production as well as for farmworker organization; training; assistance in marketing inputs and outputs; and housing finance. As support services it shall either directly, in some cases, or through other public institutions in others, undertake to construct access roads and infrastructure facilities for the storage and processing of agricultural commodities, as well as to provide for other services in the field of health, education, energy and environmental sanitation.

In keeping with these responsibilities, the INRA has been carrying out, using resources supplied in part by USAID, the integrated agricultural credit program for low-income farmworkers, and, if it is continued, will significantly supplement the Agricultural Recovery Project to be financed with an IDB loan.

The INRA is responsible moreover for the management of the recovered agricultural enterprises, most of which have been assigned to the Agrarian Reform Agribusiness Corporation, which combines the integrated government enterprises engaged in producing coffee, sugar, tobacco, rice, intensive stockraising, and export of beef.

Using other recovered agribusiness properties, the INRA has created regional agricultural enterprises, such as those engaged in cotton milling at Leon and Chinandega.

The following organizations have been added to the MIDA:

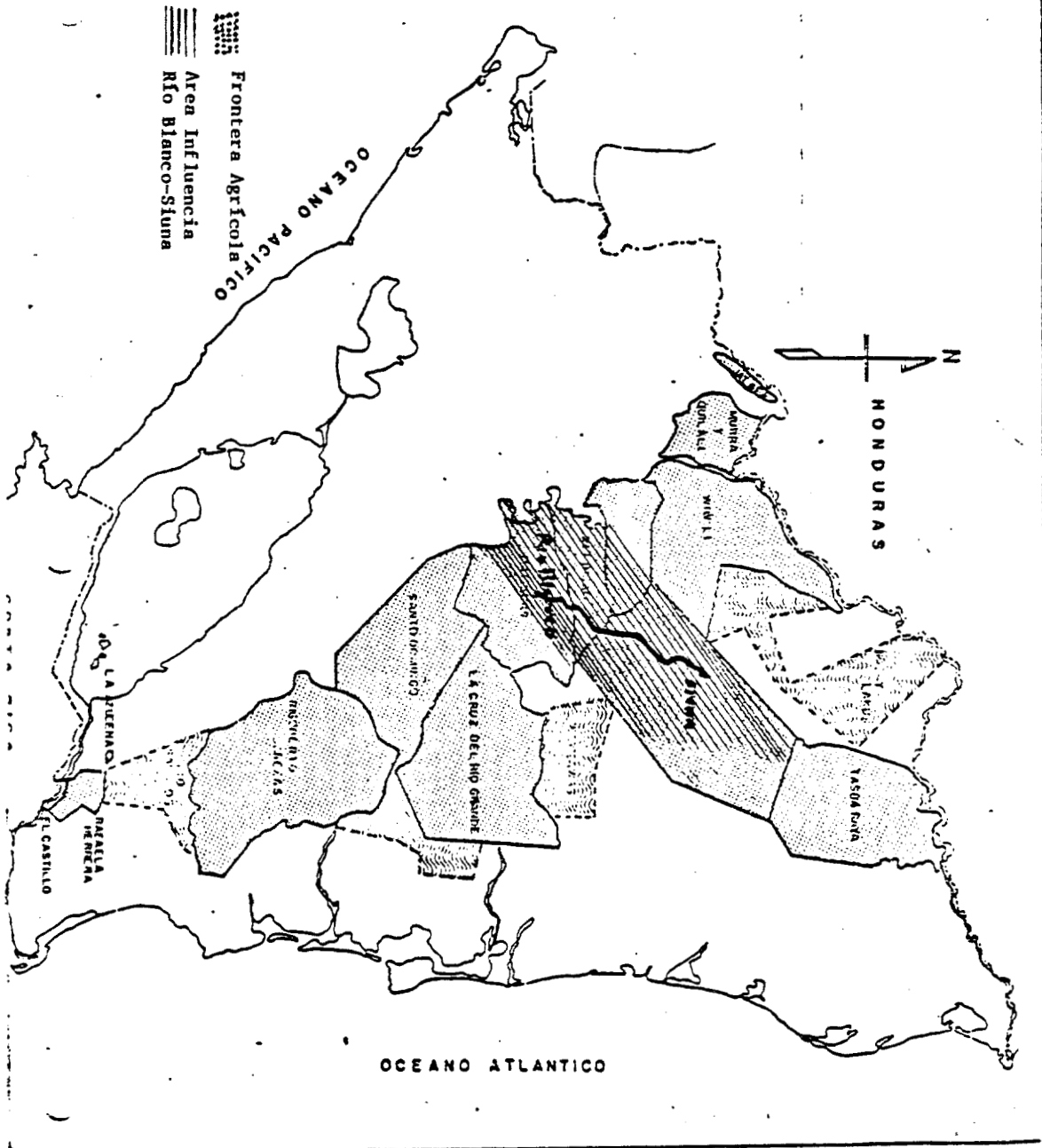
- a. The Instituto Nicaraguense de Tecnología Agropecuaria (INTA), which performs the basic functions of research, dissemination, and higher agricultural education. Plans call for transferring the last-named function to the National University.
- b. The Instituto de Recursos Naturales (IRN) which could not be created.
- c. The Centro de Promoción de Mercados (CEPAM) which likewise could not be created.
- d. The Instituto Nicaraguense de Café, which performed research, coffee grain classification and coffee marketing functions. ^{1/}
- e. The Commission Nacional de Algodón (CONAL) which did research on the improvement and cultivation as well as the classification of cotton.

Complementing the structure of the agricultural public sector are:

- a. The Banco Nacional de Desarrollo (BND), which now comprises the Banco Nacional de Nicaragua, the Instituto de Fomento Nacional (INFONAC), and the Fondo Especial de Desarrollo (FED) of the Central Bank.
- b. The Instituto de Comercio Exterior e Interior ((NCEI), charged with the marketing of export commodities, mainly coffee, sugar, cotton, and beef, as well as setting prices to the farmers payable by the intermediary who does the processing as well as by the end user.

Hence, it is noted the agricultural public sector has been reduced to four basic organizations: INRA, MIDA, BND and INCEI and a cooperating body, the Central Bank.

^{1/} The marketing function will be undertaken by INCEL.



THE MOST IMPORTANT CONSIDERATIONS IN PREPARING THE INTEGRATED RURAL
DEVELOPMENT PROJECT FOR THE RIO BLANCO-SIUNA SERVICE AREA

A. Frame of Reference

- (a) Main physical features of the project area. Total area, climate, soils (with detail studies on use for crop-farming, stock-raising, or forestry), topography, water resources, forest resources, and other resources;
- (b) Societal aspects. Agrarian structure (land-tenure), state of tenure of land in the project area, total and rural population and income levels of prospective beneficiaries in comparison with the national average;
- (c) Societal and services infrastructure. Roads and electric service. Agricultural services such as extension work, credit, and marketing. Societal services such as health, education, drinking water supply, and housing. Organization of farmers into co-operatives or other forms of association; and
- (d) Some relevant information for project-associated purposes on the state of the national agricultural sector.

B. The Borrower, Executing Agency, and Other Participating Institutions

- (a) Information on the laws, as well as on the organization and functions of these organizations;
- (b) Total supply of personnel and of that which will be assigned to the project;
- (c) Goods and other material resources available for project execution;
- (d) Rules and procedures for purchasing, inviting bids, letting contracts and engaging in other activities, as well as accounting and auditing systems;
- (e) Such financial information as may be available on the executing agencies.

C. The Project, Its Cost, and Financing

- (a) To establish and define the components of the project, and to organize them into groups as follows:

- (i) Farmworker Settlement Subprojects. Planning, demarcation, awarding, and titling of land parcels. Criteria for selection of beneficiaries. Organization and training of farmworkers. Other land reform actions;
- (ii) Production and Production-Support Subprojects. Construction of drainage and irrigation facilities or other permanent improvements. Credit for crop-farming and stock-raising, forestry, and agribusiness. Agricultural research and extension work. Marketing. Fishery and/or Aquaculture. Forestry development. Handcrafts production, etc.;
- (iii) Infrastructure facilities subprojects. Highway and road work measures and rural electrification; and
- (iv) Societal Subprojects. Education, health, drinking water supply, and housing.

For each subproject, specify objectives, executing agency, and present state. Define the facilities to be constructed and activities to be performed in material as well as financial terms, and prepare schedules for their accomplishment.

Societal, technical, and economic criteria to be used in selecting work-measures for each subproject.

Prepare 30% of the plans, designs, specifications, budgets, and provide the technical justification for the work-measures, taking into account that standard plans may be used in similar multiple work-measures.

- (b) Technology to be used in each subproject, affording preference to intermediate technologies, or less capital-intensive technologies, where feasible.
- (c) Study the market (foreign and domestic) for the output to be generated by the project. Infrastructure facilities available for storage, transport, and marketing of that output.
- (d) Cost of the project, according to the categories specified in Section G, accompanied by detailed tables and bases of calculation used. Give a summary of the principal work-measures, machinery, equipment, and other assets, as well as of the staff needed. Estimate the allowance for a cost escalation during project execution as well as the allowance for contingencies, in accordance with the rules set by the Bank. Financing charges (interest, service charge, and inspection and supervision fee) in accordance with the guidance given by the Bank's field office. Costs in foreign exchange, direct as well as indirect, and in local currency.

- (e) Expected source of financing from external organizations as well as the local contribution.
- (f) Technical cooperation. Supplement the information in category 6.2 of Section G (Technical Assistance) with information on: (i) consultants needed to advise in project execution. Prepare the terms of reference, work-schedules; and (ii) program for staff training to work in the project for training in-country as well as for special training abroad. Regulations governing fellowships.

D. Project Execution

- (a) Creation or strengthening of the administrative and technical unit to be in charge of project execution at national as well as regional level, setting forth the staff increase proposed to meet project requirements as a whole and of the subprojects in particular. The costs shall include the increased amounts of funds needed for the purpose.
- (b) Agreements or other governing documents, to be entered into to govern relations between the principal executing agency and the executing agencies of the subproject-associated investments and activities, both during the period allowed for project execution as well as during the stage of maintenance and operation of such facilities and services.
- (c) Procedure for management of funds such as will provide for an efficient flow of resources and for timely presentation of documented accounts.
- (d) A detailed account of the state of studies, designs, and plans needed for project execution.
- (e) Procedure for the procurement of goods and for contracting of work-measures.
- (f) Plan for Project Execution (PEP) in accordance with the Bank's appropriate manual.
- (g) Time-schedules for the procurement of goods and construction work. Time-schedule for investments.
- (h) Maintenance of work-measures and equipment.
- (i) Determination of investments made before approval of the loan, such as might be made after presentation of the application, for purposes of reimbursement.

- (j) Availability of suppliers and construction work contractors in the project area and, in addition, determination of such work-measures, and the total amount thereof, as it would be advisable to carry out by force account.

E. Financial Analysis

- (a) Financial projections.
- (b) Feasibility of the local contribution.
- (c) External and internal auditing.

F. Justification of the Project

- (a) Technical viability: (i) conception and strategy of the project; (ii) technology; (iii) conservation of natural resources and protection of the environment; (iv) justification of the dimensioning of the costs and technical targets of the project; and (v) feasibility of carrying on with the project;
- (b) Operational and financial viability.
- (c) Socio-economic viability: (i) characteristics of project beneficiaries; (ii) income levels of beneficiaries; (iii) benefits (mainly production increments); and (iv) project profitability (rate of economic return).

G. Investment Categories 1/

1. Engineering and Administration

- 1.1 Engineering and architectural designs
- 1.2 Engineering supervision
- 1.3 Administration

2. Investments in permanent improvements

- 2.1 Construction work (storehouses, stables, fences, corrals, silos and the like)
- 2.2 Irrigation infrastructure facilities (dams, canals, and the like).
- 2.3 Rural electrification.

1/ Within the investment categories specified, other subcategories required by the project may be added.

- 2.4 Roads
- 2.5 Construction work and installations for research activities and special services (experiment stations, laboratories, quarantine facilities, etc.)
- 2.6 Land preparation (clearing, leveling, draining, etc.)
- 2.7 Societal improvement work-measures (schools, hospitals, civic centers, drinking water supply and sewage-disposal facilities, housing, etc.)
- 2.8 Plantings
- 3. Investment in other goods
 - 3.1 Breeding cattle or draft animals
 - 3.2 Agricultural inputs
- 4. Machinery, equipment, and vehicles
 - 4.1 Machinery and spare parts
 - 4.2 Equipment
 - 4.3 Vehicles
- 5. Finance charges
 - 5.1 Interest during project construction
 - 5.2 Credit fee 1/
 - 5.3 IDB inspection and supervision 2/
- 6. Associated costs
 - 6.1 Rights of way and real property

1/ The credit fee applies to the undisbursed balance of the foreign exchange portion of the loan from the Bank. Inasmuch as the percentage varies with the type of resources considered (FSO, OC, etc.), consult with the IDB field office as to the percentage applicable.

2/ 1% of the loan amount is allocable to the Bank fee for inspection and supervision.

6.2 Technical assistance 1/

7. Unallocable

7.1 Contingencies

7.2 Escalation

1/ Includes international and/or national consulting work.

Appendix E

PROPOSED RESOLUTION

NICARAGUA. Nonreimbursable Technical Cooperation to the Instituto Nicaraguense de Reforma Agraria (INRA). Studies of the Rio Blanco-Siuna highway area of influence and preparation of an integrated rural development project.

The Board of Executive Directors

RESOLVES:

1. That the President of the Bank, or such representative as he shall designate, is authorized, in the name and on behalf of the Bank, to sign the necessary agreements and take the proper measures for execution of the plan of operations for technical cooperation which appears in Appendix D of Document in order to collaborate with the INRA in conducting studies of the Rio Blanco-Siuna highway area of influence and preparing a rural development project.
2. To allocate for the purposes of this resolution up to the sum of US\$800,000 or the equivalent thereof, chargeable to the net income of the Fund for Special Operations.
3. To authorize granting of the aforementioned amount on a nonreimbursable basis.