

UNCLASSIFIED

524-090
524-L-027

DEPARTMENT OF STATE
AGENCY FOR INTERNATIONAL DEVELOPMENT
Washington, D.C. 20523

PD-AAB-770

SECTOR LOAN PAPER

Proposal and Recommendations
For the Review of the
Development Loan Committee

NICARAGUA: EDUCATION SECTOR LOAN

524-L-027

AID-DLC/P-1035

UNCLASSIFIED

RECORD COPY

DEPARTMENT OF STATE
AGENCY FOR INTERNATIONAL DEVELOPMENT
Washington, D.C. 20523

UNCLASSIFIED

AID-DLC/P-1035

June 15, 1972

MEMORANDUM FOR THE DEVELOPMENT LOAN COMMITTEE

SUBJECT: Nicaragua - Education Sector Loan

Attached for your review are the recommendations for authorization of a loan in an amount not to exceed \$5,300,000 to the Government of Nicaragua to assist in financing the United States dollar and local currency costs of Borrower's program of educational reform and development in urban and rural areas at the primary and secondary levels of education.

This loan proposal is scheduled for consideration by the Development Loan Staff Committee at a meeting on Wednesday, June 21, 1972.

Rachel R. Agee
Secretary
Development Loan Committee

Attachments:

Summary and Recommendations
Sector Analysis
ANNEXES I-VIII

UNCLASSIFIED

NICARAGUA - EDUCATION SECTOR LOAN PAPER

TABLE OF CONTENTS

	<u>PAGE</u>
<u>SUMMARY AND RECOMMENDATIONS</u>	1
1. Borrower	1
2. Loan	1
3. Purpose	1
4. Background and Program Description	1
5. Financial Plan	iii
6. Other Sources of Funds	iv
7. Statutory Criteria	v
8. Views of the Country Team	v
9. Issues	v
10. Loan Implementation	vi
11. Recommendations	vi
12. Project Committee	x
Section I <u>LOAN BACKGROUND</u>	1
A. Summary of Macro Economic Situation	1
B. Past Education Assistance Given by A.I.D.	6
C. Past Education Assistance by International Organizations	9
D. The National Plan of Educational Development	12
Section II <u>EDUCATION SECTOR ANALYSIS AND IDENTIFICATION OF MAJOR PROBLEM AREAS IN THE SYSTEM</u>	17
A. Education Sector Analysis	17
B. Identification of Major Problem Areas in the System	17

TABLE OF CONTENTS

		<u>PAGE</u>
Section III	<u>EDUCATION SECTOR STRATEGY</u>	23
A.	Introduction	23
B.	The Role of Education in Social and Economic Development	23
C.	Establishing National Educational Priorities	24
D.	Institutional Development	26
E.	The Education Sector Loan	27
Section IV	<u>PROPOSED EDUCATION SECTOR PROGRAM</u>	28
A.	Proposed Joint Nicaraguan and A.I.D. Loan Activities	28
B.	Proposed Activities of International Organizations	79
Section V	<u>SUMMARY OF EXPECTED CHANGES IN THE EDUCATION SECTOR BY LOAN ACTIVITIES</u>	81
Section VI	<u>PROGRAM IMPLEMENTATION UNIT (UPI)</u>	96
A.	Structure of Program Implementation Unit	96
B.	Master Time-Phased Implementation Plan	97
C.	Implementation by Institutions	98
D.	Conclusion	98
Section VII	<u>LOAN FEASIBILITY</u>	99
A.	Financial Analysis	99
B.	Economic Evaluation	104
C.	Engineering Evaluation	108
Section VIII	<u>LOAN ADMINISTRATION</u>	113
A.	Program Execution	113
B.	Execution Plan	114
C.	Administrative Provision	115
D.	Progress Review	117
E.	Conditions and Covenants	119

TABLE OF CONTENTS

		<u>PAGE</u>
Section IX	<u>ISSUES</u>	122
A.	Prospects of Effective Loan Implementation	122
B.	Capacity of the GON to Carry Out Additional Financial Burden	122
C.	Timely Provision of Funds by GON	124
D.	Timely Provision of Adequate Teaching Staff and Trained Personnel for Program Facilities and Activities	124
E.	Proposed Local Cost Financing	124
F.	Maintenance Requirements	125

ANNEXES

- I. CHECKLIST OF STATUTORY CRITERIA
- II. DIRECTOR'S CERTIFICATION
- III. DRAFT LOAN AUTHORIZATION
- IV. ECONOMIC STATISTICAL TABLES
- V. EDUCATION SECTOR ANALYSIS
- VI. ESTIMATED FLOW OF FUNDS BY ACTIVITY
- VII. ENGINEERING AND CONSTRUCTION TABLES
AND BUILDING FLOOR PLANS
- VIII. BACKGROUND DOCUMENTATION

NICARAGUA - EDUCATION SECTOR LOAN

SUMMARY AND RECOMMENDATIONS

1. BORROWER: The Borrower will be the Government of Nicaragua. The Ministry of Public Education will execute the activities under the Loan.

2. LOAN:
 - a) Amount: Not to exceed FIVE MILLION THREE HUNDRED THOUSAND DOLLARS (\$5.3m.).

 - b) Terms: Repayable in 40 years including a grace period of 10 years, at an annual interest rate of two percent (2%) during the grace period and three percent (3%) thereafter.

3. PURPOSE:

The basic purpose of this loan is to assist the Government of Nicaragua to carry out a program of educational reform and development in urban and rural areas to meet identified needs in the management and functioning of the primary and secondary levels of education. This request is based on the recently completed (1971) National Educational Development Plan.

4. BACKGROUND AND PROGRAM DESCRIPTION:

In recent years, the GON has become interested in some type of overall educational evaluation and planning to improve the quality and output of the educational system. Within this framework, AID provided grant funds in 1969 to help make an educational planning study possible. This Plan (Plan Nacional de Desarrollo Educacional 1971-1980), prepared by the SALA Group (Southwest Alliance for Latin America), was completed and distributed in late 1971.

During this period, the GON initiated discussions with USAID on a possible educational development loan. In July, 1971 an IRR for School Construction was presented to AID/W. The CAEC subsequently recommended a broader approach in the nature of a Sector Loan. Discussions were resumed with the GON regarding this possibility. After several months of further analysis by the GON, a formal request for a sector type loan was received and the IRR completed by USAID.

After approval of the IRR by the CAEC on March 2, 1972 the Minister of Public Education appointed a Working Group on Educational Development. This Group reviewed the findings and recommendations of the Educational Plan relative to developing a strategy for actual educational reform implementation, and prepared specific programs for consideration under the proposed loan. The strategy and programs developed by the Working Group focus resources on three major activity areas, as they relate to pragmatically improving the system:

Activity Area No. 1 - Need to upgrade Qualification Level of Teachers and Professionals.

A major emphasis of the proposed AID Loan will be on the training and upgrading of teachers and professionals.

Activity Area No. 2 - Need to improve Educational Methods and Facilities.

The loan funds will be used to increase the ability of the educational system to meet the demand for increased relevance and internal efficiency through increasing the capacity of the system while upgrading its quality. This includes improvement of curriculum, teaching materials, textbooks, adult education and overall supervision as well as expanding facilities.

Activity Area No. 3 - Need to improve the Management, Research and Planning Capabilities of the MPE.

The Loan will provide technical assistance, scholarships, and materials to strengthen these crucial areas.

This and the above Problem Areas are fully discussed in Sections IV and V of the Capital Assistance Paper.

5. FINANCIAL PLAN:

The total estimated cost of the activities to be financed during the four-year disbursement period of the Loan is approximately \$11.4 million (excluding the \$1.03 million estimated value of school sites) in dollar and local costs, as follows:

SUMMARY OF ESTIMATED PROGRAM COSTS
(in thousands of U.S. dollars)

<u>ACTIVITY</u>	<u>Total Cost</u>	<u>Local Cost</u>	<u>Dollar Cost</u>
Upgrade Qualifications Levels of Teachers and Professionals	1,876	1,728	148
Improve Educational Methods and Facilities	4,313	3,331	982
Improve Management, Research and Planning Capabilities of the MPE	<u>5,255</u>	<u>4,282</u>	<u>973</u>
TOTAL	11,444	9,341	2,103

Of the total estimated program cost of \$11.4 million, AID will provide a maximum of \$5.3 million, the GON a maximum of \$6. million, and other Nicaraguan sources \$100,000 as follows:

SUMMARY OF FINANCING
(in thousands of U.S. dollars)

	<u>Total Cost</u>	<u>Local Cost</u>	<u>Dollar Cost</u>
AID	5,300	3,197	2,103
GON	6,044	6,044	-
Other Nicaraguan Sources	<u>100</u>	<u>100</u>	<u>-</u>
TOTAL	11,444	9,341	2,103

*NOTE: This does not include the \$1,030,000. estimated value of school sites.

6. OTHER SOURCES OF FUNDS:

To avoid possible program conflicts, the MPE and USAID have taken in consideration activities proposed or being carried out by the international organizations. The \$4.0 million loan of IBRD/IDA for secondary school expansion currently underway complements the proposed AID Loan (See Section IV, B.).

The EXIMBANK has expressed no interest in this program (See Annex VIII Exhibit 5). The IDB, in a letter dated April 25, 1972 has expressed no interest in funding any area of the Sector Loan (See Annex VIII Exhibit 6). IBRD has expressed no interest in this program.

7. STATUTORY CRITERIA:

The Mission is able to certify that all statutory criteria, as set forth in Annex I of this paper have been met.

8. VIEWS OF THE COUNTRY TEAM:

The Education Loan is of high priority and is the only loan proposed for Nicaragua for authorization in FY 1972. The Country Team believes that the loan, as outlined, will make significant improvement in the country's educational system and that there are reasonable prospects of successful implementation and the achieving of major changes in the education sector (See Section V). The Country Team strongly recommends the approval of the loan at the 5.3 million level, as proposed.

9. ISSUES:

The following issues are fully treated in Section IX page 130:

- a) Prospects of effective loan implementation;
- b) Capacity of the GON to carry out the additional financial burden;
- c) Timely provision of funds by the GON;
- d) Timely provision of adequate teaching staff and trained personnel for program facilities and activities;
- e) Proposed local cost financing;
- f) Maintenance requirements;
- g) AID acting as a last resort institution in a Sector Loan.

10. LOAN IMPLEMENTATION:

Implementation and administration of the program will be carried out by separate Program Implementation Unit (UIP) responsible to the Ministry of Public Education. The UIP will be guided by a Time-Phased Implementation Plan approved by AID. Appropriate clauses will be incorporated in the Loan Agreement to ensure efficient implementation of the program. (See Sections VI and VIII)

11. RECOMMENDATIONS:

On the basis of the conclusions of the Loan Committee that the program is technically, economically, and financially justified; it is recommended that a Loan to the Government of Nicaragua not to exceed FIVE MILLION ~~THREE~~ HUNDRED THOUSAND DOLLARS (\$5.3 m.) be authorized subject to the following terms, conditions, and covenants:

Terms:

Amortization	:	40 years from the date of first disbursement.
Grace Period	:	10 years on repayment of principal.
Interest	:	Two percent (2%) per annum during grace period and three percent (3%) thereafter.
Repayment in	:	U.S. Dollars.

Conditions and Covenants:

1. Prior to Signature - The following conditions are proposed as conditions precedent to signature of the Loan Agreement:
 - a) Creation of a separate unit within the MPE to implement the program;
 - b) Appointment of personnel to staff the unit.

2. Conditions Precedent to Initial Disbursement

Conditions precedent to disbursement will include the standard conditions and the following special requirements:

- a) Prior to any disbursement of loan funds, the Borrower shall submit:
 - i) A Time-Phased Implementation Plan (CP, PERT, etc.) satisfactory to A.I.D. Such plan shall include each component of this project, showing its interrelationship with, and priority relative to, other components.
 - ii) Evidence, satisfactory to A.I.D., that Borrower will, on a timely basis, provide the funds, in addition to the loan, necessary for the carrying out of the education sector loan program.
 - iii) Evidence, satisfactory to A.I.D., that the Borrower will provide, on a timely basis, appropriately trained personnel for each activity of the program.

- b) Prior to any disbursement under the loan for construction services for a particular construction sub-project, the Borrower shall, except as A.I.D. may otherwise agree in writing, furnish to A.I.D. in form and substance satisfactory to A.I.D.:
 - i) A draft contract for engineering services for the Program acceptable to A.I.D. with a firm or individual acceptable to A.I.D.
 - ii) A draft contract with a private firm or individual acceptable to A.I.D. for the supervision of any loan funded force account construction services.

UNCLASSIFIED

- viii -

- iii) Plans and specifications, bid documents, cost estimates, and time schedule for carrying out the construction sub-projects.**
 - iv) Evidence of legal title and right of way to all construction sites.**
 - v) A draft contract, acceptable to A.I.D. for construction services with a firm acceptable to A.I.D.**
 - vi) A draft of the proposed agreement between the MPE and Construcciones Nacionales for force account construction services.**
 - vii) A maintenance plan for the particular facilities comprised in the Program as well as the vehicles and equipment procured with loan funds, and evidence of sufficient budgetary support to accomplish adequate maintenance practices for the life of the facilities and equipment.**
- c) Prior to any disbursement under the loan for procurement of equipment, the Borrower shall, except as A.I.D. may otherwise agree in writing, furnish to A.I.D. in form and substance satisfactory to A.I.D.:**
- i) An equipment list for each activity.**
 - ii) A procurement plan.**
- d) Prior to any disbursement under the loan, for the purchase of textbooks, the MPE shall submit to A.I.D. a purchase and distribution plan satisfactory to A.I.D.**

UNCLASSIFIED

3. Covenants

In addition, the Borrower will agree to:

- a) Except as A.I.D. may otherwise agree in writing, MPE shall expend during each year of the Loan an amount not less than the previous year's total expenditures by the MPE calculated without regard to counterpart contributions required by external loans and grants.
- b) Support the Loan program through budget allocations in amounts sufficient to accomplish the purposes of the program in conformance with the time-phased implementation plan referred to above.
- c) Maintain, with its own resources, the level of recurrent costs of the Educational Sector Program after the disbursement of loan funds.
- d) Undertake with A.I.D. a joint review of the program at least annually, or at such interim times as may be agreeable to both parties, to determine the adequacy of progress in achieving the program goals and to determine if there is need to revise the sector analysis, strategy, and programs. If, in the course of the periodic review, it becomes apparent that the purposes of the loan will not be attained, A.I.D. may suspend disbursements under the loan.
- e) Provide on a timely basis appropriately trained personnel to staff each facility financed with loan funds.

Other Terms and Conditions

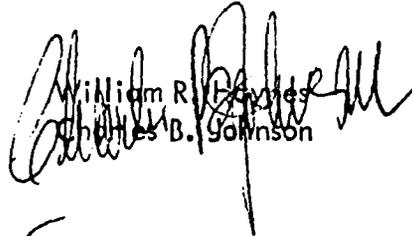
The loan shall be subject to such other terms and conditions as A.I.D. may deem advisable.

12. PROJECT COMMITTEE

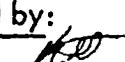
Capital Resources Development Officers: Jean M.E. Artaud, Joseph A. Charette; Terrence J. Brown
Human Resources: Peter Tobia; William H. Miller
Development Planning: Allen Goldstein
General Engineer: Carl M. Forsberg
Controller: Milton H. Eshleman

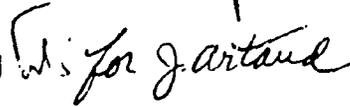
Reviewed and Approved by:

Mission Director:
Assistant Mission Director:


William R. Hayes
Charles B. Johnson

Drafted by:


Miller/Tobia/Goldstein/Forsberg/Artaud


for J. Artaud

Draft Loan Authorization prepared by: Douglas Robertson, Acting Regional Legal Advisor

Section I - LOAN BACKGROUND

June 15, 1972

A. Summary of Macro-Economic Situation

1. Growth and Structure of the Economy

During the period 1961-65, the average annual growth of the economy was about 10 per cent. For the 1966-70 period, the growth rate declined to 4.5 per cent, although this trend has been recently reversed. Beginning in 1969, the economy once again began growing at an average annual rate of slightly more than 5 per cent. During the latter period, per capita gross domestic product rose at an average annual rate of 1.6 per cent. Per capita GDP rose to \$377 in 1971 (est.) compared to \$346 in 1965 and about \$250 in 1960.

There has been a slow but perceptible change in the structure of the economy, as the primary sector's position in the output of the GDP has declined while that of the secondary sector increased. The primary sector (agricultural crops, livestock, fishing, forestry and mining) rose at an average annual rate of only 1.9 per cent. In 1965, this sector comprised 30.5 per cent of GDP; in 1970, it fell to 26.9 percent. In contrast, the secondary sector (manufacturing, construction and utilities) rose by 9.2 per cent annually; it comprised 20.6 per cent of GDP in 1965 and rose to 25.7 per cent in 1970. The remainder of the value of domestic output came from the services sector i.e. trade, government, transportation, housing and finance. Despite this shift, Nicaragua remains an agricultural and rural economy, with slightly more than 50 per cent of the total population in the rural areas and about one-half of the total labor force is employed in agriculture.

The National Planning Office is currently preparing a review of the economy and future developments for the June 1972 CIAP meeting. At the time of preparing this loan document, this information is not available. Yet on

the basis of discussions and some preliminary data, certain conclusions about developments in the next few years can be made. There is currently a boom in the cotton economy and exports will continue to grow for the next 2-3 years at least. This will have a favorable impact on total exports, and through tax collections and consumer expenditure should have an energizing effect on other economic sectors. It is anticipated that the GNP should expand by at least 5 per cent per year for the next couple of years at least. To some extent, all developments in Nicaragua must be considered within the context of the Common Market. If the CACM can be reintegrated it definitely will spur future economic growth. At the very least it will eliminate the current atmosphere of uncertainty which undoubtedly is inhibiting private domestic and foreign investment in Nicaragua. If the Common Market cannot be put together again, the need to reorient the economy may have a strongly adverse effect on future growth possibilities.

2. Fiscal and Budgetary Operations

The Government's budgetary performance has improved considerably since 1969 recovering from the serious decline in 1968. In 1968, the Government adopted several new taxes, including a 30 per cent import tariff surcharge, and various type of consumption taxes. This led to some improvement in revenue performance but insufficient to generate resources for supporting all the external assistance programs. In 1969 a "special consumption tax" was introduced, and as a result of these new taxes, total revenue from domestic resources, which actually had declined in 1968, rose 4.6 per cent. In mid-1970, the GON introduced a major new 5 per cent sales tax, which generated \$30 million in 1970 and \$74 million in 1971. As a result of all these new taxes, and some increase in the existing taxes e.g. income and property, total government revenue rose sharply in 1970 and 1971.

- 3 -

In 1968, government domestic revenue actually declined for the first time in many years by ₡6 million, to a level of ₡470.1 million. As the GON reduced current expenditures sharply, a current account surplus was maintained but capital expenditures fell to ₡97.0 million from a level of ₡147.0 million in 1967. Then in 1969, in response to some of the new taxes, revenue rose to ₡492.9 million (4.6%) and in 1970, in part due to the mid-year introduction of the 5 per cent sales tax, revenue rose to ₡569.4 million, an increase of about 15 per cent. This upward trend was modified somewhat in 1971, as total revenue rose approximately 9 per cent to a level of ₡616.6 million. The GON estimates a further increase of approximately 13 per cent in 1972, a major part of which will come from the various consumer taxes, although there are projected increases in income and property taxes as well.

As a result of these increases in revenue, and relatively tight control on current expenditures, government savings rose to ₡77 million in 1970 and capital investment rose to ₡164.5 million. The budget deficit peaked to ₡87.5 million in 1970, of which 70 per cent was covered by foreign assistance receipts and the remainder by generally non-inflationary domestic borrowing i. e. mainly I. O. U. s to the Social Security system. In 1971, although, the data is preliminary, it appears that the current account surplus increased.

3. Trade and the Balance of Payments

Nicaragua's net reserve position, which deteriorated after 1965, began to improve in 1970 and strengthened even more in 1971. In 1971 exports of goods rose by 7 per cent to about \$187.2 million (excluding \$3.8 million in non-monetary gold exports) while imports also increased by 7 per cent to a peak of \$190.4 million. Thus, for the first time in several years, Nicaragua's trade balance was positive by \$0.6 million. The services deficit did improve by \$1 million, but nevertheless

- 4 -

remained at a level of -\$43.3 million. As a result of this factor, Nicaragua's balance on goods and services remained in deficit to the amount of -\$42.8 million. This compares with a deficit of \$56.1 million in 1966 and \$70.7 million in 1967. During the past 4 years, the deficit declined below the \$45 million mark.

There was a sharp improvement in the drawdown on long-term loans (public and private, but mainly the former). In 1969, the net drawdown on foreign loans fell to \$30.8 million after reaching a sum of \$47.7 million the previous year. It then rose to \$57.3 million in 1970 and \$53.9 million in 1971. In part, the slowdown in 1969 was due to a shortage of counterpart funds to meet various loan requirements, and to some measure to management deficiencies. Meanwhile, amortization continued to grow and reached almost \$30 million in 1970, or about 15 per cent of goods and services. Available data indicates that amortization of foreign loans may peak in 1974, and then begin to decline. The debt service ratio thus should not exceed 15-18 per cent at that time and then should begin to decline if exports maintain a steady pace of growth.

Almost all of the increase in exports was accounted for by the favorable upward shift in cotton. Since 1965, cotton exports slipped, until a low of \$34.2 million was reached in 1970. Then with the improvement in prices in 1971, cotton exports rose to \$41.3 million. In contrast, coffee exports fell to \$29.2 million in 1971 from \$32.1 million the previous year. There were small gains in meat and sugar exports, but shrimp exports fell below the level of the previous two years. The three major traditional exports - coffee, sugar and cotton - thus accounted for 44 per cent of total exports; with meat, the ratio reaches 60 per cent.

UNCLASSIFIED

4. Money, Credit and Banking

The banking system of Nicaragua consists of the Central Bank, the State-owned National Bank of Nicaragua and six private commercial banks. In addition there is the National Development Institute (INFONAC), the Nicaraguan Housing Bank (BAVINIC) and the National Bank of Popular Credit (a small finance agency for low income population) - all capitalized and controlled by the Government. There are also four private investment companies, the largest of which is the Nicaraguan Investment Corporation.

In early 1970, there was a change in interest rates, and commercial bank rates on time and savings deposits of less than 1 year were raised from six per cent to 6½ per cent, and to 8 per cent on deposits of more than 1 year. At least in part due to this increase, time and savings deposits at commercial banks and BNN rose by 10 per cent in 1970 and are estimated to increase by more than 15 per cent in 1971; money supply (currency and sight deposits) also increased after having fallen in both 1967 and 1968.

In 1970, the interest rates on loans by commercial banks also were increased to 13 per cent from 10 per cent; cotton financing was raised from 9 per cent to 10 per cent, and all other bank loans from 9 per cent to 12 per cent. Rural credit loans were raised from 8 to 9 per cent. The loan rates from INFONAC were raised from 8-9 per cent to 12-13 per cent.

UNCLASSIFIED

Total credit to the private sector by all financial institutions increased 10 per cent in 1970 and is estimated to have increased by slightly more in 1971. Since 1967 when credit to the private sector rose 18.1 per cent, there has been a steady decline. Approximately 40 per cent of total credit to the private sector comes from the National Bank, 18 per cent from private commercial banks, and 15 per cent from the National Development Institute. About one-fourth of total credit goes to the agricultural sector at present, particularly cotton.

Credit of the manufacturing sector has increased considerably since 1966 and amounts to 25 per cent of total credit. Credit for housing also has risen rapidly since 1966.

E. Past Education Assistance Given by AID

Prior USAID assistance to Nicaraguan Education has been substantial. It has been provided in the form of both grants and loans, with the latter concentrating on the primary school system. At present, active grant programs are: EDUCREDITO (Educational Credit), technical assistance grant to the Ministry for curriculum reform and modernization, through the Southwest Alliance for Latin America (SALA), and Primary School Textbook Program, all of which will terminate during CY-1972.

UNCLASSIFIED

Following is a resumé of AID programs in the educational sector up to the present time:

1. Grants

a. Curriculum Reform

The GON has undertaken a program of primary curriculum reform, with AID funded technical assistance through a SALA contract. To date, grades 1-5 have been revised and the new curriculum implemented. Grade 6 is in the process of revision. When this is completed, the Basic Cycle of secondary is scheduled for revision. The SALA Contract TA will be completed on June 30, 1972 and future GON activity at the secondary level is planned in conjunction with the proposed AID loan.

b. Educational Plan

With contract technical assistance provided by AID, a Nicaraguan Education Analysis and Plan for the period 1972-1980, was completed in November 1971. The Plan has provided the analytical basis for this education sector loan.

c. Primary School Textbooks

In conjunction with the ODECA-ROCAP textbook project which began in 1963 for rewriting and preparing textbooks for all Central American countries, the USAID financed the first printing of new elementary textbooks. In addition, the USAID made funds available for the cost of materials, teacher orientation programs and participant training.

- 8 -

d. **University Textbooks**

USAID provided funds for the purchase of textbooks for the university - established bookstores at National University, Catholic University and Politechnic. USAID assistance is now terminated.

e. **EDUCREDITO**

USAID provided funds for a student loan program operated by the National Development Institute (INDE). This is a successful on-going program with supplementary funding to be included in the sector loan. To date, over 600, Nicaraguans have been assisted by EDUCREDITO funds to take programs of study which otherwise probably would not have been possible without this program.

2. **Loans**

a. **Rural Primary School Construction**

In 1962, USAID signed a loan agreement which provided \$540 thousand for the construction of rural schools. The project was completed in 1965 and resulted in the construction of 382 classrooms and 69 auxiliary rooms.

b. **Central American University**

In 1964, loan funds were provided to assist in the construction, expansion and equipping of an administration building, library and engineering facilities. The loan was fully disbursed in 1968.

c. Urban Elementary School Construction

In 1966, a \$1.5 million loan was signed with the Ministry of Public Education for the construction of approximately 700 primary grade classrooms in urban and semi-urban areas. The project was completed in January 1972, and the loan fully disbursed.

C. Past Education Assistance by International Organizations

During previous years A. I. D. has been the major contributor to educational development in Nicaragua. However, for the past several years there has been growing interest and activity on the part of the international organizations in educational assistance to the country. At present, both the IBRD and the IDB each have a loan activity underway with several additional proposals pending for consideration for the immediate future.

In addition to the major lending organizations, UNESCO, the OAS and others have been increasing their programs of studies and/or technical assistance. CARE has also been actively involved in community programs of school construction. Various bilateral programs have provided scholarships and educational equipment.

The Government of Nicaragua established a Coordinating Committee for National Planning, whose major function is to ensure that external financial assistance - loan and grant - will be coordinated and responsive to the development needs of the country.

A summary of the current educational activities of the international assistance organizations follows:

IBRD

The GON is currently receiving IBRD assistance at the Secondary level for school construction and equipment for Institutes and Normal Schools. The project was approved in 1968 with an IBRD

input of \$4.0 million loan matched by GON counterpart of \$4.0 million. These facilities are designed to provide space for 11,540 secondary school students. Termination of this activity is programmed for later 1973-early 1974.

IDB

The IDB is presently providing assistance to the National Autonomous University of Nicaragua (UNAN) through a loan in the amount of \$250,000. The purpose of this loan is to enable the University to carry out a Pre-Investment Study on future university development at the Ruben Darfo Campus area and the Medical Campus. As of April 1972 the project had disbursed 66.4% of the total loan.

CARE

Since 1968 CARE has been active in providing assistance to the Ministry of Public Education for construction of rural schools. The CARE-Ministry agreement calls for a tri-partite program with each party contributing the following:

Ministry--Transportation of materials, teachers and school furniture

Community--Land, some construction materials, and labor, and

CARE--Some construction materials, and equipment

Through this program 241 classrooms were constructed between 1968 and 1971 at an overall estimated costs of \$240,000. CARE's contribution was approximately one half of the total.

UNICEF

UNICEF provided the incentive for the GON to enter into the PRODESAR, ("Proyecto para Promover el Desarrollo Rural en Nicaragua, con Enfasis en la Niñez y la Juventud"), by providing a portion of the financing of the project, principally in equipment, school supplies, per diem for participants attending seminars,

and a vehicle. The Ministry will provide all other expenses for the project. This project is being carried out in three departments in the vicinity of Managua as a pilot program and will be jointly evaluated prior to consider the expansion of the program.

UNESCO

UNESCO has provided technical assistance to the Ministry of Public Education for a number of years. It has also provided personnel to carry out studies concerning various aspects of the system, including supervision, literacy, adult education and audio-visual methods. UNESCO is currently participating in the pilot project (PRODESAR) directed toward the improvement of primary education in three departments. In this project, UNESCO is assisting in the improvement of supervision and in upgrading training of teachers. Also it is working in five communities in an adult education program.

ODECA

ODECA, through the ROCAP, Regional Primary School Textbook Program, has assisted in developing primary school textbooks for all of the Central American countries. This project terminated in June 1971. Plans have been developed to extend the textbook program to the secondary school level; however, it does not appear at this time that this will materialize.

ODECA has, over the past several years provided Nicaragua, through the ROCAP/ODECA/University of Kansas contract, short-term technical assistance on educational budgeting, curriculum, fund raising and educational materials. It has also sponsored a number of education workshops in which Nicaraguans attended.

OAS

Over the past several years the OAS has assisted the Ministry of Public Education by providing technical assistance and scholarships. Technical assistance has been provided in the field of social studies, mathematics and chemistry at the secondary level; in organization and management; and in statistics and data collection. Scholarships to OAS sponsored programs have been approximately 21 per year. These scholarships have been in fields of administration and supervision, curriculum, statistics, library training and others, both on the primary and secondary level.

BILATERAL ACTIVITIES

Important number of scholarships have been given to Nicaraguans to study abroad by a number of foreign countries. Spain, Brazil, Mexico, France, Chile and Argentina are the major donors.

D. The National Plan of Educational Development 1971-1980

1. Background

Since July 1, 1959, when the law creating the Planning Office within the Ministry of Public Education went into effect, the Government of Nicaragua has stressed the necessity of formulating a National Plan of Educational Development.

This need has been more apparent in recent years, due to the increasing size of the educational system, the burgeoning necessities of a society that is becoming more complex, and the increased awareness of the necessity for cooperation between national agencies in the attainment of overall development goals. In Nicaragua, as with most countries actively attempting to develop economically and socially while maintaining their independence, educational expansion and improvement programs cannot proceed indiscriminantly. Educational plans must be fully coordinated, considering available human and financial resources, to design educational programs which will contribute to overall development of the nation.

The education plan attempts to look at education with a focus that encompasses overall development. Through the use of the plan it will be possible to lend direction to the existing educational system so that it will more fully complement the other major development programs in Nicaragua.

The plan was developed between the months of September 1970 and October 1971. It was completed and distributed in November 1971.

2. Development of the Plan

Since education development planning should not be done in a vacuum, nor be restricted solely to the problems, conditions and priorities of education, in developing this plan overall national conditions and priorities were taken into consideration. Further, since development planning requires more than the limited viewpoint of one person, or a team whose backgrounds are from one development area, the plan was developed using persons of different backgrounds, cultures, and disciplines. This educational development plan was based on the assessment of the most highly qualified Nicaraguans on the educational conditions, resources, needs, and trends in Nicaragua. Nicaraguans made the policy decisions regarding the possible courses of action for improving the existing educational system. As such, the plan, within the limitations of time and information available in areas other than education, contain determined priorities and courses of action that are relevant for Nicaragua.

3. Planning Personnel and Agencies

Personnel of the Planning Office of the Ministry of Public Education, initiated the study, gathered the majority of data, put the data in usable form and made projections. In this process, source materials were used from the Ministry of Public Education, USAID, OAS, ODECA, the Central Bank of Nicaragua, and the Planning Office of the Ministry of Economy.

In addition, various other departments within the Ministry of Public Education participated in the development of the plan. Most notable were the offices and directors of secondary and primary education. Advisory services were provided through an AID/Grantee contract between the

Ministry of Public Education and the Southwest Alliance for Latin America, (SALA).

4. Techniques and Methodology

The National Plan for Educational Development was designed to:

- a. Describe the existing educational system.
- b. Orient the forces of educational development in directions that would make the educational system more efficient and effective, to coordinate educational development with overall national development;
- c. Provide the basic data that can serve as the yardstick for measuring progress in the development of the educational system;
- d. Identify social, psychological, economic and physical factors to determine how the educational system could be modified to better serve overall national development; and,
- e. Help adjust any proposed educational development efforts to the cultural, geographic and economic realities of Nicaragua.

The general procedure followed was that of working with Ministry of Public Education personnel to determine existing conditions, resources and trends to establish baselines; these baseline data in conjunction with data on current and projected needs were used by Ministry officials to establish priorities; and the established priorities along with data on costs and resource availability were used to select and schedule appropriate courses of action.

The major thrusts of the planning effort were to:

- a. Fully describe the existing educational system;
- b. Make educational projections;
- c. Analyze the educational system;

-15-

- d. Devise an educational plan, to the extent possible with the data accumulated; and,
- e. Make recommendations for implementing the plan.

The planning process essentially involved collection and organization of all available data necessary to fully describe the existing educational systems and those pertinent available data describing the economic, physical, and social-psychological factors as necessary for making projections.

When data were unavailable in the education sector, where possible questionnaires were designed, distributed and collected to obtain those data. Once the data were accumulated and projections made, it was possible to determine current and future educational needs on the assumption of no change in the rate of change of the various parameters used.

With the data on educational and other conditions and resources, and with the educational projections made, it was possible for Ministry Officials and other Nicaraguan personnel to set educational priorities and determine courses of action for education on both a short and long-range basis, as covered in the plan.

5. Problems and Limitations of the Planning Process.

The major problems and limitations of this plan relate to lack of data and possible inaccuracy of the data that do exist. In many areas, the data were fairly reliable and accurate (numbers of classrooms, level of training of teachers, curricular data, conditions of the schools, etc.) but in other cases, most notably where recourse was made to the censuses of 1950 and 1963, there was no assurance that the data were accurate. However, as in most studies of this nature, since those data were the best available, they were used as if they were without error.

Data were notably lacking especially in the area of manpower needs. Where this information was needed, the best sources of estimates were used (e.g. USAID, OAS, ODECA, Central Bank of Nicaragua, and the Planning Office of the Ministry of Economy).

In addition, the quality of the educational data used was restricted by the difficulties in accurate data gathering in the rural areas of Nicaragua and in obtaining complete data from the private educational institutions. All available data from the rural and private schools were used without correction.

With these limitations, the Plan reflects the immediate and future educational needs of Nicaragua. This plan constitutes a genuine positive step forward for the people of Nicaragua and can land the necessary direction to investments in education that should increase the returns on these investments.

6. Use of the Plan

The Ministry of Public Education has accepted the Plan as a working document to be used as the basis of future plans and programs to be financed with national and/or international resources.

A working group of the Ministry of Public Education reviewed the plan, in December 1971 with the intention of selecting those activities which most urgently required action and which would have the greatest impact. Most of the problem areas identified in the plan have been included in the activities selected. Others must await a more propitious time and a more favorable environment, since it would be an almost impossible burden on the Ministry of Public Education to deal with all problems concurrently.

The results of this working group culminated in a request to USAID from the Minister of Public Education, approved by the Nicaraguan Coordinating Committee, for an educational sector loan. This request was received January 28, 1972, and served as the basis for an IRR which was presented and approved by the CAEC at a meeting on March 3, 1972.

With the approval of the IRR by the CAEC, and subsequent notification to the Minister of Public Education, the working group of the Ministry, under the leadership of the Director of the Ministry of Public Education Planning Office, using the Plan as a basic document, provided the inputs for the CAP for the Nicaraguan Education Sector Loan.

SECTION II EDUCATION SECTOR ANALYSIS AND IDENTIFICATION OF
MAJOR PROBLEM AREAS IN THE SYSTEM

A. Education Sector Analysis

A complete analysis of the Education Sector was made as a first step in the development of the National Plan of Educational Development, (ref. Section I, E.). The most significant aspects of the analysis contained in the plan are contained in Annex V of this papers, as follows:

The Education System
Financial Analysis
Teacher Education and Salaries
Primary Education
Secondary Education
Higher Education
Literary and Skills Training

B. Identification of Major Problem Areas in the System

Based on the analysis of the current conditions of the Nicaraguan Education System, as identified in the National Plan of Educational Development, (Ref. Section I. E.), the following problem areas were identified as pressing and in need of positive action to improve the educational system:

Problem Area 1: Internal Efficiency of the System

A. Indicators of the Magnitude of the Inefficiency

1. Approximately 19% of the children that enter the first grade complete the sixth grade, the last year of primary, with more children of each age between 7 and 12 in the first grade than in any other grade;
2. Approximately 40% of the children that enter the first year complete the fifth year, the last year of secondary;
3. As a result of 1. and 2., the cost per graduate and per unit of learning achievement are unnecessarily high.

B. Current Conditions which are assumed to be Causes of the Inefficiency

1. Interruption of Schooling due to Unavailability of Services

- a. In the rural areas in 1969 there were 1233 one teacher schools out of 1428 schools, and there were only 15 schools of the 1428 which had 4 teachers. This has resulted in a push out rather than a drop-out, since students have no place to go beyond what one teacher could offer.
- b. In 1969, there was an estimated deficit of 237 classrooms in the rural areas based on the number of classrooms required for the enrollment, based on 40 students to a classroom. In addition many classrooms were overcrowded with up to 98 students to a classroom.

2. Data Collection, Analysis and Planning

- a. The pupil and personnel accounting systems are archaic, disorganized and incomplete.
- b. Educational planning needs strengthening especially in the area of data collection and processing.
- c. The Ministry of Public Education is housed in an inadequate, unsuitable, overcrowded, rented facility with various sections of the Ministry in annexes in the vicinity of the Ministry.
- d. Short and long term educational goals are incomplete, need strengthening, and require adequate data for decision making.

3. Fiscal & Personnel Policies and Management

- a. There are limited financial resources available for lending funds to: staff and faculty of higher education institutions to up-grade their professional qualifications; students who

are studying in Nicaraguan higher education institutions in fields needed by the educational system; and for students who desire to study abroad in a field required for the development of Nicaragua which is not offered in Nicaragua.

- b. There is insufficient decentralization of administrative functions, and many of the administrative personnel are not sufficiently trained.
- c. The budget is inflexible.
- d. The Departmental Inspectors and their assistants in the main are not trained as inspectors and supervisors, lacked mobility, and basic support services.
- e. The personnel system is inefficient; not responsive to the needs of the system; and is managed principally by division or section chiefs of technical divisions.
- f. There is little or no supervision of Secondary Schools.

4. Information and Experimentation

- a. The production of 6th grade graduates was less than 13% of initial enrollment for the period 1962/63 to 1967/68. The reasons for this low production has not been formally studied.
- b. There apparently is a large group of repeaters in the system, and neither the extent of the problem nor the reasons for the problem have been studied.
- c. School directors in general, have not received training in educational administration and supervision.
- d. There is no mechanism either in the institutions of higher education nor in the Ministry to evaluate projects, conduct studies, do research, conduct experiments or introduce innovations.

- e. The experimental secondary school is housed in facilities of the national university (UNAN); shared with university programs; and inadequate for introduction of innovations and for conducting experiments.
- f. Provisions for innovation, testing ideas, and experimentation is weak.

5. Pedagogical Competence

- a. There is no organized center or facility for professional in-service training in the country.
- b. In 1969, 41% of the teachers in the primary schools were considered sub-qualified.
- c. The majority of teachers (730 of 878 in 1970) in the secondary system are part time "bicycle" teachers.

6. Instructional Materials

- a. Many of the secondary schools lack equipment, books and library facilities, laboratories, and other facilities to meet minimum curriculum needs.
- b. Except for the ODECA-ROCAP textbooks no teaching materials were available.
- c. Instructional materials are poor or non-existent at the Secondary School level.

Problem Area 2: Unsatisfied Quantitative Demands on the System

A. Indicators of the Magnitude of the Unsatisfied Demand

- 1. In 1969, approximately 30% of the 7-12 year old population was not enrolled in primary schools.
- 2. In 1969, approximately 87% of the 13-18 year old population was not enrolled in secondary schools.

3. Based on current utilization and per student costs, estimates of the total capital and operating expenditures required to meet enrollment targets for the years ahead appear to exceed the estimates of funds that will be available for education.

Current Conditions Which Appear to be Basic Causes of the Unsatisfied Demand

A. Availability and Utilization of Physical Facilities

1. The greatest "bottleneck" in the education system is the basic cycle school of the secondary level.
2. There are as many as 100 students per class in many of the basic cycle schools and in Managua these schools are on at least two shifts a day.
3. The status of facilities is inadequate in many cases, at all levels, especially rural primary schools.
4. School maintenance has definitely been inadequate.

B. Future Quantitative Demands

1. Based on a demand projection there would be a deficit of 576 urban primary classrooms and 539 rural classrooms by 1974.
2. The Ministry has limited future plans for providing new facilities for new population growth and to replace, inadequate, sub-standard Ministry owned or rented facilities.
3. The demand for secondary level education is increasing with a projected deficit of facilities to accommodate approximately 20,000 additional students by 1974.

Problem Area 3: Quality and Relevance of the SystemA. Curriculum and Evaluation of Educational Results

1. The majority of primary school children are not receiving Industrial Arts and Homemaking in accordance with the former or revised curriculum, due to lack of facilities.
2. Provision for pupils with special problems is poor and essentially the same methods, standards, etc., are used for all students.
3. Secondary school textbooks for the most part are inadequate, published abroad, and do not reinforce the curriculum.
4. The curriculum for the secondary school is highly academically oriented, repetitious, inflexible, needs major revision aligned with individual, community and national needs.

B. Pattern of Specialization

1. The Technical Vocational Institute (ITV) located in Managua is the only public school of its type in the system and that it cannot meet the demands of industry or students without expending and replacing facilities and equipment and upgrading teaching staff.
2. The Ministry does not have a department of guidance and counseling.
3. Guidance services are offered in 14 secondary schools, however, in only 3 of these schools are the guidance services considered adequate.
4. The demand by adults for education and skills training is not being met.

III. EDUCATION SECTOR STRATEGY

A. Introduction

The GON strategy for education was developed in response to three basic criteria stated in the National Education Plan:

1. Do the established priorities and the relative stress that will be placed upon them actually go along with overall national development plans and needs - or will they unduly increase educational expenditures to the detriment of national development in other areas?

2. What will be the effect on the educational recurrent budget - will emphasizing one or a few educational areas now, with the increasing or recurrent yearly expenses in those areas, tend to inordinately de-emphasize other areas of needed development for a protracted period of time?

3. What benefits will accrue from emphasis of effort in each area relative to the amounts to investment needed? (This includes the initial amounts invested and also the additional amounts that will have to be supplied later for staffing, training, maintenance and supplies, as well as the other "fringe costs" that often occur if funds are obtained on a grant or loan basis from external agencies).

B. The Role of Education in Social and Economic Development

In recognition of the role which education may play in the social and economic development plans of the country, the GON has been increasing its allocation of central budget to the education sector from 72.8 million cordobas in 1965 to 155.6 million cordobas in 1972. The percentage of their own resources for education has risen from 18.1% in 1965 to 21.1% in 1971 -- the largest budget of all of the Ministries.

The GON also recognizes that the present system will not meet the demand. With a literacy rate of almost sixty per cent, future social and economic as well as political development will be inhibited unless this situation can be modified. The ability of the mass of the population to participate in the benefits of development will not be feasible if the educational level remains as low as it is currently. A large part of this loan, including school facilities, teacher training and research, are directed towards improving the level of education of these presently denied sufficient and necessary educational opportunities.

Further, the Educational Development Plan estimates that by 1980 Nicaragua will have a population of approximately 3 million inhabitants, representing an annual net population growth rate of some 3.1% and a roughly 35% increment in population for the decade

1970-1980. It is also estimated* that Nicaragua will have to augment the active labor force by 45,000 employees each year to provide for the primary, secondary and tertiary sector growth needs of the country. To accomplish this it will be necessary to accelerate the programs of education and training of school children so that they can assimilate and apply new technologies essential to the modernization of industry and agriculture.

C. Establishing National Educational Priorities

The National Education Plan raises a series of questions designed to establish relative priorities in education: Does it fit in with our national plans?; is it within our means?; what will be the effects on other areas of educational development?; and will it be worth the investment?

1. Relevance

It is evident from the nature of the reforms proposed in the National Education Plan and the increases in the education sector budget allocation that the GON recognizes the role of education in carrying out the economic development plan of the country. The section summarizing the Macro Economic Situation of the country points out that there has been a slow shift in the structure of the economy toward the secondary sector (manufacturing, construction and utilities). GON policies on education (described in Section I) and the curriculum reform toward diversified secondary education, expansion and improvement of vocational education reflect this shift.

In addition, as the primary sector (agriculture crops, livestock, fishing, forestry and mining) produces increased exports and local industrial potential, as in the case of cotton, the GON has increased its interest in agricultural education at all levels.

The strategy then is to increase the relevance of the education system to the economic social development needs through basic changes in the curriculum at all levels: Agricultural education in the rural primary

* Central Bank Economic/Manpower Projections 1971

schools; agriculture and industrial-commercial vocational education in the secondary schools; and encouraging selection of development related courses in higher education through the use of Educredito (see Section IV). These kinds of reforms in curriculum require massive re-education of the teachers through in-service courses, and basic changes in the Normal Schools and the Faculties of Education, and also, continued improvement and provision of educational materials, textbooks, and guidance services. The GON strategy supported by the proposed sector loan is to give highest priority to these key reform areas of curriculum revision, teacher education, materials and textbooks, and guidance services.

2. Internal Efficiency

It is clear that the stated educational objectives in long range terms are not "within the means" of the GON. It would be impossible with present budget projections to enroll all of the primary school children in primary schools or to increase substantially the enrollment in secondary schools and in the university. The GON in recognizing this fact has selected from among its objectives those which can be financed with a combination of its own resources and external financing and which can be supported with operating funds from its own resources after the external funds are no longer available. (The financing of the strategy is dealt with in more detail in the section on loan feasibility (Section VII).

In order eventually to achieve the objectives which cannot now be financed, the GON has included in its strategy three key activities designed to reduce the unit cost of education: Research concerning the reasons for the wastage rate (drop-outs, repeaters, failures, push outs); research on the use of educational technology for reduction of unit cost; and, improvement in planning and management.

The GON has also phased its plan for 100% enrollment of the primary school to that which is feasible within current and projected financing. Certain of the other objectives will be carried out only when important reductions of unit cost are achieved.

D. Institution Development

1. In order to carry out the education strategy the GON will create a National Education Center (NEC) in Managua in 1973. NEC will be responsible for the following educational activities:

- a) In-service training, of a general nature, for personnel employed at the Primary and Secondary education levels, such as teachers, school directors, supervisors and inspectors.
- b) In-service training, of a specific nature, to implement new changes in curriculum, administration, teaching, supervision, innovations and experiments, for personnel at the primary and secondary education levels.
- c) To develop and carry out action-oriented educational research, evaluation, innovations, and experiments.
- d) To supervise the Experimental School, Secondary Level, in Managua, (activity 3.b.(1)) and the Primary School Experimental Center, Jose de San Martin, in Managua.

2. In order to carry out research and evaluation the GON will create a Research and Evaluation section within the Office of Educational Planning and six institutions will be designated as educational experimental centers.

3. In order to improve Inspection and Supervision of educational services, the GON will reorganize their present system, provide in-service training, materials, equipment and mobility to the inspectors and supervisors.

4. In support of the strategy, the GON will reorganize the present personnel system, into an effective, functional system, centralizing the personnel functions into one Ministry Office of Personnel.

E. The Education Sector Loan

The proposed education sector loan will support three key activities:

Activity Area No. 1 - Need to upgrade Qualification Level of Teachers and Professionals

A major emphasis of the proposed AID Loan will be on the training and upgrading of teachers and professionals.

Activity Area No. 2 - Need to improve Educational Methods and Facilities

The loan funds will be used to increase the ability of the educational system to meet the demand for increased relevance and internal efficiency through increasing the capacity of the system while upgrading its quality. This includes improvement of curriculum, teaching materials, textbooks, adult education and overall supervision as well as expanding facilities.

Activity Area No. 3 - Need to improve the Management, Research and Planning Capabilities of the MPE

The Loan will provide technical assistance, scholarships, and materials to strengthen these crucial areas.

A complete description for each sub-activity under the above listed activity areas, including the inputs from loan and counterpart funds, is contained in Section IV of this paper. The sector loan will be implemented immediately after the signing of the agreement and meeting of the conditions and is programmed to continue through 1976.

Section IV - PROPOSED EDUCATION SECTOR PROGRAMSA. Proposed Joint Nicaraguan and AID Activities1. Upgrade Qualifications Level of Teachers and Professionalsa. In-Service Professional Training

Purpose: To provide in-service training to Inspectors, School Directors and Primary School Teachers. Nicaragua, similar to other countries in the development stage, finds itself having to face the problem of improving the quality of education that is being provided its citizens. This activity is a three pronged attack to professionalize and improve the educational level of 1.) the departmental inspectors and their assistants; 2) primary school directors; and 3.) primary school teachers, both urban and rural. Planning for these programs will take place during 1973 for implementation in 1974.

The plan for professionalizing educational inspectors, who are the principal supervisors and representatives of the Ministry of Public Education in the political sub-divisions of Nicaragua, calls for one-third of the inspectors to be trained intensively for one school year at the National Education Center, (NEC) in Managua, (activity 1. b.) each year starting in 1974. The course will be repeated each year, thus providing the same training to each inspector during the planned life of the loan. Upon successful completion of this course, NEC will grant the student a diploma. The curriculum for the course will include professional education, technical, and general cultural subject matter. Professional staff of NEC will also follow-up on the inspectors by making periodic visits to the departments to observe the inspectors in their work. The Ministry of Public Education will finance the following for each inspector while studying: salary, a modest maintenance allowance, books and materials. This training program will be made available to all Departmental Inspectors and their assistants.

Presently there are 118 inspectors and their assistants in service, thus each group will contain approximately 40 students.

The plan for in-service training for school directors and teachers at the primary education level, consists of course work for six weeks, each year starting in 1974 and continuing through 1976. These intensive courses will be conducted at the Normal Schools, located in Jinotepe, San Marcos, Managua, and Estelí. For those who do not reside in the areas served by these Normal Schools, a mobile training team will be formed and sent to central locations in the various departments to conduct the training. The curriculum for the course will include professional and technical aspects of improving the quality of work and instruction of school directors and teachers. An emphasis will be given personnel from rural schools in the technique of multi-grade instruction and management. The program will be conducted by personnel of the Ministry of Public Education who are assigned to the Normal Schools with augmentation as required. The Ministry will grant a diploma to the students upon successful completion of the course. The total to be trained will be approximately 377 school directors and 2,820 primary school teachers.

The inputs, by the Ministry, will be for other expenses, personnel, books and materials.

The loan inputs, will be directed to finance the per diem and transportation of the participants and trainers for the primary school teachers and directors courses.

The estimated costs for the program follows:

In-Service Professional Training			\$000
<u>Component</u>	<u>Loan</u>	<u>Counterpart</u>	<u>Total</u>
Other	-	18	18
Books and Materials	-	57	57
Personnel	-	101	101
Per Diem and Transportation	485	-	485
TOTAL	485	176	661

b. National Education Center

Purpose: To establish a National Education Center

The need for a National Education Center, was identified in the National Education Plan. The Ministry of Public Education in responding to this need, will in 1973, create the National Education Center, (NEC) as a Higher Education Institution. NEC will be supported completely by the Ministry and its director will report directly to the Minister of Public Education.

NEC will be responsible for the following educational activities:

- (1) In-service training, of a general nature, for personnel employed at the Primary and Secondary education levels, such as teachers, school directors, supervisors and inspectors.
- (2) In-service training, of a specific nature, to implement new changes in curriculum, administration, teaching, supervision, innovations and experiments, for personnel at the primary and secondary education levels.

- (3) To develop and carry out action oriented educational research, evaluation, innovations, and experiments.
- (4) To supervise the Experimental School, Secondary Level, in Managua, (activity 3.b. (1)) and the Primary School Experimental Center, José de San Martín, in Managua.

The Ministry as part of this activity will construct NEC in Managua in 1973, so that it will be functioning in 1974. During 1973, the Ministry will appoint a director and key staff members to design the required courses to be offered starting in 1974 and to plan some research and experimental activities to begin in 1974. The Ministry will assign only highly qualified, professional educators, with university degrees as staff and faculty to NEC, in order to merit the the status of a higher education institution.

The purpose of this activity, is therefore, to create NEC. The physical plan will be built in 1973 and will be a modification of Type 240 Basic Cycle School , (Annex VII p.4) with additional facilities to meet the requirements of the Center. Additional equipment will be provided for demonstration purpose and for teacher training such as video-tape equipment. An adequate professional student and faculty library will also be provided. For details as to the type of construction and other Engineering aspects, see Section VII C.

Technical assistance will be provided throughout the loan for teacher training. Also participant training will be provided throughout the loan for training specialized personnel as required in the Center.

The inputs, by the Ministry, will be for personnel, some equipment and materials, books, furniture, and land. The inputs, from the loan, will be for construction, the majority of equipment, books, technical assistance and participant training.

The estimated costs for this activity follows:

National Education Center			\$000
<u>Component</u>	<u>Loan</u>	<u>Counterpart</u>	<u>Total</u>
Construction	179	-	179
Equipment and Materials	73	23	96
Books	9	3	12
Personnel	-	234	234
Furniture	-	18	18
Technical Assistance (12 M-M)	48	-	48
Participant Training (40 M-M)	24	4	28
Land		(80)	(80)
TOTAL	333	282	615

c. Undergraduate and Graduate Professional Training
University Level (EDUCREDITO)

Purpose: To provide seed capital to Student Loan Fund.

One of the chief obstacles to economic and social development in Nicaragua is the shortage of trained high-level manpower. The Nicaraguan Government, the Universities, the private sector, and A. I. D. have all been engaged in efforts to improve the number and quality of university graduates. One of the principal factors impeding the

successful termination of a university education is the scarce financial resources of the students. As a result of the expansion of public secondary school facilities and the general development of the country, more and more young people from lower income families are entering the universities. In many cases the students' families are unable to assist them financially, and some students must even contribute to the support of their families. Those students, who attempt to continue their studies in such circumstances, must do so on a part-time basis, greatly extending the time required and increasing the possibilities of their becoming dropouts for financial reasons.

In order to assist needy students to survive in their attempt to gain an education beyond high school, the Nicaraguan Development Institute (INDE), composed of leading local private sector businessmen, established a student loan program in 1964. While fully recognizing the essential role of scholarship programs, INDE believed that there should be a complementary loan program that would meet different needs, help instill a sense of responsibility and self-reliance in students, hold special appeals for private donors, and by its rotating fund nature, stretch available resources for student assistance.

During the first three years of the program INDE-EDUCREDITO made 70 loans totalling approximately \$10,300, from funds contributed directly by INDE or raised from private donations. In 1967, USAID/Nicaragua entered into a project agreement with INDE-EDUCREDITO and the Ministry of Economy, Industry and Commerce of the GON. Grant assistance has continued through FY-72. The cumulative total obligation of this grant assistance is \$270,500. Draw-down of the grant assistance has been on a matching basis concept to stimulate local private contributions. The matching ratio started on a 5 to 1 basis and now is at a 1 to 1 basis. Since EDUCREDITO was founded, in 1964, through school year 1971, 603 students were granted loans. The fields of

study ranged from education majors to medical doctors, in 31 undergraduate fields and 6 graduate fields. Of the loan recipients over 100 have graduated and are now paying back their loans, 65 of which have paid their loan and interest in full. Students who borrow from EDUCREDITO pay 3% interest per year while studying and 6% interest per year upon completion of studies. A grace period of one year after completion of studies is permitted before recipients start paying on the principal. EDUCREDITO has had a fairly good experience in payment of interest and principal. A study is now in process to determine the reasons for the failure of some students to pay. EDUCREDITO has obtained authority from the Congress of Nicaragua to garnish salaries of delinquent accounts, however, as yet it not exercised this right.

The EDUCREDITO program is managed by an executive board, with a full-time manager, who is in charge of the fund raising and clerical staff. Loan applications are reviewed by an Academic Committee, composed of the Chief of the Departments of Student Welfare of the Universities and the Manager of EDUCREDITO. Funds are raised through various fund raising campaigns throughout the year as well as through pledges. The campaigns are generally aimed at the private sector.

At the time of the submission of the Non-Capital Project Paper (PROP) in October 1969, USAID/Nicaragua indicated that seed capital would be provided to the Nicaraguan Development Institute for the EDUCREDITO student loan fund through FY-1972. Additional inputs into the fund would come from repayment of loans, and from contributions from the private sector through the efforts of the fund raising committee of the Institute. Further, that efforts would be made to insure the continuation of this project through a loan program. The most recent Project Appraisal Report (PAR) was completed in February 1972, at which time USAID indicated that the project was being carried out successfully and was meeting the project objectives. Further, that the planned phase out

would be adhered to upon complete drawdown of FY-1972 funds.

The Ministry of Public Education, in its interest in furthering and improving the quality of education in Nicaragua and in recognition of EDUCREDITO as a viable private sector organization, plans to enter into a contract with EDUCREDITO to provide seed capital from the loan to the revolving student loan fund. USAID/N will recommend to the Minister of Public Education to consider granting the loan funds to EDUCREDITO.

The loan funds will be used for the following purposes:

1. Higher education level staff and faculty to study for advanced degrees in the United States or Latin America;
2. Students studying at higher education institutions in Nicaragua, preferably in fields required by the Ministry of Public Education, such as administrators, supervisors, inspectors, guidance personnel, teacher and school directors; and,
3. Students studying at higher education institutions in the United States or Latin America in fields required for social and civic development of Nicaragua which are not offered here in Nicaragua.

Under each of the above purposes or goals, it is anticipated that the following number of students will be assisted:

	<u>Full Loan</u>	<u>Partial Loans</u>	<u>Total</u>
1.	4	6	10
2.	85	150	235
3.	19	19	38

The inputs, by the Ministry, through the loan, will be used to contribute to the revolving fund. Inputs of EDUCREDITO, through its own sources, will also contribute to the revolving loan fund.

Undergraduate and Graduate Professional Training University Level (EDUCREDITO)			
\$000			
<u>Component</u>	<u>Loan</u>	<u>Counterpart</u>	<u>Total</u>
Student Loan Fund	500	100	600

2. Improve Educational Methods and Facilities

a. Curriculum

Purpose: To revise the Secondary School Curriculum.

Basic to the efficiency and effectiveness of any educational system is the curriculum offered. This fact has been realized in Nicaragua, and as a result, the curriculum has been undergoing extensive reform since 1965.

The decision to revise the curriculum is based on felt needs in Nicaragua to provide its citizens with an education which insures a cultural, moral, physical and aesthetic formation; also a preparation that will allow them to participate actively in the economic life of the nation; and to insure efficient participation in the development and use of the natural resources of the country, particularly in the agricultural sector. The emphasis of the curriculum reform, therefore, is on agriculture and functional education.

In 1967, the Ministry of Public Education organized a team of primary education specialists to revise the primary school curriculum. The revised curriculum

has been implemented as follows:

<u>Primary School Grades</u>	<u>Curriculum Revision Year</u>	<u>Curriculum Implementation Year</u>
1	1967	1968
2	1968	1969
3	1969	1970
4	1970	1971
5	1971	1972
6	1972	1973 (Programmed)

As the curriculum team completed its work for a given school year, the revision after being reviewed, revised, approved and published, has been implemented the following school year. At the start of the school year, before school opened, seminars for special personnel (multipliers) throughout the country have been held in Managua for special training in the implementation of the new curricular materials. The multipliers included inspectors, school directors, teaching methods professors of Normal Schools, and outstanding teachers of the grades for which the curriculum was to be implemented. These especially trained individuals have then returned to their Departments and held similar training sessions for teachers of the new programs. In this way, the new curriculum has been implemented in most of the primary schools in the country. Technical assistance in the revision of the curriculum has been provided through the AID/Grant, Ministry of Public Education contract with the Southwest Alliance for Latin America, (SALA).

With the completion of the revision of the primary school curriculum, which is scheduled for 1972, the Ministry will organize a team to begin on the revision of the curriculum

for the secondary school in 1973. A good deal of preliminary work has been done for effectively starting this revision process. During CY-1971 and CY-1972, SALA under its contract with the Ministry, has provided a total of 14 man-months of highly qualified advisory services to the Ministry. During CY-1971, the advisor, literally, trained, on-the-job, an excellent Nicaraguan professional educator to be the team leader of this function.

The SALA advisor, upon completion of his assignment in August 1971, returned to the University of Colorado, where, in conjunction with his teaching assignment, reviewed, analyzed and compiled data from various surveys which were conducted during his work in Nicaragua. Also his counterpart took part in some of the work at the University of Colorado in October 1971, after having attended an ODECA/University of Kansas/ROCAP sponsored curriculum seminar.

The SALA advisor returned in January 1972 for six months, to work with his counterpart to lay the ground work for the curriculum revision process. A system similar to that used by the team for the revision of the primary school curriculum will be used in revising the secondary school curriculum. The plan follows:

<u>Secondary School</u> <u>Grades</u>	<u>Curriculum Revision</u> <u>Year</u>	<u>Curriculum Implementation</u> <u>Year</u>
Basic Cycle		
1	1973	1974
2	1974	1975
3	1975	1976
Diversified Cycle		
1	1976	1977
2	1977	1978
3	1978	1979

The inputs, by the Ministry, for this activity will be for personnel, furniture, seminars, facilities and other expenses such as travel, per diem, gasoline, repairs and maintenance of the team's vehicle and office supplies. The loan inputs will provide equipment, a vehicle, technical assistance and participant training.

The estimated costs for this activity follows:

Curriculum	\$000		
<u>Component</u>	<u>Loan</u>	<u>Counterpart</u>	<u>Total</u>
Equipment	6	-	6
Personnel	-	320	320
Furniture	-	5	5
Seminars	-	51	51
Other	-	40	40
Technical Assistance (24 M-M)	96	-	96
Participant Training (20 M-M)	8	-	8
Vehicle	4	-	4
TOTAL	114	424	538

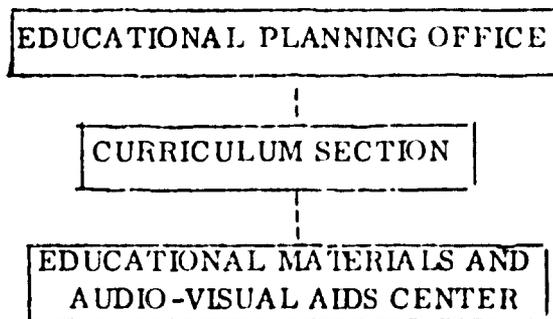
b) Educational Materials and Audio-Visual Aids Center

Purpose: To provide Educational Materials

Educational materials, of all kinds, are necessary for the efficient operation of any educational system and are imperative if teachers are to use other method of instruction than the lecture-copy-recite. The Ministry of Public

Education, as an activity of the proposed loan, will create an Educational Materials and Audio-Visual Aids Center. This Center will provide a constant flow of educational materials to teachers at all levels throughout the public education system and make available, on a limited basis, audio-visual equipment and aid to help improve the quality of education at all levels. Since production of educational materials is an integral part of all curriculum development programs, the Ministry will place this Center under the control of the Curriculum Section of the Educational Planning Office as indicated below:

ORGANIZATIONAL PLAN - Educational Materials and Audio-Visual Aids Center



Presently there is a small audio-visual aids section in the Ministry. This section will be incorporated into the newly created center. The Center will be constructed on the grounds of the National Vocational Institute in Managua (ITV) at the same time as the construction is underway for the expansion and improvement of ITV (activity 2. b. (c)). The type of construction, design and other details are contained in Section VII C. Except for the personnel now assigned to the audio-visual aids section, all the personnel for the Center will be new.

The Center will be organized to include the following activities: Administration, Coordination, Creative Artwork, Clerical, Production and Distribution. The key person in this Center will be the Coordinator who will work with the curriculum section, normal schools, schools of educa-

tion, teachers, administrators and others to obtain ideas to be developed into creative educative materials. It is planned that a packet of materials will be sent on a routine basis (probably once a month) to each teacher in the system.

The materials produced in the Center will be on a two color offset press to provide greater impact which two colors make on the teachers and students. Printing will be done 11" x 17" sheets which can be split for 8½" x 11" page size for individual sheets, or printed on both sides and folding in the center for a magazine size 8½" x 11". The press will have the capacity of producing 120,000 8½" x 11" sheets per 8 hour work day.

Distribution will be by the established mail system and via direct distribution through the departmental inspectors. The use of the mail system presents especial problems because it does not reach all areas of the country. Therefore, to reach these areas not covered by the postal service, the packages/envelopes will be mailed to the addressee in care of the departmental inspector at the place where the teachers regularly pick-up their checks. The teaching materials, therefore, will be delivered with the checks. Where mail service exists, the packages/envelopes will be addressed directly to the director of the school and distributed by him to the teachers.

The Center will be organized by the Ministry in 1973. Personnel will be hired during the first quarter, except for the production section as they will not be required until the construction phase is completed and the equipment installed. Full operation of the Center is planned for the fourth quarter of 1973. The personnel of the Center will develop materials during the first three quarters and will have a backlog of printing to go into production as soon as the equipment is installed.

Advisory services were provided the Ministry through a grant from USAID/Nicaragua, during the intensive review of the loan request. The Advisor, an American, who has been working in materials production with the Ministry of Public Education in Guatemala and with the ODECA/ROCAP Textbook Program for many years, provided these services.

The inputs, by the Ministry, will be for personnel, some equipment and such other expenses as per diem, travel, and office supplies. The loan inputs, will be for the construction of the Center, equipment, materials, technical assistance and participant training.

The estimated costs for this activity follows:

<u>Educational Materials and Audio-Visual</u>			
<u>Aids Center</u>			\$000
<u>Component</u>	<u>Loan</u>	<u>Counterpart</u>	<u>Total</u>
Construction	36	-	36
Equipment and Materials	154	11	165
Personnel	-	122	122
Other	-	11	11
Technical Assistance (16 M-M)	64	-	64
Participant Training (24 M-M)	12	-	12
TOTAL	266	144	410

c. Textbooks, Printing and Distribution

Purpose: To print and distribute Primary School Textbooks

The new textbooks and teachers guides from the ODECA/ROCAP/AID/N which have been being developed, printed and distributed since 1963, have been a significant factor in the upgrading of education in Nicaragua. In the in-service programs for teachers, these textbooks have been a positive influence for change. The Primary School Textbook Program has been given priority by the Ministry of Public Education since its inception. Since the initial printing of all of the textbooks will be completed in June 1972, the problem which now remains is the re-printing of the textbooks and teacher guides. According to the Ministry's report, over 3 million textbooks and teacher guides have been distributed since 1963.

As the textbooks and teacher guides have been printed, the negatives have been turned over to the Ministry for storage for future re-printing. The Ministry has programmed the re-printing of an average of over 200,000 textbooks and teacher guides each year from 1973-1976. These will be distributed in accordance with needs throughout the country. In addition to the printing and distribution, the Textbook Section of the Ministry will be following up on the use of the textbooks in the classroom and in orienting teachers in the use of the textbooks. Personnel of the Textbook Section will participate in the in-service professional training programs, as a part of activity 1, a. of this loan program. These textbooks are provided the students free of charge by the Ministry in keeping with the policy that education on the primary level is free.

This activity is concerned only with the re-printing of textbooks and teacher guides for use in the primary

schools. Textbooks for the secondary schools are published by various companies in Nicaragua and abroad. These books are sold to the students through distributors throughout Nicaragua. Before a book is placed on sale in Nicaragua, the distributor must present a copy of the book to a Committee of the Ministry of Public Education for review and approval. If the book is acceptable the Ministry officially approves it and authorizes its sale. In view of the curriculum changes that are expected under activity 2, a) of this loan, the books on the market will be subject to review, to see that they are still acceptable as curriculum material. The Ministry will finance this activity in its entirety.

The financial costs of this activity follows:

<u>Textbooks, Printing and Distribution</u>			\$000
<u>Component</u>	<u>Loan</u>	<u>Counterpart</u>	<u>Total</u>
Personnel	-	56	56
Printing	-	320	320
Other	-	64	64
TOTAL	-	440	440

d. Guidance and Counseling

Purpose: To establish a Secondary School Guidance Program

Because of the relatively recent introduction of guidance services into the Nicaraguan educational system, these services are available in only fourteen centers of public Secondary Education. In only three of those centers are acceptable guidance services with qualified counselors being provided.

The provision of guidance services is essential to the more efficient use of the educational system at all levels and this is especially true if the Nicaraguan educational system is to become more vocationally oriented. Recognizing the need for more and improved Guidance and Counseling in the Secondary School, the Ministry of Public Education will establish a Department of Guidance and Counseling on the Ministry level. This Department will become operative in 1973. It will be responsible for directing, promoting and coordinating the development of guidance services at the national level, preparing materials for use in the schools, assisting in the establishment of guidelines for the preparation of counselors and determining the roles to be served by those counselors that are most appropriate to the Nicaraguan educational system.

Some of the basic groundwork has already been accomplished. Seminars involving university and Ministry personnel have been held. A SALA advisor spent approximately 3 months in Nicaragua in 1971. With his Nicaraguan counterpart he developed a plan of action for the initiation of a guidance department within the Ministry and extension of guidance services to the entire educational system.

The Nicaraguan counterpart of the SALA advisor will be the Director of the newly organized Department of Guidance and Counseling. He completed all of his course work in Vocational Guidance in Mexico several years ago, as an A. L. D. participant, and will be returning in the near future to complete the requirements for graduation. Other professional personnel for the department and for the guidance of secondary schools, will be obtained from graduates of the Universities in Nicaragua. In each of the IBRD secondary schools, and the Experimental School (activity 3.b.(1)) to be constructed as an activity of this loan, the Ministry will assign guidance personnel.

Assignment of guidance personnel to basic cycle schools constructed under this loan will begin in 1974 and continue each year as the schools are built.

Inputs, by the Ministry, will be for personnel, furniture, materials, equipment and such other expenses as per diem, travel, and office supplies. The loan inputs, will be for technical assistance and participant training.

The estimated costs for this activity follows:

<u>Guidance and Counseling</u>			\$000
<u>Component</u>	<u>Loan</u>	<u>Counterpart</u>	<u>Total</u>
Personnel	-	100	100
Furniture	-	2	2
Materials and Equipment	-	4	4
Other	-	4	4
Technical Assistance (12 MM)	48	-	48
Participant Training (24 MM)	12	-	12
TOTAL	60	110	170

e. Inspection and Supervision

Purpose: To improve Inspection and Supervision

In Nicaragua, at present, supervisory services are separate and distinct for primary and secondary education. In both cases there is a great need to improve, refine and modify the duties of the supervisory personnel if there is to be effective supervision, designed to

be of real assistance to the instructional and administrative staffs.

Supervision of the primary education system is the responsibility of the Director of the Primary Education in the Ministry of Public Education. He exercises this responsibility through the departmental inspectors. Each of the 16 Departments in Nicaragua has its own departmental inspector, with assistants, according to the size of the department. The National Education Plan clearly identifies several needs which have to be addressed in order to improve supervision, on the primary education level. as follows:

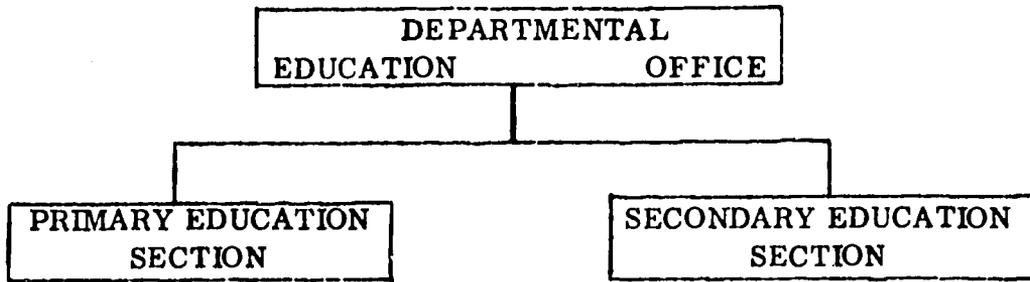
1. Specific statements outlining the desired objectives of supervision;
2. Delineation of supervisor duties in line with those objectives;
3. Upgrading of personnel to a degree sufficient to perform those duties;
4. Supplying adequate office equipment and materials; and,
5. Providing adequate transportation for making school visits.

This proposed loan activity is specifically designed to respond to the above stated needs since the first two items will be dealt with during 1973 when the National Education Center is designing a plan for training of inspectors as part of activity 1. a.). The upgrading of personnel will be accomplished by the training course described in activity 1. a.). This activity, among other things, will provide the basic office equipment and materials required for each departmental inspector's office. The equipment and materials will be purchased during 1973 and distributed to each departmental inspector's

office. Transportation has also been considered as a part of this activity. Vehicles will be provided on the basis of attending to an average of four departments each year since the supporting costs of fuel, repairs and maintenance would be quite a financial burden, if this were accomplished at one time. By scheduling the purchasing of vehicles over the four years the annual budget requirements would be lessened.

The National Education Plan also identifies the need for the secondary school system of supervision to be studied and quite possibly, drastically revised. At present, for all practical purposes there is little or no supervision at the secondary school level. Supervision at this level is the responsibility of the Director of Secondary Education in the Ministry of Public Education. He exercises this responsibility through a team of specialists in his Managua office. These specialists infrequently visit secondary schools outside the city of Managua, except when there is a very serious problem. In view of this situation and with the expansion of the secondary system under the IBRD loan and as proposed in this loan, the Ministry will reorganize the inspection and supervision system as a part of this activity.

The Ministry, in reorganizing the system, will assign a highly qualified professional educator as the departmental inspector. This inspector will assume the responsibility for all educational activities in the department. To carry out his responsibilities, this professional educator will have assistants to supervise the educational activities on the primary and secondary educational levels. The Departmental Inspector's office will be organized as follows:



The Departmental Inspectors will report to the Director of Primary Education on matters concerning primary education and to the Director of Secondary Education on matters concerning secondary education. The reorganization of four departments will take place on a time phase basis each year to coincide with the participant training program and also, to spread the budget load, which will be created by this reorganization.

Training, possibly at the Instituto Centroamericano de Administración y Supervisión de la Educación (ICASE) in Panamá, will be provided the four departmental inspectors each year. Upon their return from training they will be assigned to their newly reorganized departmental inspection offices. Training for the assistants who will be assigned to the secondary education section, will be provided under the in-service training program activity l. a.) under this loan.

The inputs, by the Ministry, will be for personnel, furniture, and such other expenses as per diem, travel, gas, oil, repairs and maintenance. The loan inputs will be for participant training, materials and equipment and vehicles.

The estimated costs for this activity follows:

<u>Inspection and Supervision</u>			\$000
<u>Component</u>	<u>Loan</u>	<u>Counterpart</u>	<u>Total</u>
Personnel	-	312	312
Furniture	-	32	32
Materials and Equipment	52	-	52
Other	-	88	88
Vehicles	112	-	112
Participant Training	56	-	56
TOTAL	220	432	652

f. Facilities and Equipment

Purpose: To provide adequate facilities and equipment on the Primary and Secondary Education Levels

The National Education Plan identifies the secondary school system as having the greatest need for expansion, with emphasis on the Basic Cycle portion of the secondary school system. Also, on this level annexes to existing secondary schools are identified as being needed for science laboratories, additional classrooms, libraries, and laboratories for industrial arts, home making, commercial and agriculture education. The plan stresses that, mainly through an expanded and improved secondary and higher educational program, trained manpower can be provided that will promote the economic growth of the country which, in turn, will permit the orderly expansion of education at all levels.

The National Education Plan recommends that further primary school construction should stress the rural areas, with urban construction restricted to areas of new population growth. The Plan also recommends that greater attention at the primary level be given to upgrading existing facilities and emphasizes the need for minimal four-grade primary schools. Through providing facilities, which will permit a minimal of four grades to be taught, a marked improvement is contemplated in reversing the problem of students being pushed out of the system since they have no place to go. Further, by replacing rented, inadequate facilities which are presently being used by the Ministry, with Ministry owned, modern adequate facilities, budget savings will be realized and retention rates will improve.

The Ministry will provide qualified professional staff for all of the educational facilities constructed under this loan. The Primary School teachers will be either, teachers presently in service, or Normal School graduates. For the Secondary School, teachers will be either teachers presently in service or graduates from Institutions of Higher Education.

The responsibilities for certain aspects in construction of schools have been delineated and are set forth as follows:

**RESPONSIBILITY FOR CERTAIN ASPECTS IN
CONSTRUCTION OF SCHOOLS**

INSTITUTION	PRIMARY RURAL SCHOOLS	NATIONAL EDUCATION CENTER PRIMARY URBAN SCHOOLS VOCATIONAL INSTITUTE EXPERIMENTAL SCHOOL
Communities	Land Fence Painting	Land Fence Painting

INSTITUTION	PRIMARY RURAL SCHOOLS	NATIONAL EDUCATION CENTER PRIMARY URBAN SCHOOLS VOCATIONAL INSTITUTE EXPERIMENTAL SCHOOL
Ministry of Public Education	Site Selection and Organization of the Community with CARE Title to the Land Students, Teachers and Office Furniture Educational Materials Teacher Financing of Construction	Site Selection and Organization of the community Title to the Land Students, Teachers and Office Furniture Education Materials Teacher School Director
National Construction Office of the Ministry of Public Works	Site Inspection Plans Construction Materials Delivery of Materials to the Site Structure (pre-fabricated shell) when appropriate Labor Supervision	Site Inspection Plans Bid Documents when Used Land Measurements and Location of Buildings on the Site Some Construction Supervision
CARE	Site Selection and Organization of the Community with MPE Some Construction Materials	
USAID/N through the Loan	Vehicles and Construction Equipment	Revision of Site Revision of Plan Revision of Bid Documents Financing of Construction Monitoring

As indicated above, five institutions will be involved in the overall construction program. Financing will come from the Ministry of Public Education and USAID through the loan. Community development will enter into the play in the initial stage in obtaining a suitable parcel of land for the construction site, and the proper legal documents to transfer the title of the land to the National Government for the purpose of constructing a school. Final determination as to the location of the schools will be made by the Ministry of Public Education in conjunction with the recommendations of the Departmental Inspectors.

Under this activity the following facilities will be constructed and equipped:

- 1) Rural Primary* -- 400 classrooms, approximately
135 schools
- 2) Urban Primary* -- 200 classrooms, approximately
33 schools
- 3) Primary School Annexes, 18 classrooms at 9
locations
- 4) Expansion of ITV - 18 rooms, 6 buildings

*NOTE: Nicaragua still maintains a rural character despite an exaggerated migratory movement to the cities. For the purpose of this document, a city will be considered a population concentration of 2,000 or so persons enjoying certain urban facilities such as paved streets, a water supply and other public utilities and services, commerce, and perhaps even some light industry.

f. (1) Rural Primary Schools

Purpose: To provide adequate facilities for 24,000 rural school children

Emphasis is being placed on the construction of rural primary schools. These schools will be constructed with no less than 2 classrooms each to enable the students to complete at least four grades, in keeping with the concept of providing a minimal of four years of education. The Ministry of Public Education will, where the population is great enough, have two sessions a day with different students probably for grades one and two in the A. M. and grades three and four in the P. M. Where the population is sufficiently large enough, 3 classroom schools will be built. Thus, by utilizing the schools for two sessions a day, students will be able to complete their primary education in the same school. Teachers will be provided by the Ministry, and, under activity 1. a) will receive special training in the operation and management of multi-grade schools.

Each school will be furnished with sufficient and appropriate furniture for forty students and the teachers per classroom. Whenever a school is constructed with 3 or more classrooms, tablet, unipersonal, type chairs will be provided in at least one classroom to accommodate older, larger children for the 5th and 6th grades and for use by adults in the accelerated adult education program, activity, 2. g. of this loan proposal. During the construction stage two blackboards will be built on the walls of the school. Educational materials and textbooks will be provided as indicated in activity 2. b) and 2. c).

During the preparation of the National Education Plan, areas where schools are needed were identified in general terms. These needs will be refined and pinpointed to the exact sites on an annual basis during the life of the loan.

When selecting sites, on which to build the schools, consideration will be given to the possibility of building between centers of population in order to serve more than one population center. By doing this it may be possible to eliminate many of the one-room rural schools (a major problem of Nicaraguan education) which exist today and from which the children are pushed-out rather than drop-out.

CARE has been assisting the Ministry of Public Education in rural school construction since 1968 and has a good deal of know-how in the organization of the community for community development purposes. Under this program, CARE will continue based on a Ministry-CARE contract, to assist the Ministry in this work and will provide some construction materials. The type of construction, design, and other details regarding these schools are contained in Section VII.C.

Under this activity 400 classrooms in approximately 135 schools are programmed to be constructed, at the rate of 100 classrooms per year. Based on 40 students per classroom, with approximately 50% of the schools being used for two shifts, these 400 classrooms will provide adequate facilities for 24,000 rural school children. These schools will be built throughout Nicaragua.

The inputs, by the Ministry, will be for land, personnel, furniture, and construction. The loan inputs, will be for construction equipment and heavy and light vehicles.

The estimated costs for this activity follows:

<u>Rural School Construction</u>			\$000
<u>Compon ent</u>	<u>Loan</u>	<u>Counterpart</u>	<u>Total</u>
Construction	-	1,026	1,026
Equipment	12	-	12
Vehicles	61	-	61
Personnel	-	594	594
Furniture	-	62	62
Land	-	(140)	(140)
TOTAL	73	1,712	1,785

f. (2) Urban Primary Schools

Purpose: To provide adequate facilities for 12,000 Urban School Children and 5,000 Adults

Construction in the urban areas of Nicaragua will be principally in areas of new population growth, or to replace inadequate or rented facilities. Urban schools will for the most part contain six or more classrooms, with an administrative office and sanitary facilities. The same construction plan and procedures for locating schools, as successfully used in the A.I.D. School Construction Loan 014 which terminated early in 1972, will be followed. The National Education Plan identified areas where schools are required in gross terms. These needs will be refined and exact sites will be located on an annual basis. Schools will be built throughout the country.

Each school will be furnished with sufficient and appropriate furniture for forty students per classroom, with furniture for the teacher and for the administrative

office. In each school, two classrooms will be provided with tablet, unipersonal type chairs for the fifth and sixth grade students as well as for use by adults in the accelerated adult education program, activity 2.g. of this loan proposal. Two blackboards will be built in the walls of the classrooms during the construction stage. Each school will also have at least one movable wall to provide a double size room for especial classes, assemblies, and community events. In many areas the school will also serve as a community center.

Educational materials and textbooks will be provided as indicated in activity 2.b) and 2.c). Teachers will be provided by the Ministry. All schools will be used on a two shift basis, where there is sufficient population to warrant this measure; also, they will be used for the accelerated adult education program in the evening.

The type of construction, design, and other details regarding these schools are contained in Section VII C. Under this activity 200 classrooms are programmed to be constructed, at the rate of 50 classrooms per year in approximately 8-9 schools per year. Based on 40 students per classroom, with approximately 50% of the schools being used for two shifts, and two classrooms for the accelerated adult education program, these 200 classrooms will provide adequate facilities for 12,000 urban school children and over 5,000 adults.

The inputs, by the Ministry, will be for land, personnel, and furniture. The loan inputs, will be for construction.

The estimated costs for this activity follows:

<u>Urban Primary Schools</u>			\$000
<u>Component</u>	<u>Loan</u>	<u>Counterpart</u>	<u>Total</u>
Construction	1,132	-	1,132
Personnel	-	444	444
Furniture	-	92	92
Land	-	(450)	(450)
TOTAL	1,132	506	1,638

Primary School Annexes

Purpose: To provide Industrial Arts and Home Making facilities for 8,100 students.

In this activity a primary school annex consists of two laboratories, Industrial Arts for boys and Home Making for girls. The curriculum for the fifth and sixth grades of primary school, in its revised form, retained the requirements for boys to receive Industrial Arts and girls to receive Home Making at least two hours weekly. Although this curriculum requirement has been in effect for many years, it has been only possible to put it into practice in 16 centers in Nicaragua.

In Nicaragua, except for one school, which was constructed under the A. I. D. School Construction Loan, 014, Industrial Arts and Home Making is offered in centers. These centers serve all the fifth and sixth grade students in the area where the center is located. In addition to serving the primary school students, these centers are used for adult education in training specific skills, such as sewing, cooking, carpentry, metal work and electricity. Industrial Arts and Home Making is also provided students in the Basic Cycle level of Secondary Education, wherever a center is located and the center can accommodate the students. However, preference has been given to primary school students.

Since Industrial Arts and Home Making are offered on both the primary and secondary level, the department responsible for this education is a separate department within the Ministry of Public Education. Location for these annexes will be identified by the Director of the Industrial Arts and Home Making Department based on need and maximum utilization of the annexes. Coordination in locating these annexes will be with the Director of Primary Education, Director of Secondary Education and the Departmental Inspectors. Final determination as to the locations will be made by the office of Educational Planning of the Ministry of Public Education.

Teachers will be provided by the Ministry of Public Education. These teachers will be trained at the Instituto Politécnico de Nicaragua (POLI). POLI began training teachers in this area in 1970 and graduated the first class in the spring of 1972.

Each annex will be fully equipped with the necessary and educationally appropriate tools, materials, furniture and equipment for this type of education. A good deal of experience has been gained since the department was formed, by the staff of the Department of Industrial Arts and Home Making education. From 1956 to 1961 some of the present centers were established through an ICA grant program. Also during the same period the department received participant training grants and technical assistance.

Under the A. I. D. School Construction Loan 014, one pilot center was constructed and equipped and is now functioning in an excellent manner. This pilot center is considered quite adequate and meets the curriculum requirements for these subjects. The laboratories in this A. I. D. Loan 014 pilot center were designed using the same module as

the classrooms constructed under the loan. However, the space of two classrooms was used, and the corridor was enclosed to provide a greater floor space for these laboratories. These laboratories were located at either end of a wing with classrooms in-between the laboratories. Laboratories in this activity will be built using the same plan.

Purchasing of tools, materials, furniture and equipment for these laboratories in the pilot center, was done by the Ministry of Public Education, supervised by the Director of the Industrial Arts and Home Making Department. From the experience gained in the pilot center, the equipment lists have been refined and will be used as the basis for purchasing for the annexes contemplated in this activity, as well as for the laboratories in the basic cycle schools, the secondary school annexes and the experimental school. The equipment lists do not contain any unusual, sophisticated equipment, nor items which cannot be purchased by the students here in Nicaragua. For details on type of construction and other Engineering details, see Section VII C.

In 1973, a survey will be made by the Director of the Industrial Arts and Home Making Department and his staff to determine where these annexes should be located. Construction will begin in 1974, with 3 annexes to be built each year, through 1976, making a total of 9 annexes.

In keeping with the curriculum, by providing primary and basic cycle, secondary school students two hours weekly of instruction in Industrial Arts and Home Making, each annex will accommodate 600 students per week on a one shift a day basis. Since these annexes will be located in highly populated areas, probably 50% of these annexes will be used two shifts a day. Therefore, it is contemplated that these annexes will accommodate 8,100

students. In addition, many of these annexes will be used by adult in evening classes.

The inputs, by the Ministry, will be for land, personnel, furniture and some equipment and materials. The loan inputs, will be for construction and some equipment and materials.

The estimated costs for this activity follows:

f.(3) <u>Primary School Annexes</u>	\$000		
<u>Component</u>	<u>Loan</u>	<u>Counterpart</u>	<u>Total</u>
Construction	192	-	192
Equipment and Materials	99	9	108
Personnel	-	32	32
Furniture	-	21	21
Land	-	(90)	(90)
TOTAL	291	62	353

f.(4) Technical Vocational Institute Managua

Purpose: To improve and expand Technical Vocational Education

The National Education Plan touches on the area of Technical Vocational training only in passing. It indicates that much more needs to be done at the secondary level in the areas of Agricultural and Technical-Vocational training, both to provide semi-skilled workers as currently needed, and to provide a pool of semi-skilled trained workers, to draw upon for further training to the skilled worker and higher categories. Further, that, it would be necessary to make a complete review of all vocational demands, needs and outputs, including formal and informal training practices at all levels, before a master plan could be developed for locating needed training courses in specific areas. Also that the only Institute in the Public School system which provides technical-vocational training is the Technical Vocational Institute in Managua.

Reports from the Central Bank of Nicaragua, the private sector, and others, indicate that there is an insufficient production of skilled labor being produced in Nicaragua to meet the demands of Industry. A study made by the Educational Performance Systems Incorporated (EPSI) in 1968, through an A.I.D. grant to the Ministry of Economy, Industry and Commerce, stressed the needs for improving and increasing vocational and technical training.

Since, a complete review of the needs and outputs on a nation-wide basis has not been accomplished, (the EPSI study of 1968 only covered Managua), this activity will be limited to the expansion and improvement of the Technical Vocational Institute in Managua, (ITV). ITV was established in 1955, as part of the ICA grant program,

and continued to have technical assistance, participant training programs, and provision of tools, equipment, and materials, through 1961, when the program was phased out as a bi-lateral program for complete operation by the Ministry of Public Education.

Since 1955, the enrollment of first year students alone has risen from 113 students to 886 students. In 1972, in all grades the enrollment, including the day and evening program, was 1,457. The enrollment of first year students has increased at an average rate of 14% since 1955 and in the last 5 years the average increase has been 28%. With the present facilities, which have outgrown themselves, it is no longer possible to accept new students without improving and expanding the facilities. Also one of the buildings which houses several shops and classrooms, is a wooden, ex-US Marine Corps Barracks, which is so termite damaged that repairs are no longer possible. This building has to be demolished and new facilities to replace it to be constructed.

Several years ago, the Director of ITV, instituted a minimal program to construct additional facilities, using the students of the Construction Trades Program. Under the direction of the Construction Trades Shopmaster, three simple shop areas were constructed. However, the quality of work and the time it takes to complete a job, makes it extremely impractical to meet the needs of the Institute, at this time.

The objective of this activity is to improve and expand ITV to enable it to meet the demand by industry for graduates and the demand of students to enter the Institute. With few exceptions, graduates of the Institute are immediately employed in the trades that they have been trained for at ITV.

Since the Institute was established in 1955, 1,280 students have graduated in 18 trades from the regular day program. There have also been 348 graduates from the evening program which has operated for only

three years.

The demand for entrance has been as high as 53.9% and as low as 9.7%, in the past five years, with an average of 28%. The projection, with new and improved facilities made by the Institute for accepting students through 1980, is at an average rate of 14% which will bring the first year students at the Institute in 1980 to an enrollment figure of 2,673.

Training in six trades in 1955 has been expanded to seventeen in 1971. Further, in 1955 training was only offered to boys, however, now there are several courses open to women. With the programmed expansion there will be 18 shops, 14 classrooms, 1 laboratory, administrative offices and a library.

To keep up with the needs and the trends the curriculum at the Institute has been under almost constant revision. In 1970, each trade area offered at the Institute was broken down in modules. Upon completion of a module after a student has completed his basic instruction, if necessary, he can dropout and go to work and then return on a part-time basis to continue with another module. The curriculum is designed on a ladder concept, that is, each rung in the ladder represents a module and by completing all the modules, one then completes all the work offered at the Institute.

The Director of the Institute is a dynamic person who has been U.S. trained under the Participant Training Program of ICA. Many of the Instructors at the Institute have also been participants. In 1972, through the efforts of the Director and the desire of the Instructors at the Institute to improve their professional education, a course was started at the Polytechnical Institute of Nicaragua (POLI) to professionalize these instructors. The course is conducted in the evening program at POLI.

Programmed under this activity are the following:

- a. New construction of six buildings,
- b. Demolition of the ex-US Marine Corps building,
- c. Re-equipping shops and the science laboratory and books for the library.
- d. Provision of materials for ITV student construction,
- e. Paving of grounds and outside lighting, and
- f. Provision of materials for students to fabricate furniture for the expanded facilities.

Details on design of the buildings and other Engineering information is contained in Section VII C. The lists of equipment, tools and materials were prepared by each individual shopmaster and reviewed by the Director of the Institute. These lists were then reviewed and revised with the shopmaster by one of USAID/Nicaragua technical staff members, who has been the Technical Director for several Technical Vocational schools in Latin America under the ICA and A. I. D. programs. final lists, prior to purchasing, will again be reviewed by a Committee to insure that the items being purchased are required to teach the trades and meet the requirements of the curriculum. The Director of Vocational and Technical Education in the Ministry is presently a participant under the A. I. D. participant training program in Puerto Rico. His training program, among other things, includes development of equipment requirements for vocational and technical schools. He will chair the Committee in reviewing the final equipment lists.

The inputs, by the Ministry, will be for land, personnel, some equipment, and materials for furniture. The loan inputs, will be for construction and for the major portion of equipment and materials.

The estimated cost for this activity follows:

<u>Technical Vocational Institute - Managua</u> \$00			
<u>Component</u>	<u>Loan</u>	<u>Counterpart</u>	<u>Total</u>
Construction	218	-	218
Equipment and Materials	270	30	300
Books	5	-	5
Personnel	-	159	159
Furniture	-	7	7
Land	-	(40)	(40)
TOTAL	493	196	689

g. Adult Accelerated Primary Education Program

Purpose: To expand Adult Education

During the past decade the Ministry of Public Education has studied the problem of literacy and adult education. The conclusion of the study was to concentrate on an Accelerated Adult Education Program. The Ministry, Executive Decree No. 2, dated the 3rd of February 1970, established the Adult Accelerated Primary Education Program. This Decree, among other things, established that persons of 15 years of age and above, would be considered adults; that the Adult Accelerated Primary Education Program would be conducted in Evening Schools; and that the objective of this program would be to provide the adult with an integrated education.

Since 1970, the Ministry has established 32 Evening Schools for the Adult Accelerated Primary Education Program, with 265 teachers and approximately 10,000 students. For the most part the teachers assigned to this program have received special instruction in teaching adults through Ministry sponsored seminars.

The Ministry is interested in expanding and improving this program, since there is a great demand by adults to be educated. At present there are Evening Schools in 13 of the 16 Departments, with the majority concentrated in the Capital City of Managua. The Ministry plans under this activity, to establish additional Evening Schools to cover all the Departments as follows: 40 in 1973; 20 in 1974; 20 in 1975; and 13 in 1976. During the four-year period the Ministry will hire 199 additional teachers to teach in these Evening Schools. Through this activity there will be approximately 8,000 adults enrolled in this accelerated program.

Education materials for this accelerated program will be provided through activity 2.b. of the proposed loan. As existing schools will be used for the Evening Schools, no additional funds will be required for facilities. Teachers who are presently teaching will be hired to teach the adults and will be compensated accordingly. Seminars by the Ministry will be conducted for these teachers in the techniques and methods of teaching in this accelerated adult program.

At present, one of the reasons why the program has not increased as it was conceived, is due to the fact that the Department of Adult Education which existed when the Decree was promulgated in 1970 was absorbed by the Primary Education Department. It is now realized by the Ministry that this program needs to be organized as it previously was as a department, however, one separated from the Primary Education Department. Therefore, as a part of this activity, the Ministry will organize an independent Department of Adult Education, with a director and supervisors to dedicate their attention to this program.

The inputs, by the Ministry, will be for personnel, materials, seminars, vehicle, and other expenses such as per diem, travel, gas and oil, repairs and maintenance of the Department's vehicle.

The estimated costs for this activity follows:

<u>Accelerated Adult Education</u>			\$000
<u>Component</u>	<u>Loan</u>	<u>Counterpart</u>	<u>Total</u>
Personnel	-	178	178
Materials	-	4	4
Vehicle	-	4	4
Seminars	-	8	8
Other	-	8	8
TOTAL	-	202	202

3. Improve the Management, Research and Planning Capabilities of the MPE
 a. (1) Personnel System Reform

Purpose: To improve the personnel system

The problem of an effective, functional personnel system serving the Ministry of Public Education has long been the concern of a number of Ministers of Public Education. Various studies have been made by experts from the Organization of the American States (OAS) and by advisors from the Southwest Alliance for Latin America, (SALA). As a result, the Ministry has revised its Organic Law and plans to make further adaptations in the Organic Law to reorganize the Personnel Office of the Ministry.

One of the major problems in respect to Personnel that the Ministry faces, is that, at present, the functions are being managed in the offices of the Directors of Primary and Secondary Education and other offices. This system takes away valuable time from these Directors which should be spent in the technical aspects of education and in supervision of teachers, directors and educational activities in general under their responsibility. In the present system much time is lost attending to both major and minor personnel matters which could be efficiently attended to by the Personnel Office.

The Director of Administrative Services of the Ministry, who is responsible for the personnel function and of the reorganization, plans to organize the Personnel Office as a sub-department of Administrative Services. He will utilize those sections and personnel which presently exist in his department and add other sections and recruit competent personnel to complete the reorganization.

In planning the reorganization and in implementing the plan, the Director of Administrative Services, will use the various reports and suggestions made by the experts from OAS and SALA in order to capitalize on the experience of these experts. He will also have available technical assistance provided by this loan to insure that the Ministry will have an efficient, effective and functional personnel system to meet the need of the entire Ministry.

In the reorganization, the Personnel Office will be responsible for all matters relating to personnel, such as: recruitment, selection, nominations, job analysis and classification, pay scales, records, training of administrative personnel, and personnel welfare. In addition, the Director of Administrative Services plans to mechanize the system utilizing the data processing services of one of the GON's facilities, or the Central American University Data Processing Center or a

private facility, such as IBM. In considering the use of one of the data processing facilities, the Director is also planning to include the processing of educational statistics and other educational data in order to mechanize this process also.

The reorganization is programmed to start in 1973 and continue in different aspects during the life of the loan. The inputs, by the Ministry, will be for personnel, furniture, equipment, and other expenses. The loan inputs, will be for technical assistance.

The estimated costs for this activity follows:

<u>Personnel System Reform</u>			\$000
<u>Component</u>	<u>Loan</u>	<u>Counterpart</u>	<u>Total</u>
Personnel	-	192	192
Furniture	-	8	8
Equipment	-	8	8
Other	-	12	12
Technical Assistance (12 M-M)	48	-	48
TOTAL	48	220	268

a. (2) Ministry of Public Education Facility

Purpose: To provide an adequate Ministry facility

The Ministry of Public Education is housed in a rented six story building and several annexes in the immediate vicinity. The annual rent for these facilities is over \$37,000 per year. This rent is paid for facilities which are in sub-standard condition and are ill-suited for their purpose. As a result, in the Ministry, all personnel

and working groups are forced to conform and contend with the physical structure of the edifice-when the physical structure should be designed to conform to the needs of the various departments and sections of the Ministry. This need for an adequate facility for the Ministry was brought out in the National Education Plan. Also, this need has been recognized for a number of years, as it was included in a list of priorities given to the Rockefeller Commission in 1969, and presented to the President of Nicaragua in 1970 and again in 1971 as well as to USAID/Nicaragua.

Assistance was requested in a letter by the GON which was incorporated in the IRR for this Educational Sector Loan. In conformance with instructions at the CAEC meeting in March 1972, no loan funds are contemplated to be used in connection with this activity. Further, due to the amount of this loan, it is not anticipated that the GON will be able to include this activity in the program, however, in the event that funds are made available, this activity will be included as part of the overall program. Although the estimated costs are not a part of the financial tables. All inputs, will be from the Ministry for this activity.

The estimated costs for this activity follows:

<u>Ministry of Public Education Facility</u>		\$000
<u>Component</u>	<u>GON</u>	<u>Total</u>
Equipment	50	50
Furniture	100	100
Construction	900	900
Land	(80)	(80)
TOTAL	1,050	1,050

b. (1) Experimental School, Secondary Level

Purpose: To provide an adequate Experimental School Facility

In 1968, the Ministry of Public Education entered into a formal agreement with the National Autonomous University of Nicaragua, (UNAN) for the purpose of creating an Experimental Institute (Secondary Level School) to function in the School of Education of the Faculty of Humanities of UNAN. Among the considerations, contained in the contract, the two most important ones, for the purpose of this activity are: a) That the school would function as an experimental school for secondary education to try out experiments which, if feasible, could be adapted for use throughout the secondary education system, and b) That the school would be used as a practice teaching center for students in their last year of studies in the School of Education.

The Experimental School was established shortly after the contract was signed and has been functioning in facilities provided by UNAN at the Managua Campus. The facilities, although adequate for conducting regular classes, do not lend themselves to experimental programs since the type of facilities are rather restrictive. Further, the facilities are shared with the university students, therefore, the teachers have to remove their materials at end of their teaching session. The Experimental School functions in the A.M. and the University uses the same facilities in the afternoon and evening for their regular University program.

The Ministry decided that since the National Education Center (activity 1. b.) would be created in 1973 that the Experimental School would become a part of the Center. Therefore, when the present contract terminates in 1973, the Experimental School will be relocated at the National Education Center.

The design of the Experimental School will basically be that of Type 240, Basic Cycle School with additional facilities for experimental purposes. Also additional equipment will be provided for demonstration purposes and for teacher training such as video-tape equipment. Additional teachers will be provided to work with student teachers and to experiment with curricular changes and other experiments. An adequate student and faculty library will also be provided. Guidance personnel will also be assigned to the School. For details as to the type of construction and other Engineering aspects, see Section VII C.

Technical assistance will be provided throughout the loan in the teacher training aspect since there is a technical assistance element included under the curriculum reform activity 2. a. for the curriculum aspects. Also, participant training will be provided throughout the loan for training of specialists as required in the Experimental School.

The inputs, by the Ministry, will be for personnel, some equipment and materials, books, furniture and land. The inputs, from the loan, will be construction, for the majority of equipment and materials, books, technical assistance and participant training.

The estimated costs for this activity follows: \$000
Experimental School, Secondary Level

<u>Component</u>	<u>Loan</u>	<u>Counterpart</u>	<u>Total</u>
Construction	179	-	179
Equipment and Materials	73	23	96
Books	9	3	12
Personnel	-	234	234
Furniture	-	18	18
Technical Assistance (12 M-M)	48	-	48

Experimental School, Secondary Level (Cont.) \$000

<u>Component</u>	<u>Loan</u>	<u>Counterpart</u>	<u>Total</u>
Participant Training (48 M-M)	24	4	28
Land		(80)	(80)
TOTAL	333	282	615

b. (2) Research, Evaluation and Educational Technology

Purpose: To develop a capability to conduct research, evaluate programs and projects and to introduce technology

Effective educational planning is dependent upon a base of comprehensive empirical data in readily usable form. It is also dependent upon a systematized program of educational research as well as an acquired capability for conducting research, evaluating and utilizing the research findings.

Unfortunately, in Nicaragua today, the factors enumerated above are either non-existent or are found in very limited form. Neither in the Ministry of Public Education, nor in the Institutions of Higher Education is there an established educational research program. Research in the past has been carried on in Nicaragua with the assistance of experts from OAS, UNESCO, various Foundations, ODECA, and through USAID grant assisted projects.

The Ministry desires to develop a capability for conducting research, to evaluate programs and projects and to

investigate the possibilities of adapting aspects of educational technology to the educational system of Nicaragua. The purposes of this activity, therefore, are to assist the Ministry to acquire these capabilities.

Through this activity, professional Nicaraguan educators with BS degrees will be provided with training on the graduate level in Research, Evaluation and Educational Technology, and undergraduate level in Special Education, and other fields. Technical assistance will be provided in each of these fields, plus in educational statistics. Technical assistance will be so scheduled so as to have advisors on the scene when the participants return to Nicaragua from their graduate work.

The first step in implementing this activity will be taken by the Ministry during this year, by creating a Research and Evaluation Section within the Office of Educational Planning. When this is accomplished, candidates will be selected for graduate studies in January 1973. Research or evaluation studies carried on during 1973, will be accomplished by qualified persons or institutions on a contract basis. Contracts will also be used during the other years of the loan to carry out various research and evaluation projects.

Also during 1972, arrangements will be made to select an institution and or individuals to provide technical assistance for this and other activities connected with the loan. It is planned to have a statistical advisor, for a portion of 1973, working with the educational statistics office of the Ministry. Personnel in the statistical section have recently received training under OAS sponsored programs, therefore, it is not contemplated to include participant training at this time for statistical personnel.

In order to carry out educational experiments at the primary and secondary educational levels and for the urban and rural areas, the Ministry will prepare a Decree designating the following institutions as educational experimental centers:

<u>Purpose/Level</u>	<u>Institution</u>
Rural Primary Schools	Rural Normal School, Estelí
Urban Primary Schools (except Managua)	Normal School, Jinotepe
Urban Schools in Managua	Normal School, Managua Centro Escolar José de San Martín-Managua
Secondary Schools	Experimental School, Secondary Level, National Education Center-Managua

The Institution designated as educational experimental centers will carry out educational experiments, introduce new methods and/or innovations in schools within their zone of influence. These projects and other action oriented research concerned with concrete educational problems, will be carried out under the guidance and supervision of the Research and Evaluation Section of the Ministry.

Among others which will be identified, during the life of the loan, the following are some of the areas being considered in the research and evaluation program of the Ministry:

- a. Assess the impact that the application of the new curriculum programs of the first four grades of primary education has had on the education system.
- b. Study the present systems of student evaluation, to structure a more functional student examinations. This study would also consider the merits and impact of an automatic promotion policy for the first four grades of the Primary School.

- c.** Carry out a national inventory of educational facilities to determine the condition and use being made of each facility, to develop a national plan for school construction and the establishment of an effective maintenance system.
- d.** Study the educational administrative system with thoughts to possibly decentralize some services to expedite these functions.
- e.** Study in depth the problem of school desertion with the goal of taking the necessary steps to assure a greater production of the education system.
- f.** Study the possibilities of establishing pre-school education financed and under the control of the Ministry of Public Education. Actually there exists very few pre-school education centers, all of which are found in the private sector.
- g.** Determine the benefits of using mass communications methods in increasing the offerings for adult education as well as for other levels of education.
- h.** Development of special programs to aid those children with learning problems.
- i.** Studies to lower costs, effectiveness and relevance of education.
- j.** Evaluation of the entire list of Secondary School Textbooks which are in use in the schools in throughout the country.
- k.** Evaluate the present educational statistical system.
- l.** Studies in improving the development and management of the budget.

- m. Studies in the general administrative operations of the Ministry and organization in general.
- n. Study problem of "Bicycle" teachers vrs. full-time teachers at the secondary school level.
- o. Evaluate progress being made of selected items included in this A.I.D. loan which were part of the National Education Plan.
- f. Study techniques for up-dating education strategy for improving qualitative and quantitative aspects of education.

The inputs, by the Ministry, will be for personnel, furniture and other costs, such as per diem, travel, vehicle, repairs and maintenance. The loan inputs, will be for technical assistance, participant training, funds for research and/or pilot projects.

The estimated costs for this activity follows:

Research, Evaluation and Educational Technology \$000

<u>Component</u>	<u>Loan</u>	<u>Counterpart</u>	<u>Total</u>
Technical Assistance (45 M-M)	180	-	180
Participant Training (156 M-M)	78	48	126
Research and Evaluation Center: MPE			
Personnel	-	69	69
Furniture	-	2	2
Equipment	2	-	2
Vehicle	4	-	4
Other	-	15	15
Research and Pilot Projects	555	-	555
TOTAL	819	134	953

B. Proposed Activities of International Organizations.**IBRD**

Assistance through late 1973-early 1974 will be provided through the loan program for secondary level institutions, as described in Section I D. See Section IX G. reference to future possible assistance and position of loan committee.

IDB

Assistance to UNAN for a pre-investment study will continue. Future possible assistance follows:

1. Polytechnical Institute of Nicaragua (POLI) has requested a loan in the amount of \$1.1 million for organization, construction of facilities, equipment, salaries for full-time professors in-service training of professors, technical assistance, administrative support and construction supervision. If the loan is approved POLI can increase its output of trained technicians and secondary level specialized teachers. POLI'S loan application, at IDB is pending a priority and guarantee from the GON. The Minister of Public Education advised the USAID on the 26th of May 1972, that he would support and assist POLI in its efforts to obtain the priority and guarantee to obtain their IDB loan. Until POLI is able to build and equip new facilities, POLI will continue training specialized teachers in its present facilities.
2. Nicaraguan Development Institute-EDUCREDITO has requested a loan in the amount of \$2.9 million for seed capital. The application has been revised and EDUCREDITO is awaiting advisors from IDB regarding its revised application. Also, EDUCREDITO has not received a priority or guarantee from the GON for their loan application. The assistance programmed under activity Section IV A.1.c. of this loan will not duplicate any assistance which might be forthcoming from the IDB loan application; rather it will complement it.

CARE

CARE will continue to assist in the construction of the rural primary schools, as outlined in Section IV A.1.f, and Section IV A.1.f. (1).

UNICEF

UNICEF will continue to assist in the PRODESAR project as described in Section I.D.

UNESCO

UNESCO will continue to assist the Ministry by providing technical services in the area of school supervision, upgrading teachers and adult education in conjunction with the PRODESAR project described in Section I.D.

OAS

The Ministry of Public Education will continue to use the scholarship program of OAS for training as a complement to the participant training planned in this loan.

V. SUMMARY OF EXPECTED CHANGES IN THE EDUCATION SECTOR BY LOAN ACTIVITIES

<u>Activity</u>	<u>Present Situation</u>	<u>Expected Changes</u>	<u>Source of Financing</u>
1a.) In-Service Professional Training	The educational inspectors and primary school directors who have acceptable training in Educational Administration are very few. Most of them hold only a Diploma from Normal schools and some years of experience. Approximately 40% of primary teachers are considered not fully qualified.	Under activity 1a. of this loan the Ministry will develop three types of upgrading programs to improve qualifications of 116 Inspectors, 377 School Directors and 2820 Teachers. The inspectors and school directors will be trained at the National Educational Center (NEC) (activity 1b.), while intensive courses for teachers will be conducted at 4 Normal Schools. Also a traveling in-service team will be set up to train teachers in the more remote rural areas. Training programs will begin in 1974.	AID Loan and GON Budget
1b.) National Education Center	NONE	The Ministry of Public Education will in 1973 create the National Education Center (NEC) (activity 1b), as a Higher Education Institution, which will be responsible for most of the in-service training programs.	AID Loan and GON Budget

UNCLASSIFIED

UNCLASSIFIED

V. Summary of Expected Changes in the Education Section by Loan Activities (Cont'd)

<u>Activity</u>	<u>Present Situation</u>	<u>Expected Changes</u>	<u>Source of Financing</u>
1c) Undergraduate and Graduate Professional Training (EDUCREDITO)	One of the chief obstacles to economic and social development in Nicaragua is the shortage of trained high-level manpower. The scarce financial resources of the student is the principal obstacle impeding the termination of a university education. In 1964, the Nicaraguan Development Institute (INDE) established a student loan program. Since EDUCREDITO was funded, through 1971, 603 students were granted loans.	The Ministry of Public Education plans to enter into a contract with EDUCREDITO to provide seed capital from the loan to the revolving loan fund for the following purposes: a) assist 10 higher education level staff and faculty to study for advanced degrees in U.S. A. or Latin America. b) Assist 235 students studying at higher education institutions in Nicaragua, preferably in fields required by the Ministry of P.E. such as administrators, supervisors, etc. c) Assist 38 students studying in USA or Latin America in fields which are not offered here in Nicaragua.	AID Loan and Private Sector

UNCLASSIFIED

-82-

UNCLASSIFIED

V. Summary of Expected Changes in the Education Sector by Loan Activities (Cont'd)

<u>Activity</u>	<u>Present Situation</u>	<u>Expected Changes</u>	<u>Source of Financing</u>
2a.) Curriculum	<p>There has been a massive GON-MPE elementary curriculum revision effort during the past 6 years. This program is being continued by GON and new curricula for the sixth grade is scheduled for completion during this year (1972). The emphasis of the curriculum reform is on agriculture and functional education. Assisted by SALA the Ministry has also initiated the revision of the Basic Cycle (first three years of secondary education) curriculum.</p>	<p>The Ministry plans to organize a team to complete the revision of the curriculum for secondary schools beginning in 1973, as follows: a) Grades 1, 2 and 3 of Basic Cycle between 1973 and 1975. b) Grades 1, 2 and 3 of Diversified Cycle between 1976 and 1978.</p>	<p>AID Loan and GON Budget</p>
<p>2b) Educational Materials & Audio Visual Center</p>	<p>The lack of teaching materials is extreme especially in the rural areas. There is need to develop and provide inexpensive educational materials at all levels. Presently there is a small audio visual aids section in the Ministry of Public Education.</p>	<p>The MPE, as an activity of the proposed loan will create an Educational Materials and Audio Visual Aids Center, under the control of the Curriculum Section of the Educational Planning Office. The center will provide a constant flow of educational materials to teachers at all levels to help improve the quality of education. The Center will be organized in 1973.</p>	<p>AID Loan and GON Budget</p>

UNCLASSIFIED

53

UNCLASSIFIED

V. Summary of Expected Changes in The Education Sector by Loan Activities (Cont'd)

<u>Activity</u>	<u>Present Situation</u>	<u>Expected Changes</u>	<u>Source of Financing</u>
2c) Textbooks	Nicaragua has participated in a regional project (1963-1971) covering all of Central America and Panama in producing updated, standardized and adequate primary level textbooks. It is because of this effort that textbooks are now provided free of charge. According to the Ministry's report, over 3 million textbooks and teacher guides have been distributed since 1963. Since the initial printing of all of the textbooks will be completed in June 1972, the problem which now remains is the reprinting of the textbooks and teacher guides.	The Ministry has programmed the reprinting of an average of over 200,000 textbooks and teacher guides each year from 1973-1976. These will be distributed in accordance with needs throughout the country.	GON Budget

UNCLASSIFIED

UNCLASSIFIED

V. Summary of Expected Changes in the Education Sector by Loan Activities (Cont'd)

<u>Activity</u>	<u>Present Situation</u>	<u>Expected Changes</u>	<u>Source of Financing</u>
2. d Guidance and Counseling	<p>Because of the relatively recent introduction of guidance services into the Nicaraguan educational system, these services, with qualified counselors, are being provided in only fourteen centers. A SALA advisor spent 3 months in Nicaragua, in 1971. With his Nicaraguan counterpart he developed a plan of action for the initiation of a guidance department within the Ministry and extension of guidance services, to the entire educational system.</p>	<p>Recognizing the need for more and improved Guidance and Counseling in the Secondary School, the MPE will establish a Department of Guidance and Counseling on the Ministry level. In each of the IBRD secondary schools, the Basic Cycle schools and the Experimental schools - activities 2. f (4) and 3. b (1) - to be constructed as an activity of this loan, the Ministry will assign guidance personnel. Assignment of Guidance personnel will begin in 1974. This personnel is being trained at the Universities of Nicaragua.</p>	AID Loan and GON Budget

UNCLASSIFIED

-85-

UNCLASSIFIED

V. Summary of Expected Changes in The Education Sector by Loan Activities (Cont'd)

<u>Activity</u>	<u>Present Situation</u>	<u>Expected Changes</u>	<u>Source of Financing</u>
2. e) Inspection and Supervision	<p>There is a total of 16 departmental inspectors and 98 assistant inspectors to attend to the needs of 1825 schools employing a total of 5958 teachers. At present, supervisory services are separate and distinct for primary and secondary education. Most of the inspectors/supervisors are not adequately trained and duties not clearly defined nor do they have sufficient mobility/support services. GON/UNICEF-UNESCO pilot program in 4 Departments provides limited training for inspectors/supervisors, equipment and supplies.</p>	<p>Through loan, training will be provided to all inspectors/supervisors (activity 1. a), also equipment, transportation will be provided. The equipment and materials will be purchased during 1973 and distributed to each departmental inspector's office. Vehicles will be provided on the basis of attending to an average of four departments each year. The Ministry will reorganize the inspection and supervision system, and will assign a highly qualified professional educator as the departmental inspector. The inspector will assume the responsibility for all educational activities in the department.</p>	<p>UNICEF-UNESCO Program, AID Loan and GON Budget</p>

UNCLASSIFIED

-86-

UNCLASSIFIED

V. Summary of Expected Changes in the Education Sector By Loan Activities (Cont'd)

<u>Activity</u>	<u>Present Situation</u>	<u>Expected Changes</u>	<u>Source of Financing</u>
<p>2.f (1) Facilities and Equipment: Rural Primary Schools</p>	<p>GON is investing substantial funds in school construction. However, in rural schools there is currently a ratio of 98 students per classroom. The National Education Plan recommends that further primary school construction should stress the rural areas.</p>	<p>Under this activity 400 classrooms in approximately 135 schools are programmed to be constructed at the rate of 100 classrooms per year. These schools will be constructed with no less than 2 classrooms each to enable the students to complete at least four grades. Based on 40 students per classroom, with approximately 50% of the schools being used for two shifts, these 400 classrooms will provide adequate facilities for 24,000 rural school children. Teachers will be provided by the Ministry, and under activity 1a.) will receive special training in the operation and management of multi-grade schools.</p>	<p>GON Budget, CARE-AID Loan, Community</p>

UNCLASSIFIED

V. Summary of Expected Changes in the Education Sector By Loan Activities (Cont'd)

<u>Activity</u>	<u>Present Situation</u>	<u>Expected Changes</u>	<u>Source of Financing</u>
2. f (2) Urban Primary Schools	The National Education Plan recommends that new construction in the urban areas of Nicaragua should be restricted to areas of new population growth, to replace inadequate or rented facilities.	Under this activity 200 classrooms are programmed to be constructed, at the rate of 50 classrooms per year in approximately 8-9 schools per year. Urban schools will for the most part contain six or more classrooms with administrative office and sanitary facilities. Based on 40 students per classroom, with approximately 50% of the school being used for two shifts, and two classrooms for the accelerated adult education, these 200 classrooms will provide adequate facilities for 12,000 urban school children and over 5,000 adults.	AID Loan, GON Budget, Community

UNCLASSIFIED

V. Summary of Expected Changes in the Education Sector by Loan Activities (Cont'd)

<u>Activity</u>	<u>Present Situation</u>	<u>Expected Changes</u>	<u>Source of Financing</u>
<p>2. f (3) Primary School Annexes</p>	<p>The curriculum for fifth and sixth grades of primary school required I. A. and H. M. at least two hours weekly, but at the present time it has been only possible to put it into practice in 16 centers in the whole country. In Nicaragua, except for one school which was constructed under AID School Construction Loan, 014, Industrial Arts and Home Making is offered in centers. These centers serve all the fifth and sixth grade students in the area where the center is located.</p>	<p>Under this activity 9 primary school annexes are programmed to be constructed with a total of 18 classrooms. In this activity a primary school annex consists of two laboratories, Industrial Arts for boys and Home Making for girls. Each annex will be fully equipped with the necessary and educationally appropriate tools, materials, furniture and equipment for this type of education. Teachers will be provided by the Ministry of Public Education. These teachers are being trained at the Instituto Politécnico de Nicaragua.</p>	<p>GON Budget, AID Loan, Community</p>

UNCLASSIFIED

UNCLASSIFIED

V. Summary of Expected Changes in the Education Sector by Loan Activities (Cont'd)

<u>Activity</u>	<u>Present Situation</u>	<u>Expected Changes</u>	<u>Source of Financing</u>
2. f (4) Technical Vocational Institute - Managua	<p>Reports from the Central Bank of Nicaragua, the private sector, and others, indicated that there is an insufficient production of skilled labor being produced in Nicaragua to meet the demands of Industry. A study made by the Educational Performance Systems, in 1968, through an AID grant to the Ministry of Economy, Industry and Commerce, stressed the needs for improving and increasing technical training. The only Institute in the Public School System is the Technical Vocational Institute of Managua. ITV was established in 1955. With the present facilities it is no longer possible to accept new students without improving and expanding the facilities.</p>	<p>Under this loan the Ministry plans to improve and expand I. T. V. to enable it to meet the demand by industry for graduates and the demand of students to enter the Institute. Programmed under this activity are the following: a) New construction of 6 buildings, b) Re-equipping shops and the science laboratory and books for the library, c) Provision of material for the student construction, d) Provision of materials for the students to fabricate furniture for the expanded facilities. With the programmed expansion there will be 18 shops, 14 classrooms, 1 laboratory, administrative offices and library.</p>	<p>GON Budget, AID Loan and I. T. V.</p>

UNCLASSIFIED

UNCLASSIFIED

V. Summary of Expected Changes in the Education Sector by Loan Activities (Cont'd)

<u>Activity</u>	<u>Present Situation</u>	<u>Expected Changes</u>	<u>Source of Financing</u>
2. g Accelerated Adult Education	<p>As a result of studies made of the problem of literacy and adult education, the Ministry, in Executive Decree No. 2, dated the 3rd of February of 1970, established the Adult Accelerated Primary Education Program. This Decree among other things, established that persons of 15 years of age and above would be considered adults. Since 1970, the Ministry has established 32 Evening Schools for the AAPEP, with 265 teachers and approximately 10,000 students. At present there are Evening Schools in 13 of the 16 Departments with the majority concentrated in the Capital City of Managua.</p>	<p>The Ministry plans under this activity to establish 93 additional Evening Schools to cover all the Departments as follows: 40 in 1973; 20 in 1974; 20 in 1975; and 13 in 1976. Through this activity there will be approximately 8,000 new adults enrolled in this accelerated program. The Ministry will also organize an independent Department of Adult Education with a Director and supervisors to dedicate their attention to this program.</p>	GON Budget

UNCLASSIFIED

UNCLASSIFIED

V. Summary of Expected Changes in the Education Sector by Loan Activities (Cont'd)

<u>Activity</u>	<u>Present Situation</u>	<u>Expected Changes</u>	<u>Source of Financing</u>
3. a (1) Personnel System Reform	The Ministry personnel affairs are being managed by the Directors of Primary and Secondary Education as well as by the Directors of Administrative Services. This system takes away valuable time from these Directors which should be spent in the technical aspects of education and in supervision of teachers, directors and educational activities in general under their responsibility.	During 1973, the Personnel Office will be reorganized and will undertake responsibility for all matters relating to personnel. In planning and implementing this reorganization, the Ministry will use the various previous suggestions made by the OAS and SALA experts.	GON Budget and AID Loan

UNCLASSIFIED

-92-

UNCLASSIFIED

V. Summary of Expected Changes in the Education Sector by Loan Activities (Cont'd)

<u>Activity</u>	<u>Present Situation</u>	<u>Expected Changes</u>	<u>Source of Financing</u>
3. a (2) Ministry of Public Education Facility	<p>The Ministry of Public Education is housed in a rented six story building and several annexes in the immediate vicinity. The annual rent for these facilities is over \$37,000 per year. The present Ministry's facilities are inadequate for present and future functioning and morale of the MPE and its staff. The need for an adequate facility for the Ministry was brought out in the National Education Plan and it was included in a list of priorities given to the Rockefeller Commission in 1969.</p>	<p>The construction of a new Ministry of Education building is not included within the loan program. Although the MPE recognizes the positive contribution which a new facility would make to the efficiency and morale especially in view of the expanding functions of the Ministry. In the event that funds are made available, this activity will be included as part of the overall program.</p>	CON Budget

UNCLASSIFIED

V. Summary of Expected Changes in the Education Sector by Loan Activities (Cont'd)

<u>Activity</u>	<u>Present Situation</u>	<u>Expected Changes</u>	<u>Source of Financing</u>
<p>3. b (1) Experimental School - Basic Cycle Level - Secondary - Managua</p>	<p>The Experimental School was established in 1968 under a formal agreement between the MPE and the National Autonomous University of Nicaragua (UNAN). The school has been functioning as an experimental school for secondary education and also as a practice teaching center for the students in their last year of studies in the School of Education. The present facilities provided by UNAN at the Managua Campus, although adequate for conducting regular classes do not lend themselves to experimental programs since the type of facilities are rather restrictive.</p>	<p>The purpose of this activity is to construct this Experimental School in 1973. The design of the Experimental School will basically be that of Type 240 Basic Cycle School with additional facilities and equipment for experimental and demonstration purposes. The Ministry decided that since the National Education Center (activity 1. b.) would be created in 1973 that the Experimental School would become a part of the Center.</p>	<p>GON Budget and AID Loan</p>

UNCLASSIFIED

UNCLASSIFIED

V. Summary of Expected Changes in the Education Sector by Loan Activities (Cont'd)

<u>Activity</u>	<u>Present Situation</u>	<u>Expected Changes</u>	<u>Source of Financing</u>
3. b (2) Research,	At present, there is no existing permanent research programs in Nicaragua. Neither the Ministry of Public Education, nor in Institutions of Higher Education is there an established educational research program. Research in the past has been carried on in Nicaragua with the assistance of experts from OAS, UNESCO, various foundations, ODECA and through USAID grants assisted projects.	Under AID loan there will be an extensive effort in educational research. The first step in implementing this activity will be taken by the Ministry during 1972. by creating a Research and Evaluation section within the Office of Educational Planning. AID Loan will provide for technical assistance and participant training. The Ministry will prepare a Decree designating six institutions as educational experimental centers. Areas like dropouts, repeaters, student evaluation, mass communication methods, special education, development and management of the budget, "Bicycle" teachers, etc. are considered in the research and evaluation program during the life of the loan.	GON Budget and AID Loan

UNCLASSIFIED

-95-

UNCLASSIFIED

Section VI. - PROGRAM IMPLEMENTATION UNIT (UIP)A. Structure of Program Implementation Unit

Because of the complexity and magnitude of the Education Sector Program the MPE has determined that an independent unit be established by the MPE and assigned to execute the implementation and administration of the Education Sector Program. The Program Implementation Unit (UIP) will be staffed and financed by the MPE. The UIP will include personnel for the following full-time positions:

Director
Coordinator
Controller-Accountant
Architect-Engineer

The personnel will be assigned subject to the approval of A.I.D. Formal organization of the UIP by the MPE will be a condition precedent to signing of the Loan Agreement. Final composition of the UIP will be determined by the MPE.

The UIP will be independent from the other Ministry offices and will report to the Minister of Education or his designee (See Annex VIII, Exhibit B, for relation of UIP within the MPE and its composition as prepared by the MPE).

The duties of the UIP will include the following:

- a) Obtain all data, information and undertake action necessary to expedite the submission of materials required under conditions precedent, covenants and conditions of the Loan;
- b) Participate in the preparation of the time-phase implementation plan;
- c) Undertake or coordinate all approvals, contracting, procurement, disbursement, reporting and other functions assigned to it under the Program.

- d) Prepare the agenda for and participate in the periodic joint evaluation meetings provided for in the Loan Agreement.

The creation and scope of work of the UIP will be identified in the Loan Agreement. In particular, the Controller-Accountant will establish arrangements with the USAID Controller's Office for effecting disbursement and payments of loan funds for the complex and detailed cost schedule of the Sector Program.

B. Master Time-Phased Implementation Plan

The UIP will effect control of implementation and administration by means of the Master Time-Phased Implementation Plan. The Master Plan will be approved by all participating institutions and A.I.D. and will be a condition precedent in the Loan Agreement. The plan will provide and forecast the sequence and amounts of inputs from the GON, A.I.D. and EDUCREDITO. All changes in the Master Time-Phased Plan will be subject to the approval of A.I.D. A major input into the program will be the budgeting and timely funding by the GON. In order to accomplish the necessary coordination, including timely-financing from the GON, the UIP will establish relations with the Coordinating Committee of the GON. In order to establish control over disbursements the UIP will maintain direct contact with Tribunal de Cuentas of the GON.

The plan will take into account, particularly, the coordination of staff requirements necessary for proper operation of all facilities to be constructed with program funds.

The UIP will also cooperate with the USAID project coordinator to prepare an agenda for the periodic and annual reviews of program that will be required under the Loan Agreement.

The UIP will keep in direct contact with USAID through the Project Coordinator as well as with the MPE and EDUCREDITO. Such contact will include the preparation of monthly and other periodic reporting that will be required under the terms of the Loan Agreement.

All awards for, construction and procurement of any kind under the Education Sector Program as scheduled under the Master Time-Phased Plan shall be approved by the UIP. The UIP will also approve all payments for work to be done by Construcciones Nacionales as well as the performance of all private contractors including the inspection of work accomplished by force account.

The Master Plan will include expenditure for the maintenance provisions required under the Loan Agreement. The UIP will monitor the approved schedule for maintenance (including vehicles) and its funding.

C. Implementation by Institutions

The UIP will not only spark plug the beginning of each sub-project but will monitor each sub-project from its initial input through the period of output during the disbursement period and will include all such data in its monthly reporting requirements. These data will reflect all program sub-projects including EDUCREDITO and the participation of CARE and other institutions, if any.

The scope of work of all contracts and the work done by all contractors will be monitored by the UIP including the planned research activities.

D. Conclusion

The Loan Committee believes that the structure and position of the UIP within the MPE will enable it to function independently and competently. We believe that the implementation duties proposed to be assigned to the UIP are necessary to the carrying out of the program. Staffed with competent people we believe the UIP can accomplish its job effectively.

Section VII. - LOAN FEASIBILITYA. Financial Analysis

The total cost of this Sector Program is estimated at \$ 11,444,000 of which \$5,300,000 will be financed with loan funds. The GON will contribute the equivalent of \$6,044,000 not including the value of land sites estimated at the equivalent of \$1,030,000. The balance of the equivalent of \$100,000 for EDUCREDITO will come from private Nicaraguan sources.

1. Financial Plan

The A.I.D. loan will finance all the foreign exchange cost estimated at \$2,103,000.00 and the equivalent of \$3,197,000 which represents about forty two percent (34%) of the estimated total local cost.

The global estimate of funds needed for the program is as follows:

	<u>(in thousands of U.S. dollar)</u>					
	<u>Foreign Exch. Cost</u>	<u>%</u>	<u>Local Cost</u>	<u>%</u>	<u>Total</u>	<u>%</u>
A.I.D.	2,103	100	3,197	34.	5,300	46.
GON	-	-	6,044	65.2	6,044	53.4
Other Nicaraguan Sources	-	-	100	.8	100	.6
TOTAL:	2,103	100	9,341	100	11,444	100

The total estimated cost of the activities to be financed during the four-year period of the program is approximately \$11,444 million broken down into dollar and cordoba costs is presented in the following table:

UNCLASSIFIED

-100-

SUMMARY OF ESTIMATED PROGRAM COSTS
(in thousands of U.S. dollars)

<u>ACTIVITY</u>	<u>Total Cost</u>	<u>Cordoba Cost</u>	<u>Dollar Cost</u>
<u>Upgrade Qualifications Level of Teachers and Professionals</u>	<u>1,876</u>	<u>1,728</u>	<u>148</u>
In-Service Professional Training	661	661	
National Education Center (NEC)	615	467	148
Pre-Service Professional Training University Level (EDUCREDITO)	600	600	
<u>Improve Educational Methods and Facilities</u>	<u>4,313</u>	<u>3,331</u>	<u>982</u>
Curriculum	538	424	114
Educational Materials Center	410	180	230
Textbooks	440	440	-
Guidance and Counseling	170	110	60
Inspection and Supervision	652	432	220
Facilities and Equipment	1,901	1,543	358
Accelerated Adult Education	202	202	-
<u>Improve Management, Administration, Research, and Planning Capabilities of the MPE.</u>	<u>5,255</u>	<u>4,282</u>	<u>973</u>
Provide Technical Advisors, Scholar- ships and other assistance to help the MPE in key areas. (Includes Puestos Claves)	3,866	3,866	-
Research, Educational Technology, Science Innovations and Experimental Schools.	1,389	416	973
	<u>11,444</u>	<u>9,341</u>	<u>2,103</u>

UNCLASSIFIED

UNCLASSIFIED

-101-

A global estimate of flow of funds during the disbursement period of four years starting from CY 1973 follows:

	<u>Global Estimate Flow of Funds</u> (in million of U.S. dollars)				
	<u>CY 1973</u>	<u>CY 1974</u>	<u>CY 1975</u>	<u>CY 1976</u>	<u>TOTAL</u>
A.I.D.	1.9	1.1	1.2	1.1	5.3
Nicaragua	1.1	1.6	1.6	1.7	6.1
	<u>3.0</u>	<u>2.7</u>	<u>2.8</u>	<u>2.8</u>	<u>11.4</u>

For detailed breakdowns of Estimated Project Costs and Estimated Flow of Funds by Components see Annex VI, Exhibits 1, 2, and 3.

2. Breakdown of Nicaraguan Contribution

The Total estimated contribution of Nicaragua is subdivided as follows:

(in thousands U.S. dollars)

Investment Costs equivalent:	\$1,779
Operational Costs equivalent:	\$4,831
Other Costs:	\$ 234
	<u>\$6,044</u>

The investment costs correspond to:

a) Construction of 135 rural primary schools approximately 400 classrooms	\$1,026
b) Furniture	\$ 277
c) Printing and distribution of textbooks	\$ 320
d) Equipment	\$ 96
e) Books	\$ 60
	<u>\$1,779</u>

UNCLASSIFIED

The operational costs correspond to:

a) Personnel	\$3,399
b) Participant Training	60
c) Maintenance	300
d) Miscellaneous Support	372
	<hr/>
	\$4,131

The balance of the Nicaraguan contribution amounting to the equivalent of \$234,000 consists of \$100,000 for EDUCREDITO; \$59,000 for Seminars; and \$75,000 for Contingencies.

One of the conditions precedent to disbursement of Loan funds will be the submission of a Time-Phased Implementation Plan which will indicate the levels of funding per activity and per year. The Loan Committee recommends that specific ratios be established for each year, keeping a certain margin of flexibility for adjustments. It must be expected that some activities may be delayed which would cause a reduction of expenditures for other correlated activities.

Specific clauses will be included in the Loan Agreement to require the timely funding by the GON. It is recommended that during the periodic joint evaluation this matter be given the highest priority on the agenda.

It must be noted that complementary financial inputs may be made by institutions such as CARE which have a special interest in a given activity of the program. In preliminary discussions with the Ministry, representatives of CARE have indicated that CARE would be willing to contribute up to the equivalent of \$200.00 for each rural primary school.

3. A.I.D. Financing of Local Cost

Loan funds will be used to finance about thirty-four percent (34%) of the total local cost, exclusive of land cost.

UNCLASSIFIED

-103-

The Loan Committee has compared this ratio to those of other A.I.D. Sector Loans for Education in other Latin American countries and concluded that the ratio proposed for this loan is reasonable. For a justification of local cost financing by A.I.D. see Section IX.

4. Alternative Sources of Financing

The loan program has been discussed with the international assistance organizations - IBRD, IDB, OAS and UNDP-UNESCO. None of the financial organizations has been interested in a sector or subsector approach at this time and none of the international organizations has current interests or plans to undertake project activities included in the areas of the proposed A.I.D. loan. Also of importance, the loan program has been shaped to take into account and complement the current and planned activities of the international organizations working in the education sector.

By letter dated April 25, 1972 the IDB has advised A.I.D. that it has no interest in financing any part of this program.

The IBRD has notified AID, as a result of a series of meetings, regarding this loan paper, that it has no interest in financing any part of this program.

The proposed loan activities have been discussed at length with the Director of MPE Educational Planning Office regarding GON future plans for assistance requests to the international organizations. Finally there exists a high level external assistance control group (Coordinating Committee on External Assistance) which has reviewed and approved this loan request relative to other external assistance activities for the Education sector as well as the other sectors.

UNCLASSIFIED

B. Economic Evaluation

1. Prospects for Adequate GON Budget Support

Since 1965, the educational budget has almost doubled, increasing from ₡75.6 million to ₡138.8 million in 1971. Although there has been an increase each year in the amount of domestic resources allocated to the Ministry, this has been erratic. From 1968-1970, the average annual growth in the budget has been about ₡8.9 million. In 1971, the increase amounted to ₡12.6 million. The GON has been placing increasingly greater emphasis on education and in 1972 has targeted an increase in the budget amounting to about ₡26 million. This proposed loan requires an average annual increase over the span of the loan of an amount equal to that targeted for the 1972 budget.

The largest element of the GON budget increase, at the equivalent of \$6,044,000 over the next four (4) years, will cover the cost of important new components necessary for the development of an educational system such as in-service professional training, curriculum, guidance and counseling, inspection and supervision and personnel system reform.

The following table summarizes the estimated GON budget support for the program by year.

	<u>000's</u>		
<u>Year</u>	<u>Construction</u>	<u>Other</u>	<u>Total</u>
1973	256	869	1,125
1974	256	1,353	1,609
1975	257	1,357	1,614
1976	257	1,439	1,696

The GON has indicated its willingness to provide the necessary counterpart funding for the loan. The loan agreement will contain a con-

dition requiring such support and will establish a mechanism to insure that the Ministry will allocate the funds as needed. The Government of Nicaragua estimates that revenue will increase by about 13 percent or some \$80 million. Thus the Government will have sufficient resources to allocate to this loan program. The educational sector is expected to share in this and future budgetary increases. Although there are no projections of the government budget for the next ten years, the economy, on the basis of current diversification efforts and proposed new programs for CACM development, should continue to grow and thus so should government revenue. There is no question that over the life of the loan, there will be sufficient resources available to the budget to allocate for the additional teachers and other services required for the development of educational system.

2. Summary Review Ministry of Education Budget 1965-72

There has been a considerable growth of the Ministry's budget since 1965, and it has been the largest budget of all Ministries since 1968. This is a clear indication of the present Administration's priority interest in education, as prior to that date the largest share of the budget went to the Ministry of Public Works (MPW). In addition, while the MPW receives a great deal of its resources from external sources, the MPE's budget has been derived mainly from domestic resources, with external resources from AID and IBRD relatively marginal.

In 1971, the Ministry's budget amounted to \$135.1 million, or about 17 percent of total government expenditure. Although this ratio is in fact below that prevailing in some prior years, the total budget as defined here includes external resources, amortization payments, etc. A more accurate ratio is the Ministry's budget as a ratio of total budget expenditures from domestic revenue only.

In this latter case, in 1965, the Ministry's budget was only 18.1 percent of the total budget. By 1971, the level, after a few years of ups and downs, reached 21.1 percent. In terms of GNP, by 1971,

2.19 percent of the total national resources was allocated to education; in 1965, this ratio was only 1.83 percent. This loan will require that a relatively larger ratio of national resources will have to go into the Ministry's budget.

GON Domestic Internal Financial Education
Budgetary Trends

<u>Year</u>	<u>% GNP</u>	<u>Domestic Financed as % Total Budgetary Domestic Funds</u>
1965	1.83	18.1
1966	1.90	18.6
1967	2.27	22.4
1968	2.24	23.4
1969	2.27	22.0
1970	2.10	20.6
1971	2.19	21.1

As stated above, most of the Ministry's budget has come from domestic resources. In 1971, the Ministry's domestic resource budget totalled ₡135.1 million, while resources from AID and IBRD totalled only about ₡4.1 million. Most of the domestic resources have been allocated towards current expenditures. In 1970 and 1971, current expenditures totalled ₡119.0 million (\$17.0 mn) and ₡129.2 million (\$18.5 mn) respectively, while capital expenditures totalled ₡7.2 million (\$1.03 mn) and ₡9.7 million (\$1.4 mn). Almost 60 percent of current expenditures are allocated toward the primary school system. (See Section I.B. for additional discussion)

3. Prospects of Loan Repayment

The National Planning Office is in the process of preparing a foreign debt repayment schedule for the forthcoming CIAP meeting in June. Based on preliminary data made available to the USAID and IMF estimates of the debt service burden, there appears to be no major difficulty in the foreseeable future.

UNCLASSIFIED

-107-

In 1971, it is estimated that debt repayment may have reached more than \$30 million or about 15 percent of exports of goods and services. It is estimated that the repayments may fall below that level in 1972 and 1973 and thus, with the increase in exports anticipated for those two years, the debt service burden as traditionally measured will decline. According to both the NPO and the IMF, debt service payments are expected to decline thereafter, even including new loans coming due during that time. Thus, if the past trends in export growth continues into the foreseeable future, loan repayments should not give rise to any problem.

UNCLASSIFIED

C. Engineering Evaluation

1. General Description of Construction Program

The construction program of the Project is divided into nine different elements as follows:

- (i) Rural Primary - 400 classrooms, approximately 135 schools.
- (ii) Urban Primary - 200 classrooms, approximately 33 schools.
- (iii) Experimental - 30 rooms, 1 school
- (iv) Primary School Annexes - 18 rooms at 9 existing schools.
- (v) Expansion of ITV - 18 rooms, 6 buildings.
- (vi) Materials Production Center - 7 rooms, 1 building.
- (vii) NEC - 30 rooms, 3 buildings.

Type of Construction. Item (i), Rural Primary Schools will be of simple design and construction, with prefabricated steel frame and roof trusses, asbestos cement roof, non bearing brick or cement block walls, cement tile floors, mesh screen and/or glass and aluminum windows, and wood doors.

UNCLASSIFIED

-109-

All other buildings will be of relatively simple design and construction, one story with reinforced concrete frame, prefabricated steel roof trusses, corrugated zinc roof, non bearing brick walls, cement tile floors, aluminum and glass windows, and wood doors.

Plans and Design. Typical plans have been prepared for the Rural Primary Schools by Construcciones Nacionales in consultation with the Planning Division of the MPE. One pilot school has been erected for the purpose of testing the design and checking construction time and costs.

The Urban Primary Schools and Primary School Annexes will be built in accordance with the plans and design used in the program under Loan No. 524-L-014. A-E work remaining is topography, site adaptation, and preparation of construction plans and bid documents, which will be done under contract with a Nicaraguan A-E firm selected by the GON and approved by USAID/Nicaragua.

Preliminary layouts and floor plans have been prepared for the Experimental School, NEC, expansion of ITV, and the Materials Production Center. Basic design will be an adaptation from Institutes constructed during the Schick Administration. Topography, site adaptation, preparation of final plans and bid documents will also be done under the same contract as mentioned above for the Urban Primary Schools.

Site selection of all schools will be based upon an investigation of topographic, soil, drainage, and certain location conditions to be performed during design and prior to construction. All sites will be approved by a representative of both MPE and CN before final selection. Title to all sites for schools under the jurisdiction of MPE will be obtained and vested in the GON prior to the call for construction bids or start of construction under force account.

With the exception of Rural Primary Schools and Urban Primary Schools which are outside of areas served by Rural Electric Coops,

UNCLASSIFIED

sites will be at locations where electricity is available. Water service will not be available at the rural schools and sanitary service will be provided by latrine. Outside of Managua, sanitary waste disposal will be accomplished by the use of septic tanks.

Cost Estimates. The construction cost estimates include allowances for A-E services, escalation, location within the country, site preparation, and planning and construction contingencies. Based on previous experience with similar type of construction, 97 percent will represent local currency costs and 3 percent U. S. dollar costs. Details of construction volume of the different elements and estimated costs are given in Exhibits 1, 2 and 3, Annex VII.

Construction. Construction of the Rural Primary Schools will be carried out by CN as the schools will be scattered throughout the rural areas of Nicaragua. The fabrication and erection of the steel structural elements will be contracted to private firms insofar as practical. The balance of the construction will be done by CN under force account. In extremely isolated areas it is anticipated that CN will handle all construction work with the exception of steel element fabrication. All costs of the Rural Primary Schools will be borne by the GON.

Construction of all other elements will be by private contract awarded by competitive bidding, to the maximum extent practicable. Bid packages will be made up with the largest number of buildings possible in order to obtain better bid response. In situations where the UIP and USAID determine on a case by case basis that bidding is not practicable by reason of isolation of the location, time restrictions, or the smallness of the job, construction will be done by CN on a force account basis. The advertising for bids, evaluation and contract awards will be the responsibility of CN, as will be the supervision of construction.

2. Technical Feasibility

In regard to the A-E and construction aspects there exists within the private sector in Nicaragua adequate capability and capacity to

carry out the proposed work within the four-year implementation period. Construction contractors from other countries will be eligible to bid but from previous experience foreign firms have shown little interest in the type of construction involved. Past experience, however, has demonstrated that competent private construction contractors have little interest in small jobs in isolated locations of the country, or where they have been induced to bid in such situations, must demand prices that are not considered to be reasonable. In these situations, CN has demonstrated the capacity to do satisfactory work at reasonable costs by the force account method. Whenever construction will be done by CN the supervision of such work will be carried out by a private A & E firm acceptable to A.I.D.

By law CN has certain responsibilities in the supervision of construction of public buildings of the type included in this project. Experience under previous A.I.D. loans has demonstrated that CN is capable of providing the necessary supervision.

The buildings are, in so far as practicable, adaptations to the site conditions of previously constructed structures. Cost estimates are based on actual costs of recently constructed buildings of similar type and specifications with adjustments made for location and projected time of construction. It is considered that the technical and engineering requirements of FAA Section 611 have been met.

3. Implementation Plan

A full time Project Implementation Unit consisting of a Director, Accountant, Auditor, and Engineer will be established. This Unit will report directly to the Minister of Education and will have full responsibility for implementing the loan activities.

The Engineer member of the Unit will be responsible for all architectural, engineering and construction aspects, including review and approval of A-E contracts, plans, specifications, bid documents construction contracts, preparation of engineering and construction reports.

Construction related expenditures will follow the general drawdown schedule shown in another section of the CAP. The schedule for construction of individual units will be established in the Detailed Time Phase Schedule to be prepared as the first step of loan implementation.

4. Maintenance

During the implementation of Loan 524-L-014 the MPE took two positive steps toward improving maintenance of school buildings as follows:

- a. Activation and staffing of the School Construction Section in the MPE, and
- b. Official establishment of the Regulations for Maintenance of Public School Buildings.

These two acts have been effective in improving light or minor maintenance conditions in the schools but there is great variation from school to school due to difference in attitudes of local school organizations (PTA), principals, and inspectors. Having a technical section in the MPE responsible for maintenance has been helpful in getting more attention focused on the problem by higher officials. Execution of major or heavy maintenance work has been, and remains, the responsibility of CN. This agency does an effective job but is dependent on budgetary allocations to finance necessary work, and appropriations are never sufficient to cover needs. CN recently prepared a study which outlines the various problems of public building maintenance and estimates required investment. Additional maintenance funds are included as part of the project budget as a GON contribution.

The essential framework for effective public school maintenance now exists. Continued efforts to improve the situation, on the part of all concerned, will be required for some time.

Section VIII. - LOAN ADMINISTRATION**A. Program Execution****1. GON Organization:**

The Ministry of Public Education under the direction of the Minister will establish overall direction, policy guidance and coordination, and will be ultimately responsible for the successful execution of the loan program. Assisting him in that capacity will be the Director of the Educational Planning Office who will also serve as the chairman of a Loan Advisory Committee made up of prominent Nicaraguan educators and educational officials. Reporting to the Minister of Education or his designee will be a newly constituted Program Implementation Unit (UIP), which will handle the day to day coordination of the program as well as the administrative functions under the loan.

The specific responsibilities of the UIP will be as follows:

- a. Obtain all data, information and undertake action necessary to expedite the submission of materials required under conditions precedent, covenants and conditions of the Loan;
- b. Participate in the preparation of the time-phase implementation plan;
- c. Undertake or coordinate all approvals, contracting, procurement, disbursement, reporting and other functions assigned to it under the Program.
- d. Prepare the agenda for and participate in the periodic joint evaluation meetings provided for in the Loan Agreement.

In order to carry out the large amount of detailed operations which the proper execution of this Program entails, it is projected that the UIP will consist of the following:

-114-

Director
Coordinator
Controller-Accountant
Architect-Engineer

The final composition of the UIP will be determined by the Ministry of Public Education and approved by USAID. The establishment of the UIP will be a condition precedent to disbursement of the Loan.

2. USAID Monitoring Organization

A USAID Project Committee will be established to monitor the Project. It will be composed of representatives of the Capital Development, Engineering, Program, Controller and Education Divisions of the USAID. Specific functions, authority and responsibilities will be assigned to each member of the Project Committee by the USAID/Director.

The USAID Project Committee shall meet with the Program Implementation Unit at least once a month. It is expected however, that during the period of negotiation of the Loan Agreement and as long as the conditions precedent to initial disbursement of loan funds will not have been met, continuing contact will be maintained with the MPE by the Education Advisor or his alternate who will serve as liaison officer for the USAID Project Committee.

B. Execution Plan

1. Loan Implementation

On the basis of prior communications with AID/W it is assumed by the USAID that the loan will be authorized by June 30, 1972. At that time the Program Implementation Unit (UIP-Unidad de Implementación del Préstamo) should be officially designated by the Minister of Public Education and enter into their organizational stage. Upon official notification of the loan authorization and conditions, the UIP

can begin to prepare material to meet the standard conditions precedent; the scopes of work; the contracts, as necessary for A & E and the Technical Assistance advisors. The UIP will begin immediately to work within the Ministry with other entities to draw up the master time-phase plan. By the end of December, the conditions precedent to initial general disbursement should be met and the time-phased plan completed. General disbursement for loan activities thus can be projected to begin in January, 1973.

2. Program Implementation

The first task of the GON MPE, following loan signature, will be to prepare a master time-phased implementation plan indicating timing and the inter-relation of steps required to assure timely execution of the program. Once the master plan is completed the Program Implementation Unit will maintain timely execution of the plan.

C. Administrative Provision

1. Training

The MPE will be responsible for all training conducted under the loan. After training requests are drawn up relative to the various project activities of the loan, the MPE, through the Program Implementation Unit, will prepare training programs, placements, and handle administrative arrangements, e.g. administering examinations, helping participants meet entrance requirements, arranging for payments, monitoring academic performance, and reporting. In-country training involves short-term in-service training and long-term teacher preparation programs. For the in-service training the MPE, and the universities will conduct the training courses. The Program Implementation Unit of the MPE will furnish the administrative support for all in-service programs as well as for any of the participants sent out of the country for advanced study.

2. Construction

There are approximately 188 buildings planned for the construction phase of the loan:

135	Rural Primary Schools
33	Urban Primary Schools
3	National Educational Center
1	Experimental School
9	Primary School Annexes
6	Buildings at Instituto Tecnico Vocacional (ITV); and
1	Materials Production Center

An Engineer will be placed on the staff of the Loan Implementation Unit of the Ministry to provide global A & E direction and guidance. Construcciones Nacionales will administer the bidding process for all construction contracts. Construction services will be provided by private firms, to the maximum extent practicable. In the case of the primary and basic cycle school construction it is recommended that bidding will be in packages as large as possible. Due to the limited amount involved and the scattered location of rural elementary schools, CN will undertake construction of all buildings. The cost of construction of such schools will be borne by the GON. All contracts and contracting procedures will conform to the A.I.D. Capital Project Guidelines.

3. Technical Assistance

The Loan provides for appropriate technical assistance to reinforce various of the project activities. The program will make use of the technical services available from Code 941 countries although it is envisioned that the bulk of the TA would come either from the U. S. or the Spanish speaking countries (except Cuba) of Latin America. Thus technical assistance will be furnished mainly in three general areas: (1) Educational Administration - planning, management, budgeting, evaluation, information systems; (2) Educational Methods - teacher training, supervising, curriculum, guidance, texts, and instructional materials; and (3) Educational Research - research, statistics, experimentation, innovation. It is anticipated that personal services contracts will be administered by the Program Implementation Unit of the MPE in the furnishing of TA under the loan. This will involve recruiting, logistic support, and administrative support for the technical assistance provided. Each activity within the loan will then submit their TA requests in accordance with their work plans to the Program Implementation Unit of the MPE which will review and approve them. The Program Implementation Unit will then request the required services from the contractor and draw up the necessary personal services contract. The TA contracts will be awarded in conformance with A.I.D. Capital Projects Guidelines.

4. Commodities

The commodity component is divided into two major categories:

UNCLASSIFIED

-117-

(1) instructional materials, which includes books and teaching materials, and (2) vehicles, equipment and materials required for new school facilities construction and the development of the Instructional Materials Center. Instructional materials will include books and teaching materials. The purchase of books will be subject to a purchase and distribution plan acceptable to the Program Implementation Unit and A.I.D. Such plan will be drawn up by the Project Office involved; the procurement will be carried out by the Purchase and Supply Office of the MPE, in accordance with A.I.D. Capital Projects Guidelines. The Program Implementation Unit of the Ministry of Public Education will have primary responsibility to submit for A.I.D. review a final equipment list for each activity. The actual procurement will be conducted by the Purchase and Supply Office of the MPE and will conform to A.I.D. Capital Projects Guidelines.

5. Research

Also proposed for loan financing are research studies. The Research Section of Educational Planning Office will award research contracts to the Nicaraguan universities and possibly other Nicaraguan educational institutions. These contracts will be let in conformance with A.I.D. Project Capital Guidelines.

6. Disbursements

Disbursements for dollar costs of procurement incurred under the loan will be made under normal AID procedures through Letters of Commitment which will be established from time to time. Other dollar costs associated with technical assistance and participant training elements will follow normal AID procedures. Disbursements for local currency costs for construction will be similar to procedures followed under loan L-014 (Primary School Construction) under which a special account in the name of the Ministry of Public Education was set up in the Central Bank. An advance will be made from loan funds to this account which will be drawn down by the Ministry as construction payments become due. Where consulting engineering firms are supervising construction, disbursement for progress payments will require consultant certification.

UNCLASSIFIED

- 118 -

Where force account procedures are utilized, supporting documents from the Ministry of Public Works will be required. Replenishment of the fund will occur from time to time based on Mission review of documentation which justified earlier disbursements from the fund. Local currency disbursements for other local costs incurred under the loan, i.e., for teacher training activities and EDUCREDITO will be made directly to the organizations involved following procedures to be agreed upon by the USAID and the Borrower. Overall fiscal monitoring of the loan by the Borrower will be carried out by the Program Implementation Unit of the Ministry of Public Education.

D. Progress Review

A joint review by A.I.D. and the Borrower to determine adequacy of progress in achieving the program goals will be held at least annually preferably during the month of August of each year to coincide with the time when the draft budget of the MPE is prepared, or at such interim times as may be agreeable to both parties.

The progress review committee should consist of the following members:

Representing USAID: USAID Director or his designee
 Human Resources Advisor
 Program Officer
 Development Loan Officer
 General Engineering Officer
 Technical Advisors according to needs.

Representing GON: Minister of Public Education or his designee
 Director, Educational Planning Office
 Loan Implementation Unit Director
 Appropriate Technical Advisors (Contract and Local)
 Such other members as designated by the GON.

Approximately one month prior to each review, the USAID Project Manager in cooperation with the Director of the Program Implementation Unit will develop an agenda listing the activities to be reviewed, establish guidelines for assembling data and supporting documentation and make a checklist to assist the review committee in assessing progress during the period under review.

The major purpose of the periodic reviews is to determine if sufficient and satisfactory progress has taken place during the preceding period so that activities scheduled for implementation subsequent to such review may be authorized. At the same time the problem analysis and strategy will be reviewed to determine its relevancy as the program develops. Recommendations by the review committee may include the following alternatives; proceed with all activities as scheduled; delay initiation of certain activities subject to corrective action by a specified date; revise the implementation schedule to conform more closely with actual experience; postpone all activities until corrective action has been taken and a new review scheduled; or update problem analysis and strategy. The agenda shall also include a specific evaluation of the timeliness of GON and A.I.D. financial inputs.

E. Conditions and Covenants

1. Prior to Signature - The following conditions are proposed as conditions precedent to signature of the Loan Agreement:

- a) Creation of a separate unit within the MPE to implement the program;
- b) Appointment of personnel to staff the unit.

2. Conditions Precedent to Initial Disbursement

Conditions precedent to disbursement will include the standard conditions and the following special requirements:

- a) Prior to any disbursement of loan funds, the Borrower shall submit:
 - i) A Time-Phased Implementation Plan (CP, PERT, etc.), satisfactory to A.I.D. Such plan shall include each component of this project, showing its interrelationship with, and priority relative to, other components.
 - ii) Evidence, satisfactory to A.I.D., that Borrower will, on a timely basis, provide the funds, in addition to the loan, necessary for the carrying out of the education sector loan program.
 - iii) Evidence, satisfactory to A.I.D., that the Borrower will provide, on a timely basis appropriately trained personnel for each activity of the program.

- b) Prior to any disbursement under the loan for construction services for a particular construction sub-project, the Borrower shall, except as A.I.D. may otherwise agree in writing, furnish to A.I.D. in form and substance satisfactory to A.I.D.:
- i) A draft contract for engineering services for the Program acceptable to A.I.D. with a firm or individual acceptable to A.I.D.
 - ii) A draft contract with a private firm or individual acceptable to A.I.D. for the supervision of any loan funded force account construction services.
 - iii) Plans and specifications, bid documents, cost estimates, and time schedule for carrying out the construction sub-projects.
 - iv) Evidence of legal title and right of way to all construction sites.
 - v) A draft contract, acceptable to A.I.D. for construction services with a firm acceptable to A.I.D.
 - vi) A draft of the proposed agreement between the MPE and Construcciones Nacionales for force account construction services.
 - vii) A maintenance plan for the particular facilities comprised in the Program as well as the vehicles and equipment procured with loan funds, and evidence of sufficient budgetary support to accomplish adequate maintenance practices for the life of the facilities and equipment.
- c) Prior to any disbursement under the loan for procurement of equipment, the Borrower shall, except as A.I.D. may otherwise agree in writing, furnish to A.I.D. in form and substance satisfactory to A.I.D.:
- i) An equipment list for each activity
 - ii) A procurement plan.

UNCLASSIFIED

-121-

- d) Prior to any disbursement under the loan, for the purchase of textbooks, the MPE shall submit to A.I.D. a purchase and distribution plan satisfactory to A.I.D.

3. Covenants

In addition, the Borrower will agree to:

- a) Except as A.I.D. may otherwise agree in writing, MPE shall expend during each year of the Loan an amount not less than the previous year's total expenditures by the MPE calculated without regard to counterpart contributions required by external loans and grants.
- b) Support the Loan program through budget allocations in amounts sufficient to accomplish the purposes of the program in conformance with the time-phased implementation plan referred to above.
- c) Maintain, with its own resources, the level of recurrent costs of the Educational Sector Program after the disbursement of loan funds.
- d) Undertake with A.I.D. a joint review of the program at least annually, or at such interim times as may be agreeable to both parties, to determine the adequacy of progress in achieving the program goals and to determine if there is need to revise the sector analysis, strategy, and programs. If, in the course of the periodic review, it becomes apparent that the purposes of the loan will not be attained, A.I.D. may suspend disbursements under the loan.
- e) Provide on a timely basis appropriately trained personnel to staff each facility financed with loan funds.

Other Terms and Conditions

The loan shall be subject to such other terms and conditions as A.I.D. may deem advisable.

UNCLASSIFIED

Section IX - ISSUES**A. Prospects of Effective Loan Implementation**

For the first time the Ministry of Education will be charged with the responsibility of implementing a complex sector loan.

During the preliminary negotiations both the USAID and the Ministry recognized that, due to the magnitude of the program, which goes far beyond a simple brick-and-mortar project, and particularly to the aspects dealing with the changes and upgrading of the educational process in Nicaragua, a separate implementation unit, within the Ministry, paid with GON funds, will be needed to carry out the effective implementation of the project at least during the disbursement period. (See Section VI,)

The creation and staffing of this separate Program Implementation Unit, satisfactory to A.I.D., will be a condition precedent to the signing of the Loan Agreement. (See Section VIII,)

In order to provide the necessary standards and guidelines for adequate implementation based on efficient coordination of efforts and impacts within the program, the preparation and submission of a Time-Phased Implementation Plan, acceptable to A.I.D. will also be required as a condition precedent to initial disbursement. (See Section VIII)

The Loan Committee is convinced that with a Program Implementation Unit, staffed with competent technicians following a well balanced Time-Phased Implementation Plan, the MPE will be able to effectively carry out the implementation of the Sector Loan.

B. Capacity of the GON to carry out Additional Financial Burden

The annual increase in the Ministry's budget for the period 1973-76

UNCLASSIFIED

-123-

including the "normal" increase and that required in support of the USAID loan, exceeds the budgetary increases that the Ministry received during the period 1965-1971. In those latter years, the Ministry's budget rose an average of 10 million cordobas, and is budgeted to increase by an additional 26.5 million cordobas in 1972. In contrast, the average annual increase in the budget for the period 1973-76, including normal and AID loan requirements, is 26.6 million cordobas. Only in 1967, when the Ministry's budget rose by 20.9 million cordobas, has the proposed level of increase been approached. Thus, the Loan Committee concludes that the amount equivalent to \$6,244,000. is the maximum that the GON can safely undertake to contribute, particularly if it must provide a substantial additional sum estimated at about \$2,160,000. to cover the cost of land and the cost of construction of the new Ministry facility.

There are several factors that tend to indicate that the GON should be able to support the AID loan. First, MPE budgetary requirements usually have been exaggerated, and in most years the Ministry's actual expenditures have fallen 7-8 million cordobas below the budgeted amount. Thus the increase projected for the normal budget would seem to be too high. Second, prior to 1975 the MPE should complete its program with the World Bank and this should release financial resources to support the AID loan; the total burden on the GON budget was \$28 million. Finally, the MPE has been in contact with the National Planning Office and the Budget Office to ensure that funding levels for the AID loan will be included in future budgetary projections.

In any event, the USAID plans to establish at least two conditions to ensure that funds would be provided for this loan. Before releasing US resources for the loan, the USAID will require that each annual budget contains clearly delineated and specific budgetary items for loan-support. Further, the implementation plan will contain information showing the GON requirements for each quarter or other agreed upon time period. If the GON funds or activities are not started on time, the USAID will not release its funds for any new activity.

UNCLASSIFIED

C. Timely Provision of Funds by the GON

The Loan Committee has carefully analyzed this matter and discussed its main features with representatives of the GON.

Appropriate provisions will be made in the Loan Agreement to cover this point which is considered essential to the success of the Sector Project.

D. Timely Provision of Adequate Teaching Staff and Trained Personnel for Program Facilities and Activities.

The MPE and the USAID recognize the importance of the timely provision of personnel appropriately trained and sufficient in number required by the total program. The Time-Phased Implementation Plan will include a plan for the timely provision of qualified personnel in sufficient numbers to meet the requirements necessary for the successful implementation and completion of each of the activities within the proposed program.

The timely provision of personnel is a crucial issue. The Loan Agreement will contain the following provisions: a) as a condition precedent to initial disbursement under the Loan, the MPE will submit evidence satisfactory to AID that appropriately trained personnel will be available for the overall program on a timely basis for each activity or facility financed with program funds; b) the GON shall covenant that appropriately trained staff will be available on a timely basis for each activity or facility financed with program funds.

E. Proposed Local Cost Financing

As explained in paragraph B) above, the Loan Committee believes that the very substantial financial input of the GON is the maximum that it will be able to contribute. This leaves an amount equivalent to about thirty-four percent (34%) of the costs which will have to be covered with loan funds. The budgeting resources of the GON are limited and the balance of payments position of Nicaragua requires U.S. support despite recent improvements. It is felt that a reduction of the size of the loan to minimize the local cost financing would not encourage the GON to

carry out the multi-activity interrelated reform it is undertaking under the Sector Loan.

The Loan Committee strongly recommends approval of the mix of dollar and local cost to be covered with A.I.D. funds.

F. Maintenance Requirements

While Nicaragua enjoys, among the other Latin American countries, a well discussed reputation for being conscious of the need for maintenance, the Loan Committee is recommending that the GON provide a minimum of the equivalent of \$300,000 for maintenance cost additional to the normal budget provision for this item. The MPE will also be required to submit a comprehensive maintenance plan which will describe activities, staffing, training and financing. This will be covered by appropriate conditions and covenants in the Loan Agreement.

AID 1240-2 (4-72)

CHECKLIST OF STATUTORY CRITERIA

(Alliance for Progress)

In the right-hand margin, for each item write answer or, as appropriate, a summary of required discussion. As necessary, reference the section(s) of the Capital Assistance Paper, or other clearly identified and available document, in which the matter is further discussed. This form may be made a part of the Capital Assistance Paper.

The following abbreviations are used:

FAA - Foreign Assistance Act of 1961, as amended.

App. - Foreign Assistance and Related Agencies Appropriations Act, 1971.

MMA - Merchant Marine Act of 1936, as amended.

COUNTRY PERFORMANCE

Progress Towards Country Goals

1. FAA Section 208; Section 251 (b).

A. Describe extent to which country is:

(1) Making appropriate efforts to increase food production and improve means for food storage and distribution.

(1) The GON has made appropriate efforts to increase food production and improve food storage and distribution facilities. Nicaragua used to import a substantial portion of its basic grain needs. Since 1969 Nicaragua has increased production of grain with the assistance of financing from AID loan 524-L-022 (Basic Crops) and started to export rice and beans. In 1970 and 1971 Nicaragua was practically self-sufficient in corn and sorghum. The

GON has built up its food storage facilities and capacity increase to 189,000 ton in CY 1971 and is projected at 209,000 tons at the end of 1972 (omitted by EXIM Bank loan). In addition, the GON is carrying out a USAID Grant TC Program in marketing and distribution to improve food storage and distribution system.

126

AID 1240-2

(2) Creating a favorable climate for foreign and domestic private enterprise and investment.

(2) The GON has created a favorable climate for foreign and domestic private enterprise and investment. Only the size of the markets and the scarcity of skilled human resources can be considered as limiting the participation of the foreign and domestic private investors.

(3) Increasing the public's role in the development process.

(3) The public's role in the development process has been considerable in Nicaragua and the GON is actively attempting to stimulate further participation therein. This loan will encourage private support of educational development through donations of land, labor, and capital. It is estimated that about 10,000 people will be engaged in community assistance and participation in project implementation. Upon completion, the project will involve about 25,000 additional students annually and permanent addition to the teaching staff.

(4) (a) Allocating available budgetary resources to development.

(4) (a) The GON allocates a significant portion of its National Budget to activities related to Development.

(4) (b) Diverting such resources for unnecessary military expenditure (See also Item No.16) and intervention in affairs of other free and independent nations. (See also Item No.14).

(4) (b) Nicaragua does not appear to be making unnecessary military expenditures nor preparing to intervene in the affairs of any other free and independent nation. Total military expenditures amount to approximately 11% of the National Budget.

127

AID 1240-2

(5) Willing to contribute funds to the project or programs.

(6) Making economic, social and political reforms such as tax collection improvements and changes in land tenure arrangements, and making progress toward respect for the rule of law, freedom of expression and of the press, and recognizing the importance of individual freedom, initiative, and private enterprise.

(7) Adhering to the principles of the Act of Bogota and Charter of Punta del Este.

(8) Attempting to repatriate capital invested in other countries by its own citizens.

(9) Otherwise responding to the vital economic, political, and social concerns of its people, and demonstrating a clear determination to take effective self-help measures.

(5) The GON has indicated its willingness to allocate the funds for this program. See Section IV, Annex VIII, Exhibit 2. of the Capital Assistance Paper.

(6) Nicaragua has initiated various programs tending to social and political reforms, tax collection improvement, additional taxes, changes in land tenure, reliability on property records. AID Loan No. 524-L-012 (Tax Improvement) has been a great help. Nicaragua allows for freedom on expression and of the press as well as individual freedom, initiative and private enterprise.

(7) The Borrower is adhering to the principles of the Act of Bogota and the Charter of Punta del Este.

(8) In following a course of political stability and in its efforts to promote economic development, Nicaragua gives an incentive to its own citizens to repatriate capital.

(9) Account has been taken of the Borrower's responsiveness to the vital economic political and social concerns of its people. Nicaragua is further improving its educational system with the present loan. Public health services and electrification through rural cooperative organization programs, financed with the assistance of AID loans, have been established by the GON in response to the vital economic, political and social concerns of its people. These programs have demonstrated effective self-help measures.

AID 1240-2

B. Are above factors taken into account in the furnishing of the subject assistance?

Yes

Treatment of U.S. Citizens

- | | |
|--|--|
| 2. <u>FAA Sec.620(c)</u> . If assistance is to government, is the government liable as debtor or unconditional guarantor on any debt to a U.S. citizen for goods or services furnished or ordered where (a) such citizen has exhausted available legal remedies and (b) debt is not denied or contested by such government? | 2. The Borrower is not known to be indebted to any U.S. Citizen in any such manner. |
| 3. <u>FAA Sec.620(e) (1)</u> . If assistance is to a government, has it (including government agencies or subdivisions) taken any action which has the effect of nationalizing, expropriating, or otherwise seizing ownership or control of property of U.S. citizens or entities beneficially owned by them without taking steps to discharge its obligations toward such citizens or entities? | 3. The GON has not taken any such action. |
| 4. <u>FAA Sec.620(o); Fishermen's Protective Act.Sec.5</u> . If country has seized, or imposed any penalty or sanction against any U.S. fishing vessel or account of its fishing activities in international waters. | 4. The GON has not seized or imposed any penalty or sanction against any U.S. fishing vessel on account of its fishing activities in international waters. |
| a. Has any deduction required by Fishermen's Protective Act been made? | a. Not applicable. |

129

AID 1240-2

b. Has complete denial of assistance been considered by A.I.D. Administrator?

b. Not applicable

Relations with U.S. Government and Other Nations

5. FAA Sec.620(d). If assistance is for any productive enterprise which will compete in the U.S. with U.S. enterprise, is there an agreement by the recipient country to prevent export to the U.S. of more than 20% of the enterprise's annual production during the life of the loan?

5. Not applicable

6. FAA Sec.620(i). Has the country permitted or failed to take adequate measures to prevent, the damage or destruction by mob action, of U.S. property?

6. Nicaragua has not permitted this and has taken adequate measures to prevent such damage or destruction.

7. FAA Sec.620(l). If the country has failed to institute the investment guaranty program for the specific risks of expropriation, in convertibility or confiscation, has the A.I.D. Administration within the past year considered denying assistance to such government for this reason?

7. The GON has instituted the investment guaranty program in which guaranties were issued for operations amounting to more than \$36 million by the end of CY 1971.

8. FAA Sec.620(q). Is the government of the recipient country in default on interest or principal of any A.I.D. loan to the country?

8. No.

9. FAA Sec.620(t). Has the country severed diplomatic relations with U.S.? If so, have they been resumed and have new bilateral assistance agreements been negotiated and entered into since such resumption?

9. Nicaragua maintains diplomatic relations with the U.S.

AID 1240-2

- | | |
|---|---|
| 10. <u>FAA Sec.620(u)</u> . What is the payment status of the country's U.N. obligations? If the country is in arrears, were such arrearage taken into account by the A.I.D. Administrator in determining the current A.I.D. Operating Year Budget? | 10. Nicaragua is not delinquent on its U.S. obligations. |
| 11. <u>FAA Sec.620(a)</u> . Does recipient country furnish assistance to Cuba or fail to take appropriate steps to prevent ships or aircraft under its flag from carrying cargoes to or from Cuba? | 11. Nicaragua does not furnish assistance to Cuba and has taken appropriate steps to prevent trade with Cuba. |
| 12. <u>FAA Sec.620(b)</u> . If assistance is to a government, has the Secretary of State determined that it is not controlled by the international Communist movement? | 12. The Secretary has so determined. |
| 13. <u>FAA Sec.620(f)</u> . Is recipient country a Communist country? | 13. No |
| 14. <u>FAA Sec.620(i)</u> . Is recipient country in any way involved in (a) subversion of, or military aggression against, the U.S. or any country receiving U.S. assistance, or (b) the planing of such subversion or aggression? | 14. No |
| 15. <u>FAA Sec.620(n)</u> . Does recipient country furnish goods to North Viet-Nam or permit ships or aircraft under its flag to carry cargoes to or from North Viet-Nam? | 15. Available information reveals no case of trafficking or permitting trafficking with North Viet-Nam. |

AID 1240-2

16. FAA Sec. 481. Has the government of recipient country failed to take adequate steps to prevent narcotic drugs and other controlled substances (as defined by the Comprehensive Drug Abuse Prevention and Control Act of 1970) produced or processed, in whole or in part, in such country, or transported through such country, from being sold illegally within the jurisdiction of such country to U.S. Government personnel or their dependents, or from entering the U.S. unlawfully?

16. Nicaragua has taken adequate steps to prevent these activities. AID, through its Public Safety Program is assisting the GON in this matter.

Military Expenditures

17. FAA Sec.620(s). What percentage of country budget is for military expenditures? How much of foreign exchange resources spent on military equipment? How much spent for the purchase of sophisticated weapons systems? (Consideration of these points is to be coordinated with the Bureau for Program and Policy Coordination, Regional Coordinators and Military Assistance Staff (PPC/RC).)

17. Approximately 11% of the budget goes for military expenditures. Foreign exchange resource spent on military equipment is minimal. No expenditure is made for the purchase of sophisticated weapons systems.

CONDITIONS OF THE LOAN

General Soundness

18. FAA Sec.201(d). Information and conclusion on reasonableness and legality (under laws of country and the United States) of lending and relending terms of the loan.

18. The proposed loan is legal under the laws of Nicaragua and the U.S. and its terms are considered reasonable for Nicaragua.

122

AID 1240-2

19. FAA Sec.251(b) (2); Sec.251(e). Information and conclusion on activity's economic and technical soundness. If loan is not made pursuant to a multilateral plan, and the amount of the loan exceeds \$100,000, has country submitted to A.I.D. an application for such funds together with assurances to indicate that funds will be used in an economically and technically sound manner?
20. FAA Sec.251(b). Information and conclusion on capacity of the country to repay the loan, including reasonableness of repayment prospects.
21. FAA Sec.611(a) (1). Prior to signing of loan will there be (a) engineering, financial, and other plans necessary to carry out the assistance and (b) a reasonably firm estimate of the cost to the United States of the assistance?
22. FAA Sec.611(a) (2). If further legislative action is required within recipient country, what is basis for reasonable expectation that such action will be completed in time to permit orderly accomplishment of purposes of loan?
19. Preliminary economic and technical studies have been prepared for this project.
20. Nicaragua is current in meeting its external debt service obligations. It appears reasonably certain that Nicaragua will repay the loan. The country's foreign exchange position warrants the conclusion that dollars will be available as needed for repayment.
21. Preliminary engineering plans, specifications and cost estimates and detailed financial projections have been prepared and were the basis of the data in this paper. Estimates on which loan is based reasonably represent maximum level of U.S. assistance.
22. Additional legislation is not required in order to execute this project as planned. The Loan Agreement will require congressional ratification but this is not expected to interfere with timely execution.

127

AID 1240-2

23. FAA Sec.611(e). If loan is for Capital Assistance, and all U.S. assistance to project now exceeds \$1 million, has Mission Director certified the country's capability effectively to maintain and utilize the project?
23. Yes (See Annex II)
24. FAA Sec.251(b). Information and conclusion on availability of financing from other free-world sources, including private sources within the United States.
24. Financing from other free world sources, including other U.S. sources, is not available for financing proposed AID contribution to this Sector Loan.

Loans's Relationship to Achievement of Country and Regional Goals

25. FAA Sec.207; Sec.251(a). Extent to which assistance reflects appropriate emphasis on: (a) encouraging development of democratic, economic, political, and social institutions; (b) self-help in meeting the country's food needs; (c) improving availability of trained manpower in the country; (d) programs designed to meet the country's health needs, or (e) other important areas of economic, political, and social development, including industry; free labor unions, cooperatives, and Voluntary Agencies; transportation and communication; planning and public administration; urban development, and modernization of existing laws.
25. The overall objective of this project is to assist the GON to increase the output and improve the quality and relevance of its educational system so that more and better trained Nicaraguans will be able to contribute to the social, economic and political development of their country. Such educational development is basic to the achievement of objectives (a) through (e).
26. FAA Sec. 209. Is project susceptible of execution as part of regional project? If so why is project not so executed?
26. No. The present loan is designed to finance a program based on an analysis of the Education sector.

134

AID 1240-2

27. FAA Sec. 251(b) (3). Information and conclusion on activity's relationship to, and consistency with, other development activities, and its contribution to realizable long-range objectives.
 28. FAA Sec. 251(b) (7). Information and conclusion on whether or not the activity to be financed will contribute to the achievement of self-sustaining growth.
 29. FAA Sec. 281(a). Describe extent to which the loan will contribute to the objective of assuring maximum participation in the task of economic development on the part of the people of the country, through the encouragement of democratic, private, and local governmental institutions.
 30. FAA Sec. 281(b). Describe extent to which program recognizes the particular needs, desires, and capacities of the people of the country; utilizes the country's intellectual resources to encourage institutional development; and supports civic education and training in skills required for effective participation in governmental and political processes essential to self-government.
27. This education activity is fundamental to achievement in all of the GON development programs and is considered to be a main contribution to realizing long-range objectives.
 28. An improved educational system is essential for the achievement of self-sustaining growth in Nicaragua.
 29. This project will promote increased popular participation in the economic development of Nicaragua by expanding the pool of trained manpower capable of such participation and contribution to the economy.
 30. The project is in response to a demonstrated need and desire of the people of Nicaragua for an improved educational system. The development of Nicaragua's human resources to be as furthered by this project is a prerequisite for the process of institution building and to effective participation in the governmental and political processes of Nicaragua.

13

AID 1240-2

- | | |
|---|--|
| 31. <u>FAA Sec. 601(a)</u> . Information and conclusions whether loan will encourage efforts of the country to: (a) increase the flow of international trade; (b) foster private initiative and competition; (c) encourage development and use of cooperatives, credit unions, and savings and loan associations; (d) discourage monopolistic practices; (e) improve technical efficiency of industry, agriculture, and commerce; and (f) strengthen free labor unions. | 31. The project will contribute directly to all of these goals with the exception of (a), and (c). |
| 32. <u>FAA Sec. 619</u> . If assistance is for newly independent country; is it furnished through multilateral organizations or plans to the maximum extent appropriate? | 32. Nicaragua is not a newly independent country. |
| 33. <u>FAA Sec. 251(h)</u> . Information and conclusion on whether the activity is consistent with the findings and recommendations of the Inter-American Committee for the Alliance for Progress in its annual review of national development activities. | 33. This sector loan is consistent with the findings of the most recent CIAP review of Nicaragua. |
| 34. <u>FAA Sec. 251(g)</u> . Information and conclusion on use of loan to assist in promoting the cooperative movement in Latin America. | 34. Not Applicable |
| 35. <u>FAA Sec. 209; Sec. 251(b) (8)</u> . Information and conclusion whether assistance will encourage regional development programs, and contribute to the economic and political integration of Latin America. | 35. This project will not directly contribute to the integration of Latin America. |

136

Loan's Effect on U.S. and A.I.D.
Program

- | | |
|---|--|
| <p>36. <u>FAA Sec. 251(b) (4); Sec.102.</u> Information and conclusion on possible effects of loan on U.S. economy, with special reference to areas of substantial labor surplus, and extent to which U.S. commodities and assistance are furnished in a manner consistent with improving the U.S. balance of payments position.</p> <p>37. <u>FAA Sec. 501(b).</u> Information and conclusion on how the loan will encourage U.S. private trade and investment abroad and how it will encourage private U.S. participation in foreign assistance programs (including use of private trade channels and the services of U.S. private enterprise).</p> <p>38. <u>FAA Sec. 601(a).</u> If a capital project, are engineering and professional services of U.S. firms and their affiliates used to the maximum extent consistent with the national interest?</p> <p>39. <u>FAA Sec. 602.</u> Information and conclusion whether U.S. small business will participate equitably in the furnishing of goods and services financed by the loan.</p> | <p>36. Part of the loan funds for this project will probably be used for U.S. procurement of goods and services since Geographic Area Code 941 is applicable. There are no foreseeable adverse effects on any area of the U.S. economy.</p> <p>37. Private U.S. firms will provide part of the services and materials to be financed by the Loan consistent with Code 941 procurement.</p> <p>38. Yes, procurement of engineering and professional services will be made according to the new guidelines of the U.S. policy as announced by President Nixon.</p> <p>39. U.S. small business will have a chance to participate in the furnishing of goods and services financed by the loan because all proposed procurement will be published in the Commerce Business Daily and AID Small Business Circular as specified in the AID Capital Guidelines.</p> |
|---|--|

137

AID 1240-2

40. FAA Sec. 620(h). Will the loan promote or assist the foreign aid projects or activities of the Communist-Bloc countries?
40. There is no foreign assistance being given to Nicaragua by Communist-Bloc countries.
41. FAA Sec. 621. If Technical Assistance is financed by the loan, information and conclusion whether such assistance will be furnished to the fullest extent practicable as goods and professional and other services from private enterprise on a contract basis. If the facilities of other Federal agencies will be utilized, information and conclusion on whether they are particularly suitable, are not competitive with private enterprise, and can be made available without undue interference with domestic programs.
41. The Loan will finance the procurement of goods and services from private enterprise on a contract basis. No utilization of the services of other Federal Agencies is contemplated.
42. FAA Sec. 252(a). Total amount of money under loan which is going directly to private enterprise, is going to intermediate credit institutions or other borrowers for use by private enterprise, is being used to finance imports from private sources, or is otherwise being used to finance procurements from private sources.
42. A substantial amount, perhaps over \$4,000,000.00, of the loan will go to private enterprise for goods and services.

AID 1240-2

Loan's Compliance with Specific Requirements

43. FAA Sec. 201(d). Is interest rate of loan at least 2% per annum during grace period and at least 3% per annum thereafter? 43. Yes.
44. FAA Sec. 608(a). Information on measures to be taken to utilize U.S. Government excess personal property in lieu of the procurement of new items. 44. The Loan Agreement will include a standard provision for use of excess property where appropriate.
45. FAA Sec. 604(a). Will all commodity procurement financed under the loan be from the United States except as otherwise determined by the President? 45. Procurement will be from the U.S. and countries in AID Geographic Code 941.
46. FAA Sec. 604(b). What provision is made to prevent financing commodity procurement in bulk at prices higher than adjusted U.S. market price? 46. No bulk commodity procurement is contemplated under this loan.
47. FAA Sec. 604(d). If the cooperating country discriminates against U.S. marine insurance companies, will loan agreement require that marine insurance be placed in the United States on commodities financed by the loan? 47. Nicaragua does not so discriminate. The Loan Agreement will so provide.
48. FAA Sec. 604(e). If offshore procurement of agricultural commodity or product is to be financed, is there provision against such procurement when the domestic price of such commodity is less than parity? 48. No agricultural commodities or products will be procured with this loan.

AID 1240-2

49. FAA Sec. 611(b); App. Sec. 101. If loan finances water or water-related land resource construction project or program, is there a benefit-cost computation made, insofar as practicable, in accordance with the procedures set forth in the Memorandum of the President dated May 15, 1962?
50. FAA Sec. 611(c). If contracts for construction are to be financed, what provision will be made that they be let on a competitive basis to maximum extent practicable?
51. FAA Sec. 620(g). What provision is there against use of subject assistance to compensate owners for expropriated or nationalized property?
52. FAA Sec. 612(b); Sec. 636(h). Describe steps taken to assure that, to the maximum extent possible, the country is contributing local currencies to meet the cost of contractual and other services, and foreign currencies owned by the United States are utilized to meet the cost of contractual and other services.
53. App. Sec. 104. Will any loan funds be used to pay pensions, etc., for military personnel?
54. App. Sec. 106. If loan is for capital project, is there provision for A.I.D. approval of all contractors and contract terms?
49. Not applicable.
50. The loan agreement will provide that contracts for construction will be awarded on a competitive basis, to the maximum extent practicable.
51. Assistance provided by this loan will not be used to compensate owners for expropriated or nationalized property and the loan agreement shall so specify.
52. Account has been taken of the availability of any local currencies that might be used in this project as outlined in the CAP (See Section IX, Issues, E. Page 132.)
53. No.
54. Yes

140

AID 1240-2

- | | | | |
|-----|---|-----|-------------------------------------|
| 55. | <u>App. Sec. 108.</u> Will any loan funds be used to pay U.S. assessments? | 55. | No. |
| 56. | <u>App. Sec. 109.</u> Compliance with regulations on employment of U.S. and local personnel for funds obligated after April 30, 1964 (A.I.D. Regulation 7). | 56. | Regulation 7 will be complied with. |
| 57. | <u>FAA Sec. 636(i).</u> Will any loan funds be used to finance purchase, long-term lease, or exchange of motor vehicle manufactured outside the United States, or any guaranty of such a transaction? | 57. | No. |
| 58. | <u>App. Sec. 501.</u> Will any loan funds be used for publicity or propaganda purposes within the United States not authorized by the Congress? | 58. | No. |
| 59. | <u>FAA Sec. 620(k).</u> If construction of productive enterprise, will aggregate value of assistance to be furnished by the United States exceed \$100 million? | 59. | No. |
| 60. | <u>FAA Sec. 612(d).</u> Does the United States own excess foreign currency and, if so, what arrangements have been made for its release? | 60. | No. |

141

AID 1240-2

61. MMA Sec. 901.b. Compliance with requirement that at least 50 per centum of the gross tonnage of commodities (computed separately for dry bulk carriers, dry cargo liner, and tankers) financed with funds made available under this loan shall be transported on privately owned U.S.-flag commercial vessels to the extent that such vessels are available at fair and reasonable rates.

61. All such requirements will be complied with and the loan agreement shall so require.

112

CERTIFICATION PURSUANT TO SECTION 611 (e) OF THE FOREIGN
ASSISTANCE ACT OF 1961, AS AMENDED

I CERTIFY to the Administrator of the Agency for International Development that, to the best of my knowledge and belief, Nicaragua possesses both the financial capability and human resources to maintain and utilize effectively the project to be undertaken pursuant to the terms of the AID loan proposed in this paper for Education Sector Development between the Government of Nicaragua and the United States of America. It should be noted that in so certifying, provision is being made under the loan for a specific Program Implementation Unit and significant technical assistance and training in order to ensure effective utilization of a development project of this nature and magnitude. I have also taken into account the maintenance and utilization of projects in Nicaragua previously financed or assisted by the United States, the capability of the institutions of Nicaragua, and the activities of other external donors with which the activities under this loan are closely interrelated.

5/26/12
Date

William R. Haynes
William R. Haynes
Director
A.I.D. Mission to Nicaragua

DRAFT LOAN AUTHORIZATION

Provided from: Alliance for Progress Funds
NICARAGUA: Educational Sector Loan

Pursuant to the authority vested in the Administrator, Agency for International Development ("A.I.D."), by the Foreign Assistance Act of 1961, as amended, the delegations of authority issued thereunder, I hereby authorize the establishment of a loan ("Loan") pursuant to Part I, Chapter 2, Title VI, Alliance for Progress, to the Government of Nicaragua ("Borrower") of not to exceed FIVE MILLION THREE HUNDRED THOUSAND United States Dollars (\$5, 300, 000) to assist in financing the United States dollar and local currency costs of Borrower's program of educational reform and development in urban and rural areas at the primary and secondary levels of education. The loan shall be subject to the following terms and conditions:

1. Interest and Terms of Repayment:

Borrower shall repay the loan to the Agency for International Development ("A.I.D.") within forty (40) years from the date of the first disbursement under the loan, including a grace period of not to exceed ten (10) years. Borrower shall pay to A.I.D. in United States dollars on the disbursed balance of the loan interest at the rate of two percent (2%) per annum during the grace period and three percent (3%) per annum thereafter.

2. Other Terms and Conditions:

- a. Goods and services (except for ocean shipping) and marine insurance financed under the loan shall have their source and origin in countries of the Central American Common Market or countries included in Code 941 of the A.I.D. Geographic Code Book. Marine insurance may be financed under the loan only if it is obtained on a competitive basis and any claims thereunder are payable in freely convertible currencies. Ocean shipping financed under the loan shall be procured in any country included in Code 941 of the A.I.D. Geographic Code

Book, excluding countries which are members of the Central American Common Market.

- b. United States dollars utilized under the loan to finance local currency costs shall be made available pursuant to procedures satisfactory to A.I.D.
- c. Prior to the execution of the Loan Agreement the Borrower shall have created a separate Program Implementation Unit (UIP) within the Ministry of Education to execute the sector program and appointed staff members of the Program Implementation Unit (UIP) satisfactory to A.I.D.
- d. Prior to the first disbursement or issuance of any commitment documents under the loan, the Borrower shall furnish to A.I.D. in form and substance satisfactory to A.I.D.:
 - i) A Time-Phased Implementation Plan (CP, PERT, etc.) satisfactory to A.I.D. Such plan shall include each component of this project, showing its interrelationship with, and priority relative to, other components.
 - ii) Evidence, satisfactory to A.I.D., that Borrower will, on a timely basis, provide the funds, in addition to the loan, necessary for the carrying out of the education sector loan program.
 - iii) Evidence, satisfactory to A.I.D., that the Borrower will provide, on a timely basis appropriately trained personnel for each activity of the program.
- e. Prior to any disbursement under the loan for construction services for a particular construction sub-project, the Borrower shall, except as A.I.D. may otherwise agree in writing, furnish to A.I.D. in form and substance satisfactory to A.I.D.:
 - i) A draft contract for engineering services for the Program acceptable to A.I.D. with a firm or individual acceptable to A.I.D.

- ii) A draft contract with a private firm or individual acceptable to A. I. D. for the supervision of any loan funded force account construction services.
- iii) Plans and specifications, bid documents, cost estimates, and time schedule for carrying out the construction sub-projects.
- iv) Evidence of legal title and right of way to all construction sites.
- v) A draft contract, acceptable to A. I. D. for construction services with a firm acceptable to A. I. D.
- vi) A draft of the proposed agreement between the MPE and Construcciones Nacionales for force account construction services.
- vii) A maintenance plan for the particular facilities comprised in the Program as well as the vehicles and equipment procured with loan funds, and evidence of sufficient budgetary support to accomplish adequate maintenance practices for the life of the facilities and equipment.
- f) Prior to any disbursement under the loan for procurement of equipment, the Borrower shall, except as A. I. D. may otherwise agree in writing, furnish to A. I. D. in form and substance satisfactory to A. I. D. :
 - i) An equipment list for each activity.
 - ii) A procurement plan.
- g) Prior to any disbursement under the loan, for the purchase of textbooks, the MPE shall submit to A. I. D. a purchase and distribution plan satisfactory to A. I. D.

3. Covenants

In addition, the Borrower will agree to:

- a. Support the program through increased budget allocations to the Ministry of Public Education in amounts sufficient to accomplish the purposes of the program in conformance with the Time-Phased Implementation Plan referred to above.
 - b. Maintain, with its own resources, the level of recurrent costs of the Educational Sector Program after the disbursement of loan funds.
 - c. Provide on a timely basis appropriately trained personnel to staff each facility financed with loan funds.
 - d. Undertake with A.I.D. a joint review of the program at least annually, or at such interim times as may be agreeable to both parties, to determine the adequacy of progress in achieving the program goals and to determine if there is need to revise the sector analysis, strategy, and programs. If, in the course of the periodic review, it becomes apparent that the purposes of the loan will not be attained, A.I.D. may suspend disbursements under the loan.
4. The loan shall be subject to such other terms and conditions as A.I.D. may deem advisable.

ECONOMIC STATISTICAL TABLES

Tables No.

1. Nicaragua General Economic Growth Data
2. Total GDP Per Capita 1965-1970
3. GDP By Sector of Origin 1965-1970
4. Total (Gross) GON Educational Expenditures 1965-1970
5. Education Budget Appropriations By Major Program Categories
6. Government Real Capital Expenditures 1965-1969
7. Annual Expenditures of the Various Ministries
8. Cash-Flow Statement - Ministry of Education
9. Central Government Finances 1968-1971
10. Public Education Expenditures From All Sources

142

NICARAGUA

GENERAL ECONOMIC GROWTH DATA

Total Population 1971 (Census Figures)-----	1,912,000
Urban Population (Census Definition of 2000 or more) -----	48%
Total Net Population Growth (1963-1971)-----	2.8%
Gross Domestic Product - 1971 (In million of Dollars)-----	736
GDP Per Capita (1971)-----	374
Major Components of GDP (1970):	
Agriculture and Livestock -----	24.4%
Manufacturing -----	17.8
Construction -----	2.9
Mining -----	0.9
Other -----	54.0
GDP Yearly Growth Rate (1965-1970)-----	4.5%
Government Revenues as % of GDP (1971)-----	9.3%
Government Expenditures as % of GDP (1971)-----	11.7%
Education Expenditures as % of GDP (1971)-----	2.0%
Education Expenditures as % of Total Govt. Expenditures (1971)---	17.4%

Source: Central Bank 4th Quarterly Report 1971

149

Total GDP Per Capita 1965 - 1970

(Million Cordobas)

	<u>Current Prices</u>		<u>Constant 1958 Prices</u>		<u>Total Yearly Population (000)</u>
	<u>G.D.P.</u>	<u>Per Capita</u>	<u>G. D. P.</u>	<u>Per Capita</u>	
1965	4,227	2,576	3,977	2,423	1,641
1966	4,497	2,654	4,099	2,420	1,694
1967	4,909	2,808	4,380	2,506	1,748
1968	5,201	2,883	4,445	2,464	1,804
1969	5,474	2,940	4,700	2,524	1,862
1970	6,010	3,143	4,940	2,584	1,912

NOTE: 1 U.S. Dollar = 7 Córdoba (\$)

NOTE: Population Figures based on 1963 Census applying 3% annual growth rate.
For 1970, the April 1971 Census figure was used.

USAID/N 4-72

UNCLASSIFIED

150

UNCLASSIFIED

Annex IV

Page 4 of 11

Table 3.

GDP By Sector of Origin

1965 - 1970

(Million Cordobas)

	Current Prices						Constant Prices					
	<u>1965</u>	<u>1966</u>	<u>1967</u>	<u>1968</u>	<u>1969</u>	<u>1970</u>	<u>1965</u>	<u>1966</u>	<u>1967</u>	<u>1968</u>	<u>1969</u>	<u>1970</u>
Total	4,227	4,497	4,909	5,200	5,474	6,010	3,977	4,099	4,380	4,445	4,700	4,940
Agriculture (a)	1,176	1,149	1,237	1,316	1,361	1,532	1,156	1,119	1,177	1,169	1,247	1,278
Manufacturing	630	686	760	846	934	1,071	637	680	748	826	900	1,008
Mining	62	68	71	68	67	56	55	60	62	64	61	51
Construction	130	178	164	156	179	177	124	166	150	145	163	160
Other	2,229	2,416	2,677	2,814	2,933	3,174	2,005	2,074	2,243	2,241	2,329	2,443

(a) Including Agriculture, Livestock, Fishing and Forestry

Source: Annual Report, Central Bank, 1971

TOTAL (GROSS) GON EDUCATION EXPENDITURES

1965 - 1970

(Million Cordobas)

	Total GON <u>Exp.</u>	Education <u>Expenditures (a)</u>	<u>Education Expenditures as % of:</u>		
			<u>Total Exp.</u>	<u>Domestic Revenues</u>	<u>GDP in Current Prices</u>
1965	435	75	17.2	17.0	1.8
1966	524	91	17.4	19.7	2.0
1967	596	112	18.8	23.7	2.3
1968	526	115	21.8	24.6	2.2
1969	568	124	21.8	25.6	2.2
1970	657	127	19.3	22.5	2.1

Source: Government Accounting Office Report, 1971

Footnote: This data represents the gross GON Domestic Budget for Education and thus includes those amounts for education from the other Ministries, i.e. Ministry of Agriculture - National School of Agriculture, etc. It therefore differs from the net Education Budget (of the MPE).

USAID/N 5-72

UNCLASSIFIED

1.2

EDUCATION BUDGET APPROPRIATIONS BY MAJOR PROGRAM CATEGORIES

1965 - 1971

CATEGORIES	1965	1967	1969	1971	% Change 1965 - 1971
Central Administration	1.7*	2.0	2.1	2.1	+25.6 %
Planning	.8	.8	.7	.7	- 3.7 %
Primary Education	42.6	68.0	73.2	81.0	+90.1 %
Secondary Education	12.1	18.4	17.4	19.0	+57.5 %
Agricultural Education	-	-	1.2	1.4	-
Physical Education	-	-	1.0	1.0	-
Industrial Arts	-	-	1.1	1.1	-
Cultural Extension	1.0	2.4	1.3	2.0	+94.5 %
University Education	-	9.2	10.0	11.4	-
Current Transfers	10.8	8.6	7.9	9.8	- 8.6 %
Construction and Maintenance	3.8	10.2	14.6	15.4	+308.9 %
Capital Transfers	-	-	-	1.2	-
TOTAL	<u>72.8</u>	<u>119.5</u>	<u>130.5</u>	<u>146.2</u>	<u>+101.2 %</u>

* Million of Cordobas rounded to nearest hundred thousand

SOURCES OF FUNDS FOR NEW CONSTRUCTION AND EQUIPMENT

	1967	1969	1971	1967 - 1971 % Change
AID	5.2*	5.2	1.2	-77.0%
IBRD	-	3.0	5.9	-
GON	<u>5.0</u>	<u>5.7</u>	<u>7.9</u>	<u>+59.1%</u>
Total...	<u>10.2</u>	<u>13.9</u>	<u>15.0</u>	<u>+47.1%</u>

*Millions of Cordobas rounded to nearest hundred thousand

Source: Nicaraguan National Budgets for the years cited.

UNCLASSIFIED

153

GOVERNMENT REAL CAPITAL EXPENDITURES1955 - 1969

(Million Córdobas)

Year	Total Expenditure	Total Real Investment	Investment as % of Total Expenditures
1955	241.0	36.1	15.3
1960	267.8	49.8	18.6
1965	441.6	94.0	21.3
1969	599.4	89.8	15.0

Source: Central Bank Annual Report, 1971

USAID/N 4-72

UNCLASSIFIED

154

Annual Expenditures of the Various Ministries

(Actual Figures - Million Cordobas)

MINISTRIES	1965	1966	1967	1968	1969	1970	1971
<u>Executive:</u>							
Presidency	6.2	9.2	7.5	13.0	10.7	12.5	17.9
Interior	35.5	39.9	36.7	33.4	31.9	34.4	35.1
Foreign Relations	14.1	18.8	17.8	16.1	15.8	16.7	19.0
Finances	40.5	39.8	41.0	44.3	48.2	51.0	55.2
Education	75.6	87.4	108.3	114.7	122.9	126.2	138.8
Public Works	85.7	114.6	136.6	79.0	77.6	96.4	106.7
Defense	63.8	67.3	73.8	72.2	70.4	81.7	96.7
Health	39.5	41.6	62.6	59.5	69.6	80.7	98.2
Economy	25.0	39.4	38.9	33.7	40.2	42.5	77.9
Agriculture	16.5	21.4	26.5	23.0	43.4	59.6	94.0
Labor	3.2	4.5	4.2	3.7	3.5	3.5	4.0
Gov. Accounting Office	3.7	4.1	4.7	4.7	4.7	4.7	5.0
TOTALS	409.3	488.0	558.6	497.3	538.9	609.9	748.5

Source: Central Bank Annual Report, 1971

155

CASH-FLOW STATEMENT - MINISTRY OF EDUCATION

(Current Thousand of Cordobas)

	1965	1966	1967	1968	1969	1970	1971	1972
<u>TOTALS</u>	<u>72.652</u>	<u>87.656</u>	<u>119.538</u>	<u>122.177</u>	<u>130.474</u>	<u>119.621</u>	<u>146.160*</u>	<u>155.743*</u>
<u>Current Expenditures</u>	<u>70.836</u>	<u>86.075</u>	<u>109.276</u>	<u>113.974</u>	<u>117.223</u>	<u>118.245</u>	<u>129.828</u>	<u>132.576</u>
Personnel Services	53.450	64.924	84.025	89.189	92.880	94.146	102.507	109.420
Materials & Supplies	2.893	3.611	1.786	1.619	1.517	1.381	1.373	1.381
Current Transfers	10.752	12.203	17.757	17.652	17.936	18.524	21.308	17.756
Other Current Expenditures	3.741	5.337	5.708	5.514	5.240	4.194	4.640	4.019
<u>Capital Investments</u>	<u>1.816</u>	<u>1.581</u>	<u>10.262</u>	<u>8.203</u>	<u>13.251</u>	<u>1.376</u>	<u>16.332</u>	<u>23.167</u>
Domestic Resources	1.816	1.581	4.912	2.888	4.986	401	7.642	11.423
Capital Transfers	-	-	100	65	15	975	1.587	2.014
<u>External Resources</u>	-	-	-	-	<u>8.250</u>	-	<u>7.103</u>	<u>9.730</u>
IBRD	-	-	-	-	3.000	-	5.894	9.730
AID	-	-	5.250	5.250	5.250	-	1.209	-

Source: General Budget of The Republic.

USAID/N 5-72

UNCLASSIFIED

*Represents Budgetary data and not cash flow

15

CENTRAL GOVERNMENT FINANCES

1968 - 1971

(Million Cordobas)

	<u>1968</u>	<u>1969</u>	<u>1970</u>	<u>1971</u>
A. <u>Ordinary Revenues - Total</u>	<u>469.2</u>	<u>483.9</u>	<u>564.5</u>	<u>616.6</u>
Income Tax	52.3	50.1	55.1	63.0
Other Direct Taxes	47.2	45.3	55.6	68.9
Import Duties	150.1	135.9	160.9	155.3
Export Duties	7.6	7.3	7.7	8.2
Excise & Consumer Taxes	167.4	196.0	229.7	267.8
Other Revenues - Receipts	43.6	49.3	56.5	63.4
B. <u>Expenditures - Total</u>	<u>526.2</u>	<u>574.3</u>	<u>616.9</u>	<u>755.9</u>
(Functional Classification)				
1. <u>Current Sub-Total</u>	<u>429.5</u>	<u>461.0</u>	<u>492.3</u>	<u>582.7</u>
Education	110.8	119.0	120.1	131.7
Health	31.2	36.0	39.7	46.0
Social Security Institute	28.2	29.4	25.7	25.8
Roads & Transportation	-	19.3	9.3	36.2
Communications	19.0	16.2	19.4	21.7
Agriculture & Land Reform	25.1	21.2	29.7	27.3
Industry & Power	6.9	3.3	0.3	40.4
Interest	11.1	16.2	17.2	18.2
Administration	121.2	125.4	119.9	127.6
Defense	70.9	75.0	86.4	89.7
Others	5.1	-	25.6	18.1
2. <u>Capital Sub-Total</u>	<u>96.7</u>	<u>113.3</u>	<u>164.6</u>	<u>173.2</u>
Education	3.9	5.0	7.2	9.7
Health	-	4.2	15.3	26.4
Housing	-	3.0	2.0	2.0
Roads & Transportation	61.8	81.4	88.1	55.5
Irrigation	2.7	4.5	6.0	2.8
Communications	2.7	0.5	2.2	11.0
Agriculture & Land Reform	-	7.3	32.8	38.6
Industry & Power	7.0	2.2	8.9	23.5
Administration	-	5.2	2.1	3.5
Others	16.6	-	-	0.2
C. <u>Deficit or Surplus</u>	<u>-60.9</u>	<u>-81.3</u>	<u>-92.4</u>	<u>-139.3</u>
D. <u>Financing The Deficit</u>				
External Borrowing (net)	51.1	28.7	62.2	88.9
Treasury Bonds (GON)	4.9	6.4	14.7	9.8
Other Domestic Balances	4.9	46.2	15.5	40.6

Source: Government Accounting Office Report, 1971

UNCLASSIFIED

157

PUBLIC EDUCATION EXPENDITURES FROM ALL SOURCES

(Million of Cordobas)

	<u>1965</u>	<u>1966</u>	<u>1967</u>	<u>1968</u>	<u>1969</u>	<u>1970</u>	<u>1971</u>
Total Education Expenses	<u>77.4</u>	<u>89.1</u>	<u>110.1</u>	<u>116.6</u>	<u>124.6</u>	<u>127.9</u>	<u>141.4</u>
Ministry of Education	75.4	87.3	108.3	114.7	122.8	126.2	138.8
Ministry of Economy	0.7	0.6	0.5	0.5	0.5	0.5	1.0
Ministry of Agriculture	1.2	1.1	1.2	1.1	1.1	1.1	1.4
Ministry of Public Work	-	0.1	0.1	0.3	0.2	0.1	0.2

Source: Ministry of Finance Annual Budget Document 1971

USAID/N 5- 72

UNCLASSIFIED

ANNEX V - EDUCATION SECTOR ANALYSIS

A. The Education System

1. Educational Legislation and Policy

All of the educational legislation reflecting the formalized policies for education in Nicaragua is based on Articles 98 through 109 of the Nicaraguan Constitution. These Articles establish that public education is a State duty (Art. 98), that education is under the technical inspection of the State (Art. 99), that primary education is obligatory and both primary and secondary education shall be free (Art. 100), that the State shall promote secondary, higher, technical, industrial and agricultural education (Art. 101), that all school centers shall provide moral and civic education (Art. 102), that all academic and professional titles shall be regulated and issued by the State (Art. 103), that academic degrees from recognized foreign institutions can be approved by the State (Art. 104), that the National University will have autonomous status (Art. 105), that academic freedom is guaranteed (Art. 106), that teachers have rights to tenure, promotion, minimum salaries, retirement, vacations and further training paid for by the State (Art. 107), that teaching is non-political (Art. 108), and that all agricultural or industrial businesses where there are located more than thirty children of school age and where no public school is available shall be obligated to provide primary schools (Art. 109).

All of the above Articles have been closely adhered to within the letter of the law with the exception of Article 109.

There is nothing in the existing legislation which would serve as an obstacle to the educational reforms to be carried out in connection with the proposed education sector loan and no new legislation is under consideration for this purpose. Whatever changes in structure or policy which might be necessary will be carried out through decrees which are promulgated by the Minister of Public Education.

Recent policies promulgated by decree were: rapid increase of primary school attendance through emphasis on school construction programs; improvement of primary teacher capabilities through improvement and consolidation of Normal school programs; improvement of planning and decision-making capabilities through use of technical assistance in administration and educational planning; realignment of the primary curriculum toward a more practical orientation involving the dissemination of agricultural and other vocational information during the primary school years; and improvement of primary teaching methodologies through making free textbooks available and providing intensive in-service training programs and teaching guides for primary school teachers to assist them in properly using the new texts.

In addition, there has been some emphasis given to providing more technical-vocational-agricultural education through the establishment of a Technical-Vocational Institute, Agricultural schools at both the primary (Escuelas Granjas) and secondary levels (Liceos Agrícolas) and Commercial high schools, and adding various courses such as Home Economics, Health Education, Industrial Arts, etc., at some of the high schools.

Although these policies are wholly consistent with the objectives of the program to be supported by the loan, the GON has been unable to carry them out at the desired rate due to a series of problems described in detail in the National Plan and summarized in the analysis presented below.

2. Goals and Objectives of Nicaragua Education

The goals and objectives of education in Nicaragua are fully stated in the Regulations previously discussed. In those Regulations, the goals are presented separately, and are different, for primary education and secondary education.

Nicaraguan primary education has for its major stated functions the transmission of basic cultural elements, the development of fundamental abilities and skills, the inculcation of ideals and values and the stimulation and development of individual capabilities in order to better understand the world in which we live and to more efficiently integrate into the social system. (Art. 1, General Regulation of Primary Education).

These goals for primary education are amplified further to include:

a. Strengthening national unity and creating the disposition to serve Nicaragua, through knowledge of its geography, resources, history, institutions and ideals of progress and well-being.

b. Cultivating the capacity to understand and appreciate the spiritual values that dignify the individual and society.

c. Inculcating personal respect to eliminate violence and aggression in social relations.

d. Forming a democratic conscience that forms the basis for taking on duties, assures the exercise of rights and contributes to strengthening civic ideals.

e. Strengthening family unity so that each member knows and assumes his corresponding obligations and adjusts his conduct to the moral principles that ought to guide family living.

UNCLASSIFIED

Annex V

Page 2 of 60

f. Forming the health habits that are indispensable to maintaining and improving the physical and mental health of the individual and the group.

g. Teaching the rational distribution of time between work, rest and recreation and promoting the honest and beneficial use of leisure time.

h. Facilitating the acquisition of basic knowledge and cultivating a scientific attitude, to banish superstition, prejudice and fanaticism.

i. Developing correct usage of the national language and cultivating other methods of human expression and communication.

j. Cultivating individual aptitudes and guiding vocations in a socially useful manner in accordance with national needs and the necessity of elevating the collective and individual economic level.

k. Cultivating the ideals of Central American integration and of international cooperation and understanding.

l. Enabling the individual to act adequately in social situations. (Art. 2, General Regulation for Primary Education).

These goals for primary education seem quite adequate for that level. However, the actual educational services provided, as will be covered in greater detail later in this Annex, do not permit the full accomplishment of many of the stated objectives. The necessary services and information consistent with objectives f. and j., as listed above, are especially lacking with few teachers well-trained in basic health knowledge, almost no personnel capable of providing vocational guidance, and little data available over specific national needs.

At the secondary level, there are different general objectives for the Basic Cycle level and the Diversified Cycle level. At the Basic Cycle level, comprising the first three years of secondary education, the major goal is to provide additional learning beyond the primary level but still that education considered to be fundamental and necessary for every person whatever his inclinations or aptitudes. The Basic Cycle level, then, is the same for all students and pre-requisite to all branches of the Diversified Cycle with its various specialties. (Art. 326, General Regulation for Secondary Education).

This stated objective for Secondary education, reflecting the assumption that all students need the same education for the first nine years of school, is probably one of the greatest deterrants

UNCLASSIFIED

161

UNCLASSIFIED

Annex V

Page 4 of 60

to the changes needed in Nicaragua education if it is going to truly serve individual and national needs. As will be covered in more detail later in this Annex, it is precisely at the beginning of the secondary level, or possibly as early as the fifth grade, that students should be able to select courses in keeping with their aptitudes and interests and that educational courses should be offered in line with current and projected national needs. This implies a need for flexibility in the educational system that is not reflected in the above stated goal for the Basic Cycle.

The Diversified Cycle, comprising grades ten and eleven for some specialties and grades ten through twelve for others has separately stated objectives for College Preparatory, Normal school and Agricultural education. The goals for the College Preparatory schools are to provide students with an intensive quantitative and qualitative preparation in humanistic and scientific areas, along with adequate formation of citizenship, that will permit them to successfully incorporate themselves into the socio-economic life of the country or to continue studying in local or foreign universities. (Art. 345, General Regulation for Secondary Education).

For Normal school training, in addition to the general goals of secondary education previously given, the specific objectives are as follows:

- a. Preparation for primary teaching based on the ideals, problems, resources and necessities of the nation.
- b. Practice in teaching with student groups at different teaching levels.
- c. Organization of psychopedagogical investigations to give a scientific base to their educational service.
- d. Initiation into the knowledge of community problems and educational practices.
- e. Promoting the continued theoretical and practical development of teaching personnel in the Normal school, practice teaching schools, and other primary schools in the zones of influence of the Normal schools.
- f. Cultivating community interest as a teaching function and making known the importance and benefits of education to the future of the nation.
- g. Promoting the study of land problems and of the organization and development of rural communities. (Art. 2, Regulation for Normal Schools).

UNCLASSIFIED

162

For the Agricultural schools, in addition to the general goals of secondary education previously given, the specific objectives are:

- a. To form the personalities of the students in such a manner that they can guide and conduct farm-life activities.
- b. To organize scientific investigations to technically improve farming and livestock activities.
- c. To initiate the knowledge of farming and livestock problems and to develop the desire to solve them.
- d. To provide the students a preparation sufficient for the continuation into higher education in agriculture, animal husbandry and related areas.
- e. To contribute to the improvement of the farming and livestock techniques common to the community in which the center is located. (Art. 3, Regulation for National Agricultural Schools).

The above stated goals for the Diversified Cycle schools seem to be well-stated. However, again, the reality of what is offered in the schools differs somewhat, especially in the College Preparatory area, from the objectives. Where the objectives of the College Preparatory program include "...to successfully incorporate (students) into the socio-economic life of the country...", in reality students are prepared almost solely for further study with little training being given in those schools that directly prepares students for any career.

As will be more fully demonstrated later, the flexibility provided by a system composed, in the main, of college preparatory schools along with only a relatively few technical, vocational, commercial, and agricultural schools and programs, is insufficient to respond to Nicaragua's current needs for skilled and semi-skilled manpower.

3. Structure of the System

a. The Ministry of Public Education

The Nicaraguan educational system is set up in a centralized fashion with all major decision-making functions held by Ministry of Public Education administrators with offices in Managua. The administrative hierarchy within the Ministry is highly stratified, with limited delegation of authority and tightly circumscribed boundaries of responsibility. However, in a rapidly developing system, and in this cultural setting, it is quite possible that, in most cases, the authority and responsibility restrictions are warranted. The major exceptions to this are related to pupil-

personnel accounting, personnel management procedures, and data collection as will be covered later in this section.

As indicated in Exhibit 1, Page the Minister of Public Education is the functionary directly responsible for the educational policy of the country and the general direction of all levels of teaching. The Vice-Minister collaborates with the Minister when he is absent. When this happens, the Vice-Minister takes on all the duties and responsibilities of the Minister.

The most basic manner in which the various divisions below the Minister and Vice-Minister can be separated is based on the type of task performed by each and includes the following:

- (1) Technical Divisions,
- (2) Technical-Administrative Divisions; and
- (3) Administrative Divisions.

To the first fall the tasks of evaluating or providing technical assistance in the solution of educational problems and the making of educational plans; to the second, the execution of educational plans and programs and the direction and inspection functions connected with the specific educational levels and areas of the Nicaraguan school system; and the third is in charge of the maintenance functions normally associated with educational systems (buying supplies, compiling budgetary information, distributing materials, etc.)

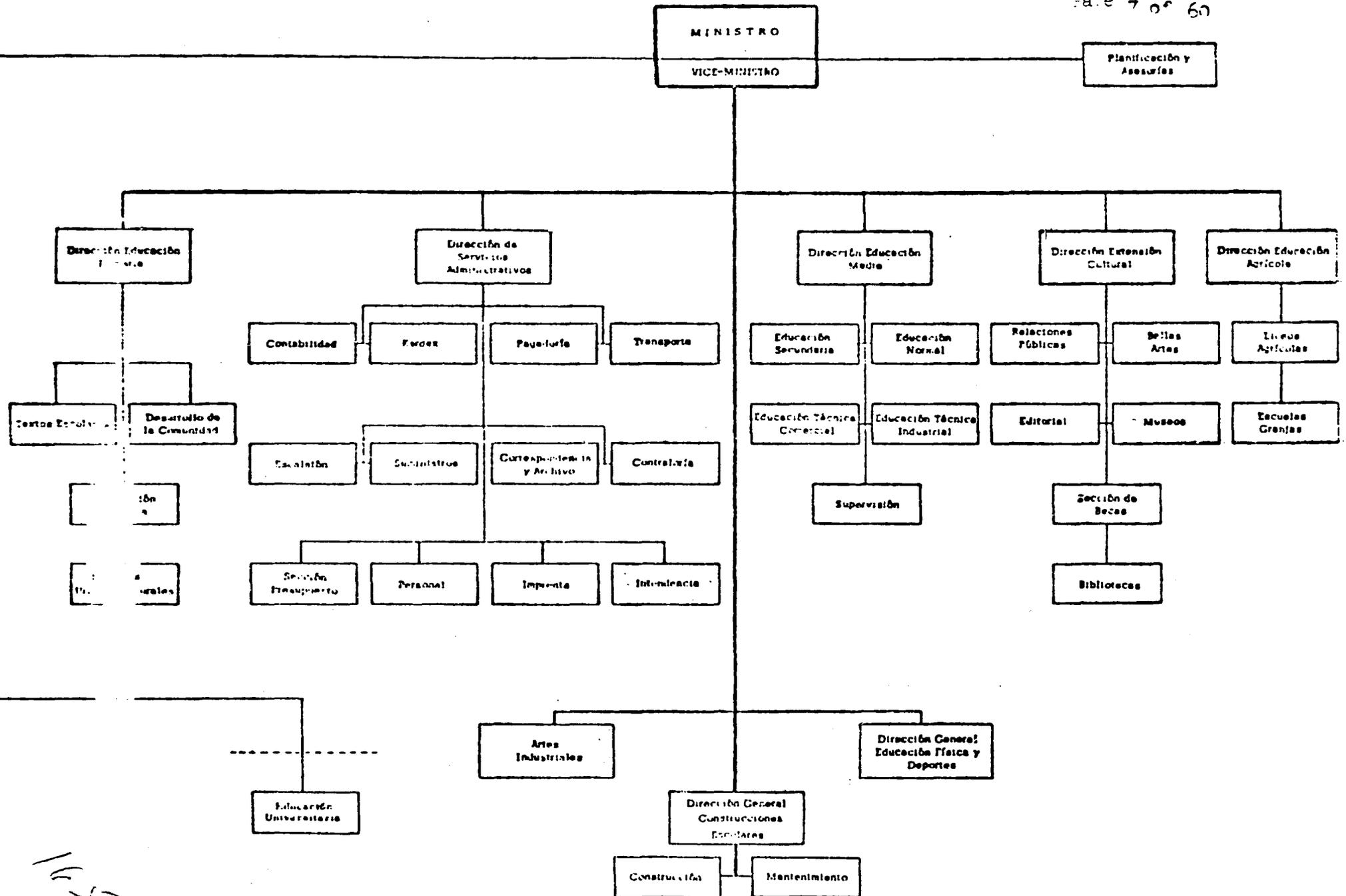
As indicated on Exhibit 1, Page 7, the Technical Divisions are the Planning Office along with any Special Commissions that are created through that office to investigate specific educational problems. The Technical-Administrative Divisions include the Direction of Primary Education, the Direction of Secondary Education, the Direction of School Construction, the Direction of Physical Education and Sports, the Direction of Cultural Extension, and the Direction of Agricultural Education. The Administrative Divisions consist of the Direction of Administrative Services and its dependencies.

The Planning Office is the Division in charge of providing assistance to the Ministry through integral educational planning and studying and resolving technical problems as they arise in the development of the educational system. It also is the coordinating Division for international assistance received by the Ministry and for the contracted personnel obtained through such assistance.

The National Education Plan includes a detailed description of the functions of each of the divisions of the Ministry of Education. All of the Divisions of the Ministry of Public Education, as presented in Exhibit , Page , are housed in one edifice with some annexes on the Eastern side of downtown Managua. This building with its

ORGANIZATION OF THE MINISTRY OF PUBLIC EDUCATION - NICARAGUA

UNCLASSIFIED
Exhibit 1
Page 7 of 60



annexes is rented by the government, is fairly old, and is definitely ill-suited for its purpose. Since the building was not designed for the Ministry of Public Education in keeping with its needs relative to the working areas and conditions of lighting, space, air circulation, noise levels, etc., these are to a great extent pre-determined by the structure, when the physical structure should be designed to meet the specific needs of the various departments and sections of the Ministry.

Directly within the Ministry of Public Education are the major problem areas related to decision-making, pupil-personnel accounting methods, the recognized need for a Direction of Personnel, data gathering and handling capabilities, and the afore-mentioned restrictions due to the limitations imposed by the building and annexes in which the Ministry is housed. Decision-making is often made very difficult and less exact by the lack of sufficient records and data upon which decisions should be based. The record-keeping and data collection and handling processes are restricted mainly through a combination of lack of modern equipment for data storage and handling and the difficulties of obtaining and updating information from the less accessible areas of the country - which includes most of the rural portions of Nicaragua. The pupil-personnel accounting problems suffer from the above-mentioned data collection difficulties compounded by inefficient organization of the functions normally performed by a Personnel Office. And all of the above difficulties are compounded by the Ministry being housed in an inadequate structure.

b. The School System

The Ministry of Public Education coordinates the operation of the school system through the use of Departmental Inspection Offices at the elementary level and by direct communication at the secondary level. At the elementary level there are a total of sixteen Departmental Inspection Offices, one for each Department in the country, employing a total of 107 inspectors.

It is the duty of the primary school inspectors to oversee the educational efforts in their districts, to observe and assist teachers and school directors, to assist in obtaining supplies, to place new teachers where needed, to recommend teacher placement and school construction, and to gather data as required by the Ministry. Unfortunately, road and climatic conditions, lack of adequate transportation, lack of funds for gasoline and per diem, and, often, lack of real interest result in many schools never being visited by an inspector and in much of the data being transmitted to the Ministry being inaccurate.

The total school system in 1969 consisted of slightly over 2100 primary schools (grades one to six) with about 1900 of these public and 200 private, about 200 secondary schools (grades seven

UNCLASSIFIED

Annex V, Page 9 of 60

to eleven and twelve) with approximately one-third of these public, two universities (one public), post high school institutions in Agriculture, Public Accounting, and technical training, and a graduate school of business administration.

The Nicaragua educational system has four levels or cycles. The first level, primary education, consists of the first six years, and is for students between the ages of 7 and 12, although there is a significant proportion of older students and a few that are younger than the minimum age.

The secondary system actually includes the second and third cycles of the Nicaragua educational system since it is divided into a Basic Cycle (grades seven through nine) and a Diversified Cycle (grades ten through eleven or twelve).

Higher Education, the fourth level in the Nicaragua educational system, takes place in seven institutions. The two major institutions are the Autonomous National University (UNAN) and the private Catholic-operated Central American University (UCA).

The other institutions of higher learning, are the Central American Business Institute (INCAE), a graduate school in Business Administration; the Polytechnical Institute (POLI) which provides advanced technical training in various fields (nursing, industrial arts, electro-mechanics, technical drawing, electronics, interior decorating, etc.); and schools of Agriculture, Public Accounting and Nursing which provide training in those particular specialties.

UNCLASSIFIED

167

C. Teacher Education and Salaries

1. Primary School Level

In Nicaragua, primary school teachers are produced in Secondary level Normal Schools. This program has greatly improved in recent years, due to the improvement in the curriculum and the length of the program. This revision took place in 1967. Prior to 1967, the Normal School program was for two years beyond the Basic Cycle program of the Secondary school. Now the program is for three years beyond the Basic Cycle program. In addition to the basic academic and teacher training subject matter, each Normal school student has thirty hours weekly devoted to practice teaching in the last year of the program. In 1969, there were 11 Normal schools functioning in Nicaragua. Since these schools were producing more teachers than could be employed in Nicaragua, the Ministry of Public Education, reduced the number to five in 1972. These five Normal schools are producing enough teachers to permit the replacement of non-qualified teachers as they retire and to provide for expansion of the system.

The percentage of teachers who are qualified to teach at the primary school level has increased steadily since 1965. However, in 1969, according to Exhibit 7, Annex V, 41% of the teachers were still considered sub-qualified with less than a secondary school education. It is recognized that any system with over 40% of its teaching staff considered sub-qualified has a need to up-grade its teachers. The decision to up-grade rather than to replace sub-qualified teachers with Normal schools is based on several considerations: a. the lack of willingness on the part of Normal school graduates to teach and live in rural areas; b. the Normal schools have recently been reduced in number due to the over-production of graduates without employment possibilities, therefore, to replace all sub-qualified teachers would require a reversal of this policy; c. there is a salary differential between qualified and non-qualified teachers which would require substantial budgetary increases to satisfy if all teachers were qualified; and, d. the majority of sub-qualified teachers are teaching in the rural areas, and have built up longevity and provided faithful service, which makes it difficult to simply replace them. Further, it is less costly to upgrade these teachers and provide them with new techniques and methodologies specifically oriented, especially to the rural areas, including multi-grade teaching techniques.

2. Secondary School Level

At present, most secondary school teachers are being trained in institutions on the higher education level. As indicated in Exhibit 20, Annex V, in 1970 25% of secondary school teachers had completed their university program and had the title of Professor of Secondary Education. Of the remaining teachers, 8% have no degree (most of whom are teaching special subjects, such as, art, music or physical

education); 22% have a high school diploma equivalent; 13% have a normal school diploma; 9% have a BA equivalent; and 3% have a university degree, other than in the field of education. The current program at the National University for secondary school teacher training is for four years with either a major in pedagogy, or in any of the following areas: Chemistry, mathematics, social science, physics, Spanish, English, French, or biology and natural science. This program covers the traditional college-preparatory subjects given in the secondary schools. Practice teaching is included in the curriculum for secondary school teacher training.

Special subject teachers, such as for physical education, industrial arts, home making, and vocational are being trained at the Politechnical Institute of Nicaragua, (POLI). POLI is a higher education level institution and has been training teachers in physical education since 1967. In the fields of industrial arts and home making, the program started in 1970, and for vocational education in 1972. POLI is planning to expand its offerings for teacher training in the following fields: commercial, agriculture, art, health, and for librarians. These programs will start on a modest scale in POLI's present facilities, supplemented by using facilities of the Ministry of Public Education, and will be increased as soon as its loan from IDB is authorized for the construction of modern, adequate and enlarged facilities. Approval and subsequent construction is expected late 1972 or early 1973. Practice teaching experience is also part of the POLI program. Length of courses depend upon the area of speciality, and whether these are being pursued on a vacation basis for teachers in-service or on a full time basis.

One of the problems for teachers on the secondary level, is that only about 40% of the graduates of the University program are now teaching full-time in the secondary schools. Most are part-time or "bicycle teachers". This problem is scheduled to be studied as part of Activity 3.b.(2) of this loan.

With the expansion of the Basic Cycle level of secondary education to the semi-urban areas, in the municipalities outside of departmental capital cities, it will be necessary to train these teachers in more than one field for example, science and math, or social studies and languages, since these schools will not be sufficiently large to warrant specialists in one subject area.

3. Higher Education Level

The teaching staffs of most of the post-secondary institutions including the two universities, are quite well qualified. At the two universities, many professors, (30%) have advanced degrees from foreign institutions, while most of the other professors, (50%) possess the highest degrees obtainable locally, and the remainder (20%) are considered sub-qualified. (Reference Exhibit 30, Annex V). In 1969, there were almost 600 professors teaching in the two

universities, with the majority employed on either a part-time or hourly basis.

4. Salaries

Teachers salaries are considered adequate and compare favorably with salaries for positions requiring comparable levels of education. Salaries are based on educational level, qualifications, title, and teaching location. Teachers in the departments of Rio San Juan or Zeleza are paid a differential due to the isolation of these two departments from the rest of the country.

The base rate for qualified teachers is higher than for an unqualified teacher. However, by in-service training and successful completion of the equivalent of normal school education, a teacher's status changes to the level attained with the corresponding salary scale. Primary school teachers are paid on a monthly rate, whereas most secondary and higher level teachers are paid on an hourly rate.

B. FINANCIAL ANALYSIS

1. General

The education budget can be approached both in its aggregate and in its various parts. Over the years since 1965, the total budget has grown by 84 percent from a level of \$76 million to \$139 million in 1971 (Exhibit 2, p 14). This can be compared to expenditures of all government ministries during the same period, which grew by 83 percent. Since 1968 education has had the largest budget of all ministries, clearly indicating the administration's priority interest in this area. Over the next four years (1973-1976), education expenditures are projected to increase by an additional 45 percent. Indeed, education has been awarded about 20 percent of the government budget in all of the last several years, a figure that puts it ahead of all but four or five of the Latin American countries (Exhibit 3, p 1). Since tax collections are very poor in Nicaragua, the proportion of GNP devoted to education is quite low--around 2 percent. In sum the GON is devoting a great deal of attention to education although the low tax revenue generation of the country tarnishes the glow of this emphasis.

Looking into the education budget itself yields a picture of a system that is concentrating on the primary level. This, of course, is the level that effects the mass of the people as neither of the higher levels do. As seen in Exhibit 4, p 1, 73 percent of the budget that is specified by level is devoted to primary education in 1971. This represents 55 percent of the total education budget. Primary education was also the fastest growing level of education in terms of budget allocation, increasing by 90 percent over the six years. Such a great emphasis on the primary level is certainly to be commended from the view of the very positive effect on educational access for the people. In addition, if international studies of the rate of return to education have any message, it is that primary schooling is the level with the highest rate of return to investment.

The level of expenditure on construction is surprisingly low: in 1971 it was only 11 percent of the total budget appropriations. Nevertheless, it has grown considerably since 1965; in fact, it is the fastest growing item over that period. The increased emphasis on construction would be continued according to government plans, rising to 17 percent of the budget by 1974. This would bring it more in line with the experience of other LDCs who are emphasizing education.

EXHIBIT 2MINISTRY OF PUBLIC EDUCATION BUDGET
{Million of Cordobas}*

	<u>Regular Budget</u>	<u>GON Contribution to Proposed A.I.D. Loan</u>	<u>Total GON</u>	<u>INDEX</u>	<u>Percent increase over previous year</u>
1965 <u>1/</u>	75.550	-	75.550	100	
1966 <u>1/</u>	87.350	-	87.350	115	15
1967 <u>1/</u>	108.300	-	108.300	143	24
1968 <u>1/</u>	114.710	-	114.710	152	6
1969 <u>1/</u>	122.880	-	122.880	162	6
1970 <u>1/</u>	126.200	-	126.200	167	3
1971 <u>1/</u>	138.830	-	138.830	184	10
1972 <u>2/</u>	161.560	-	161.560	214	16
1973 <u>3/</u>	175.060	8.030	183.090	242	13
1974 <u>3/</u>	189.660	11.154	200.814	265	9
1975 <u>3/</u>	205.460	11.154	216.703	286	8
1976 <u>3/</u>	222.660	11.812	234.472	310	8

Notes:

1/ Data 1965-1971 are central expenditures and include foreign borrowing.

2/ 1972 data of proposed budget.

3/ 1973-76 regular budget was submitted by MPE and represents proposed budget and not central expenditures.

* 7 Cordobas equal one U.S. dollar.

172

EXHIBIT 3

GON DOMESTIC INTERNAL FINANCIAL EDUCATION

BUDGETARY TRENDS

<u>YEAR</u>	<u>% GNP</u>	<u>DOMESTIC FINANCED AS % TOTAL BUDGETARY DOMESTIC FUNDS</u>
1965	1.83	18.1
1966	1.90	18.6
1967	2.27	22.4
1968	2.24	23.4
1969	2.27	22.0
1970	2.10	20.6
1971	2.19	21.1

EXHIBIT 4

EDUCATION BUDGET BY MAJOR PROGRAM CATEGORIES+

1965 - 1974

	<u>1965</u> 1/	<u>1967</u> 1/	<u>1969</u> 1/	<u>1971</u> 1/	<u>1972</u> 2/	<u>1973</u> 2/	<u>1974</u> 2/
Central Administration	C\$ 1.7	C\$ 2.0	C\$ 2.1	C\$ 2.1	C\$ 2.1	C\$ 2.2	C\$ 2.2
Planning	.8	.8	.7	.7	.9	.9	1.0
Primary Education	42.6	68.0	73.2	81.0	86.5	93.5	100.6
Secondary Education	12.1	18.4	17.4	19.0	23.0	24.0	25.2
Agricultural Education	-	-	1.2	1.4	2.0	2.2	2.3
Physical Education	-	-	1.0	1.0	1.0	1.0	1.0
Industrial Arts	-	-	1	1.1	1.1	1.2	1.3
Cultural Extension	1.0	2.4	2.3	2.0	2.3	2.5	2.7
University Education	-	9.	10.0	11.4	13.6	14.7	15.9
Current Transfers	10.8	8.6	7.9	9.8			
Construction & Maintenance	3.8	10.2	14.6	15.4	21.1	26.2	32.6
Capital Transfers	-	-	-	1.2	2.0	2.2	2.3
TOTAL	<u>72.8</u>	<u>119.5</u>	<u>130.5</u>	<u>146.2</u>	<u>155.6</u>	<u>170.6</u>	<u>187.2</u>

Millions of Cordobas rounded to nearest hundred thousand. Seven Cordobas equal one U.S. dollar.

/ Budget Appropriations

/ Projections

Source: National Budget and MOE projections.

12

The rapid increase in expenditures on primary education will undoubtedly create a pressure on secondary education in the future. The budgetary allocation for secondary schooling has increased (by 58 percent from 1965 to 1971), but at a slower rate than primary school expansion. As more and more primary students graduate, the secondary system will become increasingly inadequate to meet the demands for places. Therefore, it is critical that primary education be directed toward the provision of some employable skills that will lead to employment or to greater economic self-sufficiency. At the same time, consideration should be given to providing alternatives to secondary schooling so that the skills of the primary school graduates and non-graduates can be built upon.

The extremely low levels for central administration and planning--together they only accounted for 2 percent of the budget in 1971--could imply great administrative efficiency or a great need for more emphasis in this area. On the other hand, it is the case that a great deal more spent in these areas would probably yield high returns in terms of the efficiency and productivity of the education system.

Finally, the budget shows that personnel services take up 70 percent of the total resources, not at all unusual since education every where is a very labor intensive activity. However, materials and supplies accounted for less than 1 percent of the total in 1971 and even by LDC standards this is rather low.

2. Budgeted Costs Per Student

Exhibit 5 as follows reflects the costs per student for the various types of education. Although data on the costs per student for Agricultural programs was not available, it can be readily seen that specialized education does cost more than the college-preparatory variety but that cost per student for specialized courses apparently goes down as capacity is increased.

As shown in Exhibit 5, per-student costs at the primary level have risen almost 20% since 1965. This rise is due to numerous factors including the upgrading of the teaching staff, with the concomitant necessity of paying higher salaries, the provision of free texts to students and accelerated school construction programs. As the teaching staff is upgraded further and more of the burden of supplying texts taken over by the Government of Nicaragua, per-student costs at the primary level should be expected to continue to rise.

EXHIBIT 5

BUDGETED COSTS PER STUDENT BY AREA OF STUDY IN CORDOBAS*

1965 - 1971

	<u>1965</u>	<u>1967</u>	<u>1969</u>	<u>1971</u>	<u>1965-1971 % Change</u>
Primary	€208	€273	€272	€249	+19.4 %
College Preparatory	€577	€456	€533	€481	-16.6 %
Normal Schools	€826	€774	€1591+	€1138+	+37.8 %
Commercial and	€864++	€491	€867	€458	- 6.7 %+++
Vocational		€2972	€1320	€1270	-57.3 %+++
Agricultural	NA	NA	NA	NA	

+ Last two years only

++ Not given separately in 1965

+++ 1967-1971

* Seven Cordobas equals one U.S. dollar.

Source: Figures from the National Budgets for the years cited.

176

At the secondary level, it should be anticipated that per-student costs for College Preparatory, Normal and Commercial programs will probably remain fairly constant in the foreseeable future unless it is decided to reduce class sizes and have major programs to provide needed educational materials and equipment {both of which are highly recommended changes}. The per-student costs for Vocational-Agricultural programs should be expected to rise considerably if the recommended expansion of services and provision of adequate equipment takes place. However, it should be remembered that the training being provided is essential to the continued economic growth of Nicaragua and that the potential returns on the investments in Vocational and Agricultural education are great, even if they were to be measured only in economic terms. These conclusions are affirmed and covered in more detail in the ODECA report recently submitted to the Ministry evaluating the national educational budget policies and procedures.

3. Costs per Graduate

Although exact costs per graduate at any level of any educational system are difficult to determine, since this involves accumulating all educational costs, private and public, for the entire educational life of each student to the point of graduation, rough approximations of the minimum costs can be made by dividing the numbers of graduates at any particular level by the public investment in education up to that level. Since this process does not include either private costs {tuition, books, supplies, donations, earnings foregone, etc.} or many administrative and supervisory expenses, it should be stressed again that the costs per graduate obtained are minimal figures and probably sorely underestimate the true total costs.

However, using this method, as illustrated on the following page in Exhibit B, it is indicated that the minimal costs per literate {4th grade graduate} is about 4,000 Cordobas; for a primary school graduate {6th grade}, about 8,000 Cordobas; and for a high school graduate, about 44,000 Cordobas. {On the basis of enrollment data, it was determined that 83% of the primary education budget is currently being used for grades one through four.}

EXHIBIT 6

EDUCATIONAL COSTS PER GRADUATE IN CORDOBAS*

1965 - 1969

	<u>1965</u>	<u>1969</u>
Number of 4th Grade Graduates	10,195	16,356
83% of Primary Budget {1,000's}	€35,331	€60,751
<u>Cost per 4th Grade Graduate</u>	€ 3,465	€ 3,714
Number of 6th Grade Graduates	5,077	9,562
Primary Budget {1000's}	€42,567	€73,194
<u>Cost per 6th Grade Graduate</u>	€ 8,384	€ 7,655
Number of High School Graduates	1,445	2,335
Primary Budget plus Secondary Budget {1,000's}	€54,659	€101,724
<u>Cost per High School Graduate</u>	€37,826	€43,564

*Seven Cordobas equals one U.S. dollar.

Source: National Budgets and Enrollment Data for the years listed.

Now, except for the many students who do not go to the fourth grade, the money spent on educating most students, whether they graduate or not, is not completely wasted - supposedly some skills are learned each year that can contribute to a more productive life. But for those students not becoming functional literates, the money spent teaching them has, in effect, been wasted since most of the skills being taught will be soon forgotten. This is a major reason why it has been suggested in this Plan that every effort be made to maximize the percentage of students finishing the fourth grade of those who enter primary school and to provide educational relevant to national, regional and individual needs beyond that point to promote greater effectiveness and efficiency in the public educational system beyond the fourth grade.

With this approach, the costs per graduate may not decrease - in fact, at the secondary level, with the construction of better facilities and provision of usable materials and equipment, the costs will probably go up considerably initially - but the potential return on the investments in education will be greatly increased.

D. Primary Education

1. General

As with all areas of development, it is necessary to know as fully as possible what the existing conditions and resources are and what the situation will be if past and present trends continue before adequate plans can be made to possibly modify those trends. This section will present the available data as necessary to fully describe the Nicaraguan Primary education system in that manner.

2. Enrollments

Exhibit 7, p. 22, gives the basic data on primary school enrollments for 1965 and as projected to 1980. In every department of the country urban school enrollment in 1965 was greater than the number of students between the ages of 7 and 12 residing in the urban areas.

This can be accounted for by one or more of the following three possibilities: 1. a large number of students are beginning school earlier than the legally prescribed minimum age of seven, 2. a large number of students are attending primary school who are over 12 years of age, and/or 3. a great number of students are coming into the urban centers from the rural areas to attend primary schools.

The situation in the rural areas can be explained, at least in part, by the relative lack of availability of schools, especially those with all six grades, the lower quality of teachers, and the relative lack of materials--all of which would contribute to a tendency to send rural students into the urban areas to attend schools. Other factors often mentioned by Nicaraguan educators are a lack of interest on the part of rural parents in education, the need for students to work at an early age to help provide food and/or income for the family, and climatic and health conditions which keep students away from school.

School enrollment in the rural areas ranges from a low of 13.6% (of the 7 to 12 age group) in the department of Boaco to a high of 55.9% in the Department of Managua, while the range for the urban areas is from 92.7% in Granada to 159.0% in Estelí.

Exhibit 7, p. 23, also gives the number and percent of the population from 7 to 12 years of age enrolled in primary schools since 1965 with projections to 1980.

As can be seen in Exhibit 7, total enrollments are expected to increase by about 40% between the years 1970 and 1980 and enrollments of students age 7 to 12 are expected to increase by about 55% indicating a tendency to enroll more students of the appropriate age level. However, as also indicated, it is

EXHIBIT 7

UNCLASSIFIED
Annex V
Page 23 of 60POPULATION OF SCHOOL AGE, BY NUMBER AND PERCENT ENROLLED (PRIMARY)

	<u>1965 - 1990</u>							
	Population 7-12 Years		Enrollment Total		Enrollment 7-12 Years		% of Population 7-12 Years Enrolled	
	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural
1965	106,696	163,043	135,774	75,641	103,762	61,615	95.4	37.6
1966	112,504	166,055	140,695	75,618	116,269	62,496	103.3	37.1
1967	116,573	173,482	165,654	81,411	129,260	66,263	109.0	36.2
1968	123,614	200,136	174,718	83,902	132,370	65,966	107.0	32.9
1969	128,063	204,661	182,365	85,961	141,166	69,176	120.2	33.7
1970	132,525	209,455	186,625	88,496	145,125	72,261	109.5	34.5
1974*	153,232	229,260	215,567	96,610	175,227	84,596	114.3	36.9
1990*	193,670	266,822	260,063	115,124	226,655	106,955	127.0	39.6

* Projections by the Planning Office, Ministry of Public Education

Source: Planning Office, MPE

Note: The enrollment is larger than the school population due to inclusion of population younger and older than the official school age (7-12), and rural population attending urban schools in some areas.

also expected that the major increases in total enrollment will be in urban schools, increasing by over 70,000 students in the next decade, while the rural schools increase their total enrollment by only about 27,000 students.

The goal of universal elementary education, as stipulated in the Nicaraguan Constitution, is not being fully attained at the current (or projected) rates of school construction and provision of teachers.

Exhibit 8, p. 2^a, present the numbers of primary school students enrolled, by age and grade, in the public and private primary schools of Nicaragua. As can be seen in Exhibit 9 approximately 17% of the total primary enrollment is in private institutions.

The descending figures in both Tables, proceeding through the primary grades, reflect the high attrition rates previously discussed but two additional items of major note are: 1. these attrition rates are apparently lower in private institutions (about 11% of the total enrollment is in sixth grade as opposed to 5% in the public schools) and 2. fewer students in the private schools are over-age for their grade and more are under-age (about 18% of the private first grade students are under 7 as opposed to less than 4% of the public; about 75% of the public sixth grade students are over 12 while this is true of only slightly over half of the private school sixth grade students).

3. Rates of Promotion and Graduation.

Directly related to the educational attrition rates and age-grade levels previously discussed are the promotion rates presented in Exhibit 9, p. 26. As illustrated in Exhibit 9, in 1969 in the Nicaraguan public primary schools at all grade levels, 62% of those students entering at the first of the year were passed to the next grade (ranging from 53% of those entering first grade to 84% of those entering sixth grade). Of the 38% of the students who were not passed, 23% was due to desertion (not staying in school) and 15% was due to failure to pass the year-end examinations.

It should be mentioned, however, that passing the year-end examinations does not ensure entrance into the next grade, since this requires that the next grade be available and for many rural students, this is not true.

The desertion rates and the failure to pass year-end examinations can be attributed to a number of reasons, many of them inter-related. Among these reasons are: 1. poor health from many causes (poor nutrition, poor sanitation, lack of knowledge about disease, etc.), 2. poor roads, 3. need for students to help support their families, 4. inability of the students to buy required notebooks and materials, 5. lack of learning materials in the schools, 6. teacher attitudes that standards are maintained by failing a relatively high proportion of their students, 7. lack of interest on the part of students and/or their parents, 8. lack of adequate school facilities, and 9. inadequate teacher preparation.

EXHIBIT 8

STUDENTS IN OFFICIAL AND PRIVATE SCHOOLS BY GRADE AND AGES - 1969

AGES	TOTAL		Pre-P.		1st Grade		2nd Grade		3rd Grade		4th Grade		5th Grade		6th Grade	
	O	P	O	P	O	P	O	P	O	P	O	P	O	P	O	P
TOTAL...	239,044	49,986	2,629	6,893	97,678	9,559	48,319	8,012	36,436	7,254	24,335	6,822	17,168	6,117	12,479	8,239
Below 7 years	4,935	6,446	971	4,616	3,964	1,830	-	-	-	-	-	-	-	-	-	-
7 Years	32,882	5,890	673	1,122	29,309	3,190	2,900	1,578	-	-	-	-	-	-	-	-
8 Years	33,772	6,219	430	496	21,978	1,945	8,673	2,351	2,691	1,427	-	-	-	-	-	-
9 Years	31,086	6,220	208	264	14,261	1,165	9,338	1,474	5,419	2,005	1,810	1,312	-	-	-	-
10 Years	32,892	6,281	144	160	11,562	652	9,307	1,667	6,996	1,415	3,673	1,853	1,210	1,134	-	-
11 Years	27,715	5,880	84	94	6,762	336	6,762	657	6,293	912	4,492	1,225	2,519	1,647	923	1,009
12 Years	28,447	5,311	62	62	5,232	224	5,746	499	6,502	698	5,295	1,031	3,545	1,271	2,005	1,536
Above 12 Years	47,315	7,749	57	79	4,610	217	5,703	386	8,535	207	9,065	1,401	9,854	2,065	9,491	2,784

O: Official
 P: Private
 Source: Planning Office, MPE

103

EXHIBIT 9

UNCLASSIFIED
Annex V
Page 26 of 67

PROMOTION RATES IN PUBLIC PRIMARY SCHOOLS (1969)

GRADES	ENTERED	EXAMINED	PASSED	RETAINED	DESERTION DURING YEAR	PASSED OF THOSE ENTERING
TOTAL	222,718	171,036	139,437	31,599	23.6	62.6
FIRST	94,672	64,797	50,465	14,332	32.6	53.6
SECOND	46,850	37,034	31,481	5,553	21.6	66.6
THIRD	32,366	26,224	21,637	4,587	19.6	69.6
FOURTH	22,016	18,731	15,189	3,542	18.6	68.6
FIFTH	15,484	13,622	11,103	2,519	14.6	71.6
SIXTH	11,330	10,618	9,562	1,056	6.6	84.6

Source: Planning Office, MBE

181

Exhibits 10 and 11, pps. 28 and 29, give the numbers of graduates from the public and private primary schools for the fourth and sixth grades as they have occurred since 1963 and as projected to 1980. As can be seen in both exhibits the percentages of students passing both grades have been optimistically projected with overall graduation rates of about 87% for the 4th grade and 92% for the 6th grade in 1980 (as opposed to 72% and 86% in 1969). But, perhaps more important, the numerical projections at both levels have the number of both 4th and 6th grade graduates more than doubling from 1969 to 1980 (with the number of 6th grade graduates increasing from 14,028 in 1969 to 29,670 in 1980).

4. Classrooms and Schools.

Exhibit 12, p. 29, presents the data indicating the total numbers of primary classrooms in Nicaragua in 1969 by department and relates these data with the total school-age population and with numbers of primary students registered at the beginning of the 1969 school year.

As can be seen in Exhibit 12, in 1969 there were 6,727 primary school classrooms in the country with almost one-third of these located in the department of Managua.

In Nicaragua, the legally stipulated per classroom student limit is 40 students per classroom. This is somewhat high by world averages, but with the currently existing high yearly attrition rates, initial enrollments of 40 or more students can be expected to diminish appreciably (average of 23% in 1969) during the course of each year. As the major causes of attrition are successfully overcome in the future, however, it would be hoped that maximum class sizes would be reduced to more manageable levels.

It should be noted here that the figure of 6,727 total classrooms reflect those that are used for more than one shift (22% of the schools) - if a classroom is used for two educational shifts, with one class in the morning and another in the afternoon, etc., it is counted as two classrooms (or three if appropriate). Also, the average registration per classroom given in the last column of Exhibit 12, can be misleading. In many classrooms, especially at the lower grades and even more especially in the rural areas, class sizes of up to 100 students or as low as 15 or 20 are not uncommon. The legally stipulated limit of 40 students per classroom is exceeded in well over 50% of the classrooms in the country even by the end of each school year, after the current yearly attrition rates have diminished class sizes. The data in Exhibit 12, is based on a theoretical concept of a standardized classroom, in good condition, with the capacity of 40 students in each classroom, treating rural and areas alike.

Exhibit 13, p. 30, shows the number of primary schools, differentiated on a rural-urban basis, by numbers of teachers and numbers of grades offered. Over two-thirds of the primary schools are located in rural areas while over two thirds of those schools offering all six grades are located in urban areas.

185

EGYPT 10

UNCLASSIFIED
Annex V
Page 28 of 60

PRIMARY SCHOOL GRADUATES - FIELD SCHOOLS

Year:	5 ^C Grade						6 ^C Grade					
	URBAN			RURAL			URBAN			RURAL		
	Enroll- ment:	No. passed:	%:	Enroll- ment:	No. passed:	%:	Enroll- ment:	No. passed:	%:	Enroll- ment:	No. passed:	%:
1963	9.591	6.839	71	534	325	60	4.513	3.663	81	45	34	75
1965	13.563	9.321	68	1.437	674	53	6.259	4.933	78	209	144	68
1967	15.456	10.708	69	2.262	1.363	60	8.312	7.004	79	402	294	73
1969	18.657	12.997	69	3.359	2.192	61	10.725	9.070	84	605	492	70
1970 ⁺	19.604	17.055	87	3.394	2.414	62	11.659	9.793	84	853	597	70
1974 ⁺	23.800	21.182	89	6.415	4.233	66	16.482	14.504	88	1.897	1.355	72
1980 ⁺	30.617	27.861	91	9.555	6.734	71	22.835	21.740	95	3.447	2.585	75
+Projections												

Source: Planning Office, MPE

UNCLASSIFIED

1/28

EXHIBIT 12

UNCLASSIFIED
Page 29 a of 60

PRIMARY SCHOOL CLASSROOMS

YEAR	No. OF EXISTING CLASSROOMS**	URBAN RURAL		NO. OF CLASSROOMS NEEDED						SURPLUS/DEFICIT			
				URBAN		RURAL		TOTAL		URBAN		RURAL	
				(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
1969	6,727	4,814	1,913	4,559	3,201	2,150	5,118	6,709	8,319	-255	-1,613	-237	-3,205
1970 **	-	-	-	4,715	3,313	2,213	5,237	6,928	8,550	-99	+1,501	-300	-3,324
1974**	-	-	-	5,390	3,831	2,452	5,731	7,842	9,562	-576	-983	-539	-3,816
1980**	-	-	-	6,501	4,842	2,878	6,670	9,379	11,512	-1,687	-28	-965	-4,757

- (1) Based on total enrollment, all ages.
- (2) Based on enrollment of 7-12 years population.

* The total of 6,727 classrooms includes an adjustment for 22% of the schools which are used for two shifts.

** Projections

NOTE: Construction planned in loan activities Section IV, 2.f. (2) is programmed in areas of new population growth, to replace inadequate or rented facilities.

Source: MPE
USAID/N 5/28/72

UNCLASSIFIED

187

OFFICIAL PRIMARY SCHOOLS - ACCORDING TO NUMBER OF TEACHERS - 1969

	TOTAL			P. Primary		1		2		3		4		5		6	
	Total	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R
TOTAL	1825	397	1428	3	3	6	133	9	278	31	459	51	305	31	132	266	116
1. TEACHER	1293	10	1233	3	3	4	133	2	269	-	431	0	265	-	86	1	46
2. TEACHERS	127	15	112	-	-	-	-	3	3	2	25	2	31	3	27	5	21
3. TEACHERS	68	27	41	-	-	-	-	3	1	8	-	2	8	5	12	9	20
4. TEACHERS	51	36	15	-	-	1	-	1	-	9	3	11	2	3	4	11	6
5. TEACHERS	40	23	17	-	-	1	-	-	-	3	-	10	1	1	2	8	1
6. TEACHERS	45	40	5	-	-	-	-	-	-	4	-	10	-	4	-	22	5
6. AND MORE TEACHERS	251	246	5	-	-	-	-	-	-	5	-	16	-	15	1	210	4

SOURCE: PLANNING OFFICE, MEP

UNCLASSIFIED

188

Now, not including the other more general social, political, economic and physical goals of education, there are two major objectives of a primary education - to produce functional literates and to prepare students for a secondary education. The first goal, functional literacy, is generally assumed to be fully attained by the end of four years of schooling; the fifth and sixth grades are generally used for the second goal.

Exhibit 13, illustrates graphically the major reason why the Nicaraguan primary education system is not efficiently reaching either of these goals. Where it can be stated that the major reason is the high educational attrition rate, it is possible now to go one step further, for the high elementary attrition rate is in great part attributable to the large number of schools that offer less than the full six, or even four, years of primary schooling.

Looking at Exhibit 13, it can be seen that fully 916 of the total 1825 primary schools in the country (outside of those strictly for pre-primary students) are less than four year schools (only 46 of these are urban schools). For the majority of the students attending these schools, the possibility of attending the fourth grade in some other school is remote. Up to 50% of the third grade graduates might attain functional literacy but even that would mean that much of the investment in these schools was wasted.

In addition, there are 189 schools (180 of them are rural) with five and six grades where there are only one or two teachers (133 with only one teacher). In these cases, there is little doubt that the students attending are not receiving an effective education through all six grades unless the teachers are highly trained and have a very minimal number of students.

The point is, of course, that the situation presented in Exhibit 13, reflects an inefficiency of the primary school system that can only be overcome by establishing all schools as four or six year schools, giving special training to teachers who have to teach four grades, and reducing class sizes to a quantity of students that can be effectively taught according to the number of grades that each teacher must teach (one, two, or four grades).

It can be concluded that where one-teacher schools must be used, those teachers should be fully competent to teach at least the first four grades and should probably have fewer students than teachers teaching one grade only. Further, no teacher should have more than 40 students, a multi-grade teacher should have no more than 35 students, and, where all six grades are taught, at least three teachers should be working in the school.

Closely related to this, of course, are two other major determinants of teaching effectiveness - condition of the school building and availability of teaching materials. As determined in a primary school survey conducted in the Spring of 1971, slightly more than half (52%) and "poor" (16%). Of all the schools, however, only 28% have a potable water supply, 22% have electricity, and only 44% have restroom facilities of any kind.

181

The lack of teaching materials is also extreme. Many primary school students do not have desks or chairs to sit in and rough planks are often used - it is not uncommon, especially in the rural areas, to see classes with students sitting on the floor which often is nothing more than tamped earth.

The major areas, then, in which the Nicaraguan Ministry of Public Education should give priority to increase the efficiency of primary education are establishment of minimum four-grade schools, upgrading the condition of those schools, providing adequate learning materials, establishing variable class-sizes in primary schools in accordance with numbers of teachers and grades taught, and improving teacher capabilities so they can adequately handle multi-grade teaching situations as necessary.

5. Curriculum

Basic to the efficiency and effectiveness of any educational system is the curriculum offered. This fact has been realized in Nicaragua and as a result the primary curriculum has been undergoing extensive reform since 1965.

The impetus for the current reform of the curriculum began in 1956, with the first of a series of seminars dealing with education in Central America. These seminars resulted in many recommendations, concerning educational textbooks, administration, finance, and the curriculum for the elementary schools. Writing seminars were held by ODECA-ROCAP in 1964-1971, which led to the publication of a series of textbooks in many subjects for the elementary schools of Central America and Panama. These texts are now in use in Nicaragua, as well as in the other countries of the area.

The curriculum reform movement in Nicaragua gained momentum in 1962, with a reform of the Horarios de Primaria, and then again in 1965, with a meeting of Ministry of Educación and university personnel, who produced a document entitled Ante-Proyecto de Reforma de Planes y Programas de Educación Primaria. Some of the major problems facing the schools were well stated in that document: the inability of the educational system to respond to necessary changes in the society; the need for planning and programming at all levels of the educational system; illiteracy, which was the result of insufficient and ineffective schools; and poor work habits.

The report also recommended that the organization of the school day, the goals and purposes of Primary Education, the training and supervision of teachers, and the distribution of teachers throughout the country be studied. Finally, it recommends the organization of a Commission to Reform Plans and Programs.

For the next two years, individuals within the Ministry of Education worked part-time on the writing of materials for the reform of the first grade program of studies, and then in 1967 a full-time staff of curriculum writers was appointed. At this time, the government of Nicaragua made clear its full support of the curriculum and materials development program to prepare students "...for an efficient participation in the development and use of the natural resources of the country, particularly in the agricultural sector."

The new first grade programs were published in March, 1968, followed by the new second, third, fourth, and fifth grade programs in 1969, 1970, 1971, and 1972. Plans call for the completion of the sixth grade programs in 1972. At the start of each school year, sessions for inspectors and master teachers have been held in Managua for special training in the implementation of the new curricular materials. These specially trained individuals, then have returned to their Departments and have held similar training sessions for teachers of the new program. In this way, the new curriculum has been implemented in most of the elementary schools in the country. Exhibit 14, p 34, reflects the revised curriculum by subject and hours, grades 1-5. Also the present sixth grade curriculum which is being revised in 1972 for implementation in 1973. The number of separate courses offered has been cut down from fourteen to eight, through the process of combining related subject fields. There has also been a reduction in the number of class meetings per week from 35 to 30 in grades 1-5 and from 35 to 32 in grade 6, and changes in the number of hours offered in various subject areas.

Of greater significance than the changes in the number of courses or the hours that they are offered each week, are the new printed programs or plans of studies. A major strength of the new curriculum lies in its clear statements of objectives in each subject area.

Some sections of the new program contain ideas on evaluation, to see if the objectives have been met, but in many cases the activities and the suggested evaluation procedures have little to do with the stated objectives.

The new program materials have had a positive impact in diversifying the approaches that teachers take in their classroom presentations but, with the lack of many audio-visual aids and other materials, far too often the classes still tend to be only lecture and recitation.

In most curricular areas, the new program is in keeping with the latest worldwide trends and developments. It has a solid, logical, subject matter orientation, and this is one of its greatest strengths. At the same time, however, the psychological and developmental needs of children could be more closely considered.

The elementary program of studies has been significantly improved over the past five years, with the new program containing a greater integration of subjects, a clearer development of objectives, a greater use of concepts and generalizations, better articulation between grades, and more aids for the teachers to use in their classroom presentations. The new textbooks from ODECA-ROCAP are a significant factor in the upgrading of education in Nicaragua, and the in-service programs for teachers have been a positive influence for change.

6. Educational Wastage

In Nicaragua, every child, by law, is guaranteed a primary education - in practice, over 80% of the Nicaraguan children currently are

100

PRIMARY SCHOOL PLAN OF STUDIES (CURRENT)

<u>S U B J E C T S</u>	<u>G R A D E S</u>					
	<u>1st</u>	<u>2nd</u>	<u>3rd</u>	<u>4th</u>	<u>5th</u>	<u>6th</u>
<u>REVISED CURRICULUM</u>						
Spanish	10	10	8	8	8	
Mathematics	6	6	6	6	6	
Sciences	3	3	4	4	4	
Social Studies	3	3	4	4	4	
Handcrafts, Music, Singing	4	4	4	4	4	
Physical Education	2	2	2	2	2	
Live-Stock Orientation	2	2	2	2	2	
Industrial Arts/o/Home Making	—	—	—	—	—	<u>2</u>
Weekly Lessons of 40 minutes	30	30	30	30	32	
<u>CURRICULUM - PENDING REVISION</u>						
Physical Exercise and Educative Games						3
Human Body and Health						2
Moral and Civism						2
Spanish Language and Reading						2
Dictation, Composition & Grammar						4
Writing						3
Mathematics and Geometry						5
Sciences						2
Geography						2
History						2
Drawing						2
Singing						2
Handcraft and Home Education						2
Agriculture Work						2
Weekly Lessons of 40 minutes. . .						<u>35</u>

Source: MPE

USAID/N 5-72

NOTE: Revised curriculum implemented through fifth grade. Curriculum revision for sixth grade is in process and will be implemented in 1973.

UNCLASSIFIED

192

UNCLASSIFIED

Annex V

Page 35 of 60

entering first grade and of those, close to 20% finish the 6th grade, around 3% finish a high school education and about .6% end up with a university degree.

Poor as this situation is when compared to the figures obtained from more developed countries, it is a marked improvement over the situation of ten years ago illustrated in Exhibit 15, p. 26, which indicates that in 1970 less than 8.2% of those students entering first grade finished their elementary education.

This reflects the great interest in education that the Nicaraguan government has taken in the past ten years and the relatively large amounts of money that have been invested.

Exhibit 16, p. 28, gives the primary school wastage for the years beginning in 1955, 1959, and 1965. It can be seen that the attrition rate has been greatest from grades 1 to 2 with 28.5% of those entering first grade in 1955 entering the second grade, about 34% entering the second grade in 1960 of those entering first grade in 1959, and the current rate is about 45%. So, although the improvement has been great, the situation still has less than one-half of those students who enter first grade going on to the second grade.

With respect to the number of students entering fourth grade, considered necessary for functional literacy, 10.5% of those entering first grade in 1955 entered the fourth grade in 1958, 17.8% in 1962, and slightly over 30% currently. This also reflects a marked improvement in efficiency of the Nicaraguan educational system, even though there obviously is still much further room for improvement.

The reasons for the high attrition rates shown in Exhibit 16, p. 28, are myriad. The preponderance of one-teacher elementary schools (roughly two thirds of all primary schools in the country) is undoubtedly a major factor. In addition, the practice of using teacher-constructed year-end tests in the primary grades coupled with an historical tendency to screen out relatively large numbers of students is another factor. Third, most primary teachers cannot effectively teach more than one or two grades, and since multi-teacher schools are often not available, especially to the majority of rural students, many students are effectively pushed out of the educational system after the first, second, or third grade, depending on the numbers and qualifications of the teachers. Fourth, some students leave school after enrolling, to help at home or to help provide family income in some way.

Until the great majority of those who enter first grade continue through at least the fourth grade, it can be safely assumed that much of the money spent on elementary education in Nicaragua has been wasted. When only a maximum of one-third of those students entering first grade become functional literates, most of the money spent educating the other two thirds has been, in effect, thrown away.

145

EXHIBIT 15

ALL LEVEL EDUCATION PYRAMID

1955 - 1970

			M	F		
5th Year	1970	1.0%	313	74	.2%	
4th Year	1969	1.0%	318	304	.9%	
3rd Year	1968	1.3%	417	249	.7%	Higher
2nd Year	1967	1.5%	494	255	.8%	
1st Year	1966	4.2%	1365	487	1.5%	
5th Year	1965	3.8%	1214	736	2.2%	
4th Year	1964	6.2%	2003	1114	3.4%	
3rd Year	1963	6.3%	2011	1453	4.4%	Secondary
2nd Year	1962	6.3%	2010	1485	4.5%	
1st Year	1961	8.7%	2786	2099	6.4%	
6th Grade	1960	8.2%	2621	2680	8.2%	
5th Grade	1959	9.7%	3108	3127	9.6%	
4th Grade	1958	10.5%	3361	3427	10.5%	
3rd Grade	1957	13.9%	4446	4535	13.9%	Primary
2nd Grade	1956	28.5%	9093	9276	28.5%	
1st Grade	1955	100%	31966	32511	100%	

Source: Planning Office, MPE

USAID/N 4-72

UNCLASSIFIED

1/19/71

Exhibit 16, gives the attrition rates for just the six primary grades for the years 1965-1970, separated on an Urban-Rural basis. As can be seen the rural areas are the greatest contributors to the high primary school attrition rates. Even though over 20% more students enrolled in rural schools in the first grade in 1965 than enrolled in the urban schools, by 1970 only about 6% of all students in the sixth grade are attending rural schools. The situation reflected in Exhibit 16, with only 6% of the beginning enrollment in rural schools reaching the fourth grade, is serving to perpetuate the high rates of illiteracy in the rural areas of Nicaragua.

193-

PRIMARY SCHOOL WASTAGE IN PERCENTAGES

<u>GRADE</u>	<u>1955/60</u> %	<u>1959/64</u> %	<u>1965/70</u>		
			<u>Total</u> %	<u>Rural</u> %	<u>Urban</u> %
1	100	100	100	100	100
2	28.5	24.5	47.5	47.5	71
3	13.9	23.1	36.7	14	64
4	10.5	17.8	27.4	6	52
5	9.6	13.7	22.6	3	46
6	8.2	12.5	17.0	2	25

Source: National Educational Development Plan 1971-1980

E. Secondary Education

1. General

The Nicaraguan secondary education system is composed of two parts, or cycles - The Basic Cycle, which comprises the first three years beyond elementary school, and the Diversified Cycle, which consists of the final two to three years. In this section the available data is presented to fully describe and analyze those two cycles.

2. Enrollments

Exhibit 17 and 18 p. 10 and 11, give the basic data on secondary school enrollments for 1969 and as projected to 1980. As shown in Exhibit 17, in 1969 across the country only 12.7% of the potential students between the ages of 13 and 18 were enrolled in secondary schools, ranging from 31.3% in the Department of Managua to none in the Department of Rio San Juan. However, as of 1971 all departments now have students in secondary schools.

The low percentages of enrollment given in Exhibit 17 can be ascribed to: 1. lack of facilities and teachers, 2. students in that age group attending primary school, 3. low graduation rates from primary school, 4. lack of perceived relevance of the secondary program by students in that age group and/or their parents, and 5. the desire, need, or custom of going to work or getting married at a relatively early age.

In Exhibit 18, it can be seen that, based on prior and anticipated increases in efforts to expand the secondary system, it is expected that secondary school attendance will increase from 13.5 to 21.3% of the 13 to 18 age group between 1970 and 1980. Due mainly to the rapid rate of population growth in Nicaragua, the numbers of students between the ages of 13 and 18 not attending secondary schools is projected to increase between the years 1970 and 1980 from 225,000 to 260,924 or, roughly, by 15%. Therefore, the current and projected rates of expansion of the secondary school system are not sufficient to keep up with the increasing numbers of young people in the 13 to 18 age group. Exhibit 18 indicates that overall secondary school enrollments, as low as they are as a percentage of potential students, have increased dramatically from 1965 when about 19,700 students were enrolled, to 1969, when over 45,500 students were enrolled - an increase of 133% in 7 years.

In Exhibit 19, p. 42, the column labeled "Institutes and Basic Cycle," which includes slightly over 50% of the total students for each of the years mentioned, covers what is essentially college preparatory training since there is little in the way of any practical training given to students in the Basic Cycle or in those schools classified as "Institutes". As shown in Exhibit 20, p. 44, in 1969 83% of all secondary students were enrolled in college preparatory programs, 7% in normal schools, 6% in commercial schools, with agricultural, vocational and other training sharing about equally the remaining 4% of the

1971

EXHIBIT 17

POPULATION OF SECONDARY SCHOOL AGE BY GEOGRAPHICAL DEPARTMENTS - 1969

DEPARTMENTS	Population+ 15 - 18 Years	Enrollment* Total	Enrollment++ 13-18 Years	% of Population Enrolled 13-18 Years
NATIONAL	264,260	45,624	33,609	12.7%
Boaco	12,737	370	307	2.4%
Carazo	11,067	3,062	2,469	22.3%
Chinandega	21,925	2,728	2,213	10.0%
Chontales	13,368	1,084	761	5.6%
Estelí	11,973	2,109	1,519	12.7%
Granada	11,464	1,888	1,598	13.9%
Jinotega	13,337	780	604	4.5%
León	26,377	2,971	2,211	8.3%
Madriz	8,689	229	141	1.6%
Managua	51,451	22,900	16,135	31.3%
Matagalpa	30,715	1,640	1,198	3.9%
Masaya	13,333	2,264	1,786	13.3%
Nueva Segovia	7,923	311	273	3.4%
Rfo San Juan	2,634	---	---	---
Rivas	11,543	1,185	868	7.5%
Zelaya	15,724	2,103	1,527	9.7%

+ Projections

++ Does not include Agriculture Liceos

* All ages

UNCLASSIFIED

Source: Planning Office, MPE

EXHIBIT 13

TOTAL POPULATION IN SECONDARY SCHOOLS BY PROJECTIONS AND PRESENT ENROLLMENTS

1965--1980

YEARS	Population 13-18 Years	Enrollment* Total	Enrollment+ 13-18 Years	% of the Population Enrolled 13-18 Years
1965	207.398	27.021	19.725	9.50%
1966	215.419	29.642	21.638	10.00%
1967	224.111	34.165	23.715	10.60%
1968	252.604	40.038	29.551	11.70%
1969	264.260	45.624	33.635	12.70%
1970++	275.932	50.913	37.166	13.50%
1974++	319.325	73.754	53.840	16.90%
1980++	368.487	107.563	78.535	21.30%

- + Does not include Agriculture Liceos
- ++ Projections
- * All Ages

Source: Planning Office, MPE

USAID/N 4-72

UNCLASSIFIED

199

EXHIBIT 19

ENROLLMENT IN SECONDARY SCHOOLS

1963 - 1980

YEAR	TOTAL	INSTITUTES and BASIC CYCLES	NORMAL	COMMERCIAL	AGRICULTURAL	VOCATIONAL	OTHER
1963	19.473	11.958	4.530	1.905	120	572	327
1965	27.021	15.754	4.334	1.925	125	691	435
1967	34.165	20.637	2.735	1.035	411	815	538
1969	45.624	30.227	3.034	2.317	639	720	637
1970 ⁺	50.913	42.441	3.299	2.953	735	757	635
1974 ⁺	73.754	62.119	4.434	4.255	946	1,003	932
1980 ⁺	107.563	91.084	6.035	5.751	1,433	1,545	1,304

+ Projections

Source: Planning Office MPE

200

The projected rate of increase for the secondary educational system seems to be adequate, since the projections do indicate that most of the sixth grade graduates in 1979 will be able to enter a secondary school in 1980, but it is strongly indicated that the courses to be offered in at least the new secondary schools need to be designed more in keeping with national, local, and individual needs.

Exhibit 20, p 14, break the secondary school enrollment data down by year of study and by public and private schools. Almost 60% of all secondary school students are enrolled in public schools (27,706 students out of a total of 45,624). The percentages of students entering the fifth year of studies, as compared to the number enrolled in the first year of studies, is slightly higher for private schools (35% in the private schools as compared to 30% for the public schools). However, the attrition rates for both private and public secondary schools, as with the primary system, are still deplorably high and are greatest during the first two years of the Basic Cycle (about 30% attrition during each of those years).

As shown in Exhibit 20, public secondary schools provide education for the majority of the enrolled students in all areas of study offered and provide the only official educational programs for vocational instruction at the secondary level. The classification "Other," with 79 students in private schools reflect the enrollments in three private Nurses' Aide Training Schools at the Basic Cycle level, one located in Estela and the other two in Zelaya, used to train young girls in very basic rudiments of Nursing.

In Exhibit 21, p. 15, secondary school enrollments are given by course of study and by rough geographic location for the year 1969. Over one-half (50.2%) of the secondary school students in 1969 were attending school in the Department of Managua. The Managua system, breaking the figures down by course of study, enrolled 49.3% of all Basic Cycle students, 53.6% of all Secondary (last two years of the College Preparatory program) students, 36.1% of all Normal school students, 80.1% of all Commercial students, none of the secondary school Agricultural students and all of the secondary vocational students.

Outside of Managua, all of the Departments have Basic Cycle programs (Rio San Juan began a program in 1971 not included in Table 29), 14 of the fifteen Departments have the last two years of College Preparatory work (excepting Rio San Juan), 10 other Departments have Normal Schools, 9 other Departments have Commercial schools, 7 Departments provide secondary level Agricultural training, no other Departments have secondary level Technical-Vocational schools, and two Departments provide secondary level training of Nurses' Aides.

201

UNCLASSIFIED

Annex V
page 44 of 60

EXHIBIT 20

ENROLLMENT OF SECONDARY EDUCATION PER SCHOOL YEAR

OFFICIAL AND PRIVATE SCHOOLS - 1969

	TOTAL		1st Year		2nd Year		3rd Year		4th Year		5th Year		6th Year*	
	O	P	O	P	O	P	O	P	O	P	O	P	O	P
	27.706	17.418	9.367	5.919	6.339	4.257	4.454	2.858	3.606	2.640	2.793	2.049	1.147	295
<u>Type of School</u>														
Basic Cycle & Secondary Institutes	23.324	16.406	9.011	5.779	6.305	4.227	4.234	2.849	2.028	1.964	1.509	1.546	237	41
Normal	1.894	344	-	-	-	-	-	-	536	47	631	142	717	155
Commercial	1.336	844	-	-	-	-	-	-	747	516	488	271	101	57
Agriculture	443	245	-	-	-	-	-	-	186	113	165	90	92	42
Vocational	719	-	356	-	34	-	220	-	109	-	-	-	-	-
Other	-	79	-	40	-	30	-	9	-	-	-	-	-	-
Total All Schools	45.624		15.186		10.596		7.312		6.246		4.842		1.442	

O = Official Schools; P = Private Schools; * Night Schools

Source: Planning Office, MPE

USAID/N: 4-72

UNCLASSIFIED

202

EXHIBIT 21

UNCLASSIFIED
Annex V
Page 45 of 60ENROLLMENT IN SECONDARY EDUCATION BY GEOGRAPHICAL DEPARTMENTSAND TYPES OF STUDIES - OFFICIAL AND PRIVATE - 1969*

	Total	Basic Cycle	Diversified Cycle	Normal	Commercial	Agriculture	Vocational	Others
NATIONAL	45.624	32.405	7.325	2.228	2.180	688	719	79
<u>Areas</u>								
Boaco	370	306	64	-	-	-	-	-
Carazo	3.062	2.005	486	495	76	-	-	-
Chinandega	2.728	2.102	277	105	124	120	-	-
Chontales	1.084	750	153	93	-	88	-	-
Estelí	2.109	1.464	246	261	54	65	-	19
Granada	1.888	1.393	302	-	125	68	-	-
Jinotega	780	553	126	81	20	-	-	-
León	2.971	2.143	710	-	118	-	-	-
Madriz	229	174	43	12	-	-	-	-
Managua	22.900	15.955	3.931	803	1.492	-	719	-
Masaya	2.264	1.712	322	230	-	-	-	-
Matagalpa	1.640	1.199	241	49	42	112	-	-
Nueva Segovia	311	258	49	-	4	-	-	-
Rfo San Juan	-	-	-	-	-	-	-	-
Rivas	1.185	816	166	23	-	180	-	-
Zelaya	2.103	1.575	212	76	125	55	-	60

* National Projections For Following
Years are as follows:

1970	50.913	42.441**		3.299	2.963	785	737	688
1974	73.754	62.119**		4.434	4.255	946	1.008	982
1980	107.563	91.084**		6.083	5.751	1.493	1.548	1.604

**Includes Diversified Cycle

207

3. Rates of Promotion and Graduation.

Exhibit 22, p.47, presents the 1969 promotion rates for the public secondary schools. Except for the public agricultural and vocational schools, for which no exact data exist and for which the desertion rate is estimated to be quite high (on the order of 40% per year), the percent passed or graduated at the end of 1969 of those who registered at the beginning of the year was, in many cases, quite good. It can be seen that overall more than 71% of the students passed their courses in 1969, ranging from about 67% in the first year of the Basic Cycle to about 98% in the last year of Normal school.

The specific reasons for students dropping out of school during the year (the average dropout rate in 1969 was about 18%) are not fully known. Some of the possible contributing causes could be: 1. lack of adequate facilities, educational materials and/or qualified teachers, 2. the desire, need, or custom of going to work or getting married at a relatively early age, 3. health reasons, 4. lack of perceived relevance of the secondary program by the students and/or their parents, and 5. inability to pay school-related costs such as books, supplies, laboratory fees, testing fees, etc.

The general upgrading of educational materials, facilities and teachers would probably serve to reduce desertion rates as would further modification and diversification of the curriculum in line with national, local and student needs. However, another perhaps even more important approach to solving the dropout problem would be through providing guidance and counseling services for students. This possibility will be discussed in more detail in the section covering Specialized Educational Services.

Exhibit 23, p.48, gives the graduation rates from the secondary school system by area of study from 1963 as projected through 1980. Using the trends established during the past seven years, it is noted that the total numbers of graduates from public institutions are expected to triple in the next ten years while those from private institutions are expected to double.

4. Classrooms and Schools.

Exhibit 24 and 25 p.49 and p.50, presents the distributions of secondary schools by type of school and by Department, and the projected numbers of schools by type of school through 1980. Exhibit 24 indicates that in 1969 there were 75 public secondary schools and 133 private secondary schools. However, in the public sector, a school that operates for more than one session daily (e.g., during the day for college-preparatory students and at night for commercial courses, etc.) is counted as two separate schools. In 1969 there actually were 62 centers of public

204

EXHIBIT 22

SECONDARY SCHOOL STUDENTS EXAMINED AND PASSED
(Public Schools Only)

	Enrollment	Examined	Passed	Failed	% Desertion	% Passed
TOTAL	27.771	22.716	19.725	2.991	18.2%	71.0%
Basic Cycles						
Primero	9.011	7.353	6.031	1.322	18.4%	65.9%
Segundo	6.305	5.324	4.553	791	15.6%	71.9%
Tercero	4.234	3.797	3.392	405	10.3%	80.1%
Bachillerato						
Cuarto	2.028	1.791	1.558	233	11.7%	76.8%
Quinto	1.509	1.385	1.333	52	8.2%	88.3%
Sexto	237	183	183	-	22.8%	77.2%
Normales						
Cuarto	535	472	425	47	11.9%	79.3%
Quinto	631	591	567	24	6.3%	89.8%
Sexto	717	706	704	2	1.5%	98.1%
Commercial						
Cuarto	747	608	515	92	18.6%	19.1%
Quinto	488	413	390	23	15.4%	19.9%
Sexto	101	93	93	-	7.9%	12.1%
Agricultural						
Cuarto	221	+	+	+	+	+
Quinto	195	+	+	+	+	+
Sexto	92	+	+	+	+	+
Vocational						
Primero	356	+	+	+	+	+
Segundo	34	+	+	+	+	+
Tercero	220	+	+	+	+	+
Cuarto	109	+	+	+	+	+
+ No data available						

EXHIBIT 23

GRADUATES OF OFFICIAL AND PRIVATE SECONDARY SCHOOLS

1963 - 1980

YEAR	Total - Less		Basic Cycle (3 Years)		Institutes		Normal		Commercial		Agriculture		Vocational	
	O	P	O	P	O	P	O	P	O	P	O	P	O	P
1963	888	516			482	406	272	37	32	39	34	34	68	-
1965	1.445	895	1.219	966	714	712	512	100	107	50	33	33	79	-
1967	1.735	1.320	2.681	1.813	814	928	662	269	155	84	39	39	65	-
1969	2.335	1.714	3.392	2.262	1.260	1.419	563	95	360	161	95	39	57	-
1970+	2.667	1.810	3.765	2.586	1.448	1.588	615	-	423	181	118	41	63	-
1974+	4.147	2.577	5.274	3.558	2.552	2.264	847	-	512	261	135	52	101++	-
1980+	8.055	3.722	10.629	5.502	5.978	3.278	1.135		628	381	159	63	155++	-

+ Projections

++ New Program of two and four years after primary education.

O = Official Schools

P = Private Schools

Source: Planning Office, MPE

UNCLASSIFIED

EXHIBIT 24

UNCLASSIFIED
Annex V
Page 49 of 60

LOCATION OF SECONDARY SCHOOLS BY GEOGRAPHICAL DEPARTMENTS (1969)

GEOGRAPHICAL DEPARTMENTS	Total	Basic Cycle		Institutes		Normal		Commercial		Agriculture		Other			
		O	P	O	P	O	P	O	P	O	P	O	P		
NATIONAL	208	75	133	17	36	32	67	11	8	4	16	5	2	6	4
Boaco	2	2	-	-	-	2	-	-	-	-	-	-	-	-	-
Carazo	18	7	11	2	2	1	5	2	1	-	3	-	-	2	-
Chirandega	15	7	8	2	1	4	4	-	1	-	2	1	-	-	-
Chontales	9	4	5	1	3	1	2	1	-	-	-	1	-	-	-
Estelí	14	4	10	1	2	2	3	1	1	-	2	-	1	-	1
Granada	10	5	5	1	2	2	3	-	-	1	-	1	-	-	-
Jinotega	6	3	3	-	-	2	2	1	-	-	1	-	-	-	-
León	13	3	10	2	2	1	7	-	-	-	1	-	-	-	-
Madriz	2	2	-	-	-	1	-	1	-	-	-	-	-	-	-
Managua	63	17	46	3	10	8	31	1	2	2	2	-	-	3	1
Masaya	11	5	6	1	4	2	2	2	-	-	-	-	-	-	-
Matagalpa	10	5	5	2	2	2	1	-	-	-	2	1	-	-	-
Nueva Segovia ...	3	1	2	-	1	1	-	-	-	-	1	-	-	-	-
Río San Juan	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rivas	8	2	6	1	3	1	1	-	1	-	-	-	1	-	-
Zelaya	24	8	16	1	4	2	6	2	2	1	2	1	-	1	2

Source: Planning Office, MPE
USAID/N 4-72

O = Official Schools
P = Private Schools

UNCLASSIFIED

207

EXHIBIT 25
SECONDARY SCHOOL CENTERS
1960 - 1980

YEAR:	TOTAL	INSTITUTES and BASIC CYCLES		NORMAL		COMMERCIAL		AGRICULTURAL		OTHERS	
		PUBLIC	PRIVATE	PUBLIC	PRIVATE	PUB-	PRI-	PUB-	PRI-	PUBLIC	PRIVATE
						LIC	VATE	LIC	VATE		
1960	83	16	28	5	7	4	23	-	-	-	-
1965	135	29	55	21	7	4	17	-	1	3	2
1969	208	49	103	11	8	4	16	5	2	6	4
1970 ⁺	210	52	106	10	6	4	15	5	2	6	4
1974 ⁺	264	71	141	8	4	4	18	6	2	6	4
1980 ⁺	342	97	193	5	1	4	22	7	3	6	4

+ Projections (including the Centers that are going to be constructed with the IBRD loan)

Source: Planning Office, MPE

208

secondary education with 13 of them being counted as two schools to make the official total of 75 public secondary schools. These 62 centers of public secondary education, although comprising only about one-third of the total of all secondary schools, account for about 60% of the total secondary school student enrollment.

As indicated in Exhibit 25, the majority of the schools, both public and private, are college preparatory institutions (counting the Basic Cycle schools as college preparatory since they currently offer little if any practical vocational training). In 1969, of 202 schools listed, 152, or about 73%, were Basic Cycle schools (first three years of secondary work) and Institutes (all five years of the college preparatory program). Another 19 (9%) were Normal schools, 20 (10%) provided Commercial training, 7 (3%) provided Agricultural training and 10 (5%) provided other types of training. This is a relatively close reflection of the percentages of student enrollments indicated previously (83% college-preparatory, 7% teacher trainees, 6% Commercial students, and 4% for the other classifications) and indicates again the strong emphasis being given to the college-preparatory type of instruction.

The projections given in Exhibit 25 indicate that this emphasis is not expected to change. In 1974, about 80% of the 264 schools projected are expected to be Basic Cycle schools and Institutes, and, in 1980, about 84% of the projected 342 schools are expected to be in the College Preparatory categories. The data reflects that when the number of schools available are compared to potential student population, the secondary school system is in great need of expansion.

5. Curriculum

At the secondary education level, the schools are just beginning a new process of curriculum reform. Seminars have been held in new approaches to the teaching of mathematics, and the Office of Planning in the Ministry of Education is conducting a study of the needs for curricular reform at the Basic Cycle level.

A survey of the course offerings in Secondary Education, Exhibit 26, p. 28, shows a curriculum with its emphasis on breadth, rather than depth. This is seen in the number of courses each student takes in any given week which can total up to eleven different subjects. If properly carried out, such a program can offer the students a broad sampling of ideas, but there is always the danger of the student becoming a sampler of many things and a master of none. It is probable that the programs at the Basic Cycle and Diversified Cycle levels should follow the pattern set by the Primary Education curriculum team and attempt to integrate related subjects into a "broad fields"

209

EXHIBIT 26

CURRICULUM - SECONDARY SCHOOLS

	FIRST YEAR	SECOND YEAR	THIRD YEAR
Basic Cycle Grades 7, 8 and 9	Mathematics Spanish Foreign Language History Geography History & Geography of Nicaragua Civics Physics & Chemistry Introduction to Art Industrial Arts	Mathematics Spanish Foreign Language History Geography History & Geography of Nicaragua Civics Physics & Chemistry Introduction to Art Industrial Arts	Mathematics Spanish Foreign Language History Geography History and Geography of Nicaragua Physics & Chemistry Psychology Introduction to Art Industrial Arts
	FOURTH YEAR		FIFTH YEAR
Diversified Cycle "Bachillerato" Grades 10 and 11	<ol style="list-style-type: none"> 1. Mathematics 2. Spanish 3. Foreign Language 4. Physics 6. General Chemistry 6. Geography of Nicaragua 7. Sociology 8. Philosophy 		<ol style="list-style-type: none"> Mathematics Spanish Foreign Language Physics General Biology 9. History of Nicaragua 10. Philosophy 11. Economics
	Courses No. 1, 2, 3, 4, 5, 6 and 10 Accounting Law Principles Typing Functional Organization of Offices Commercial Calculations Shorthand		Courses No. 1, 2, 3, 4, 9, and 10 Cost Accounting Political Economy Commercial Calculations Commercial Law Typing Shorthand Banking & Commercial Calculations
Commercial	FOURTH YEAR	FIFTH YEAR	SIXTH YEAR
	Courses No. 1, 2, 3, 5 and 9 Gen. Agriculture Gen. Zootechnics Field Practice	Courses No. 1, 2, 3, 4 and 6 Gen. Agriculture Gen. Zootechnics Agriculture Economics Field Practice	Courses No. 2, 3, 4 and 10 Topography Agriculture Machinery Veterinary Agriculture & Special Zootechnics Field Practice
	Courses No. 1, 2, 3, 4, 5, 6 and 8 Psychology Pedagogy Agriculture & Zootechnics Physical Education	Courses No. 1, 2, 3, 4, 5, 9 and 10 Psychology Pedagogy Agriculture & Zootechnics Physical Education	Agriculture & Zootechnics Primary Programs Didactic & Language Didactics of: Mathematics Science Social Studies Physical Education Evaluation & Statistics Audio-Visual Materials Teaching Practice Monography (Thesis) Health Education Community Problems
Agriculture			
Normal			

210

curriculum. This is especially true of the social sciences, where students at times are taking four different courses. There is a much greater danger of overlap and lack of articulation in programs which attempt to cover too many subjects. Articulation with the elementary schools and the universities is also a major problem, as it is possible to see a great many areas in which the same subject matter is covered at several levels, or where the preparation in a particular course is inadequate for work in the same area at higher levels.

6. Textbooks and Material

The textbooks in use in Secondary Education are generally of a high quality and reflect recent thinking and scholarship in their particular disciplines, but there are problems due to the fact that there may be no choice of what textbooks to use, or because the same textbook is used at several different levels causing an inevitable problem of overlap. The secondary schools are equipped and underused. In some schools the laboratories are in use only one day a week, thus indicating that the discovery approaches to science teaching and learning have not really caught on in the secondary schools of Nicaragua.

A related problem facing secondary education is the great difference between the books, materials and equipment available in the various schools. Some school libraries contain only a relatively few books, while others contain many hundreds; some laboratories contain expensive equipment and the necessary materials with which to carry on experiments, while others contain almost nothing.

The great need for equipment of all kinds, adequate libraries, educational materials and audio-visual aids cannot be stressed too greatly. Whether considering college preparatory education or vocational training, students will never be adequately prepared without having essential equipment, books and educational materials available.

211

F. Higher Education

There are two major universities in Nicaragua. The National Autonomous University (UNAN) is government supported and currently enrolls over 5,000 students; the Central American University (UCA) is a private Catholic university, although partially supported through special grants by the Government of Nicaragua, currently enrolling about 2,500 students. A Graduate School of Business Administration (INCAE), a post-secondary Poly-Technical Institute (POLI), and three post-secondary schools for Agriculture, Nursing and Commercial Sciences, all located in Managua, complete the formal educational institutions locally available to Nicaraguan students for training beyond the high school level (not including a School of Fine Arts and the National Conservatory of Music which do not require high school graduation for entrance).

UNAN now has three campuses - the original site in Leon, a campus in Managua devoted almost entirely to the fields of Education, Civil Engineering, Economics and the Humanities (including Education), and a small General Studies campus in Jinotepe with an enrollment of about 100 students. UCA has one central campus in Managua and a smaller General Studies campus in Esteli also enrolling about 100 students. INCAE is devoted to providing graduate training in Business Administration to persons both from Nicaragua and from other countries who already possess their initial college degree in business-related areas.

POLI has various three-year programs of study and offers the degrees of Assistant Executive, Professor of Physical Education, Technical Artist, Electronics Technician, Interior Decorator, Professor of Industrial Arts, Professor of Home Economics, Professional Nurse, and Electromechanical Technician. Currently, there is an enrollment of 454 students in POLI, with 41 in Nursing Training, 121 training in the Assistant Executive Program, 54 in Physical Education, 46 in Technical Drawing, 94 in Electronics and Electromechanics, 40 in Interior Decorating, 7 in Industrial Arts and 51 in Home Economics.

The other three post-secondary institutions mentioned have smaller enrollments with a total enrollment of 54 students in Agronomy working for their 5-year Agricultural Engineering degree, 111 students currently enrolled in the three year program of the National School of Nursing, and 79 students working for their commercial teaching, private accounting or business secretary degrees in the Institute of Commercial Sciences.

With the diversity of courses being offered it would seem that the groundwork has been laid for the provision of skilled and technician-level graduates as needed for national development. However, the outputs in most of the areas mentioned are quite low, the enrollments are not actively tied in to projected national needs, and almost all of the courses are available only in the City of Managua. This stresses the need for a national vocational survey, the placing of more technical training courses in the high schools (with greater dispersion throughout the country), and the need to standardize the curricula leading to the various degrees available before the offerings become too diverse.

212

Exhibit 27, p 56, presents the combined enrollment data for the two major institutions of higher education - UNAN and UCA. As can be seen in Exhibit 27, the attrition rates are high in most of the university programs. Overall, about 47% of those entering the first year enter the second, 27% the third year, 20% the fourth year, and about 16% complete all of the coursework in their fields of study. However, the number of graduates is quite a bit less (currently less than 10% of those entering in the first year) since graduating generally depends on finishing an approved "monograph", similar to a Master's thesis in the U.S., after all coursework is finished.

The attrition rates in the other institutions mentioned are generally of the same order, or higher, than for the universities. These high attrition rates are generally ascribed to girls getting married or deciding to go to work, boys going to work, the financial burden (students must purchase most books and supplies, provide their own transportation, and pay fees - 350 Córdobas per semester at UNAN and 1000 Córdobas per semester at UCA which, though low by comparison with many other countries, are expensive for most lower and lower-middle class students), lack of relevance of the coursework, and lack of adequate preparation at the secondary level.

There is little doubt that all of the aforementioned are valid to some extent. The major areas in which the universities and the Ministry of Public Education would work to decrease the high attrition rates are as follows:

1. Having the universities realistically define the capabilities desired of their entering students. The Ministry could then examine and refine the secondary curricula as necessary to better meet these standards.
2. Providing some remedial courses for students having their high school degrees but not meeting university standards.
3. Easing the financial burden on low income students either by making more loans available (especially in those areas for which greatest national need is projected), by having sliding scale tuition based on family income and number of children with zero tuition for the lowest and much higher tuitions than present for higher income students, or by both.
4. Making a complete review of university coursework in the various areas to determine the necessity, relevance, appropriate sequence and content of each course, and
5. Taking other measures as necessary to ensure that enrollments in the various areas, as well as the areas themselves, reflect projected national needs for professional and technician-level people and to provide the necessary guidance to assist students in making career choices that are in keeping with their interests and abilities.

213

EXHIBIT 27

ENROLLMENT IN HIGHER EDUCATION BY

YEAR AND FIELD OF STUDY

1969

FIELD OF STUDY	TOTAL	1st Year	2nd Year	3rd Year	4th Year	5th Year	6th Year	No Year Stated	Non-degree Courses
TOTALS.....	7,782	2,881	1,343	783	585	346	85	1,409	320
Medicine.....	266	51	57	32	46	44	38	-	-
Medical Techno- logy.....	49	-	13	15	21	-	-	-	-
Law.....	784	281	202	111	78	63	49	-	-
Pharmacy.....	48	-	17	25	6	-	-	-	-
Dentistry.....	58	18	14	16	9	7	-	-	-
General Studies...	596	596	-	-	-	-	-	-	-
Chemistry.....	69	-	20	29	20	-	-	-	-
Physics.....	8	-	2	4	2	-	-	-	-
Biology.....	21	-	4	3	14	-	-	-	-
Mathematics & Physics.....	1,083	536	233	140	62	97	-	15	-
Economics.....	1,661	730	349	158	61	28	-	335	-
Humanities.....	884	147	287	133	226	91	-	-	-
Science & Letters.....	1,403	-	-	2	13	9	-	1,059	320
Agriculture.....	341	183	65	59	27	7	-	-	-
Nursing.....	298	128	110	60	-	-	-	-	-
General Studies (Estel).....	113	113	-	-	-	-	-	-	-
General Studies (Carazo).....	100	100	-	-	-	-	-	-	-

Mathematics & Physics includes: Civil Engineering and Topography. Economics includes: Business Administration and Public Accounting. Humanities includes: Educational Sciences, Social Work, Newspaper Reporting and Radio Reporting.

Source: Planning Office, MPE

USAID/N 5-72

214

Exhibit 27 indicates that there are fairly diverse offerings for two universities of this size with degrees available in twenty-three separate fields. However, many traditional courses still predominate beyond the actual need for graduates in those areas and most of the Science and Engineering courses (as with the technical areas in the other post-secondary schools mentioned) suffer from lack of equipment and adequate laboratories.

215

G. Literacy and Skills Training

As shown in Exhibit 28, p. 59, the 1970 estimates of literacy for persons over ten years of age ranges from a high of 84.6% in urban Managua to a low of 24.6% in rural Boaco. As might be expected, literacy rates are much higher in the urban areas than in the rural. The country-wide estimated literacy rate for 1970 is 58.3%.

However, the figures cited and those in Table 9 are based on projections from the 1950 and 1963 censuses, which used as the major criterion for literacy a positive response to the question "Has he (she) attended the first grade?" Therefore, it is safely presumed that functional literacy, which is almost universally regarded as requiring about four years of school, is much lower. Even so, using the criteria and projections from the national censuses, across the country the most optimistic projection has no more than 37.5% of the rural population currently classified as literate.

When the overall literacy figures are projected to 1980, again using the census criteria and assuming the tendencies established during the last twenty years continue, which implies a continuing increase in the rate of school construction, the literacy rate rises to 69.3%. However, even using these optimistic criteria, when the literacy figures are projected in terms of actual numbers, it is estimated that the number of illiterates in Nicaragua in 1980 will rise from the estimated 1970 figure of 511,276 to 630,226.

Adult literacy programs in Nicaragua have not been as complete or as comprehensive as is often considered to be desirable in a developing country. With the massive support that has been given by the Government of Nicaragua to the improvement and expansion of the primary education system during especially the past five years, little financial support has been available for literacy programs and, as a result, few people have been enrolled and little has been done.

However, early in 1970, the Ministry of Public Education did establish an accelerated primary education program for adults. This program now (1971) has an enrollment of close to 9,000 adults, in 31 schools with a total of 210 teachers. As yet the major effort has been oriented toward the urban area illiterates (over one-half of the adults enrolled are attending schools in Managua) but it is planned to expand this program more toward the rural areas.

Complementing the accelerated primary education program, there is a program of "popular culture schools" which give classes in dressmaking, tailoring and basic business management. These courses are offered in 27 different centers, have 2,193 adults registered for 1971, and classes are being taught by a total of 91 instructors.

Exhibit 28
1970+ Rural-Urban Literacy Rates by
Department (over 10 years of age only)

UNCLASSIFIED
Annex V
Page 59 of 60

UNCLASSIFIED

DEPARTMENT	URBAN				RURAL			
	Literate	%	Illiterate	%	Literate	%	Illiterate	%
TOTAL	464,415	83.4%	92,191	16.6%	251,395	37.5%	419,085	62.5%
Boaco	5,799	72.3%	2,225	27.7%	10,057	24.6%	34,821	75.4%
Jarazo	18,095	81.7%	4,016	18.3%	13,715	50.5%	13,502	49.5%
Chinandega	40,600	79.7%	10,350	20.3%	22,173	40.4%	32,666	59.6%
Chontales	8,269	80.6%	2,293	19.4%	12,616	26.4%	34,160	73.6%
Estelí	14,629	74.7%	5,007	25.3%	16,735	42.1%	23,097	57.9%
Granada	23,393	81.5%	5,301	18.5%	6,253	32.6%	12,974	67.4%
Jinotega	8,004	83.3%	1,608	16.7%	20,920	39.1%	32,659	60.9%
Leon	47,644	81.0%	11,227	19.0%	19,940	37.9%	32,657	62.1%
Madriz	5,840	83.3%	2,188	16.7%	10,172	31.1%	22,466	68.9%
Managua	209,933	84.6%	27,682	15.4%	33,550	53.3%	29,498	46.7%
Masaya	24,193	78.9%	6,504	21.1%	9,743	43.0%	12,852	57.0%
Matagalpa	17,644	77.9%	5,076	22.1%	29,435	29.5%	70,441	70.5%
Nueva Segovia	6,579	71.2%	2,673	28.8%	8,870	29.0%	21,716	71.0%
Rio San Juan	1,399	75.2%	462	24.8%	4,542	41.3%	6,425	58.7%
Rivas	14,193	87.9%	1,948	12.1%	17,127	53.4%	14,960	46.6%
Zelaya	18,198	84.6%	3,441	15.4%	15,546	39.2%	24,191	60.8%

+ Projections by the Planning Office, Ministry of Public Education

UNCLASSIFIED

217

There are currently no plans to expand this program or to further diversify the types of training being offered. However, the vast numbers of "cottage industries" (woodwork, carpentry, weaving, pottery making, etc.) found in so many Nicaraguan communities indicate that expansion and diversification of this program could be of great national benefit. With additional courses aligned with teaching the new techniques, marketing methods and basic business procedures associated with these "cottage industries," these small businessmen could easily contribute much more both to local and national development. The existing system of "popular culture schools" is already functioning quite well and could easily serve as the nucleus around which a more comprehensive skill-training program could be developed.

Related to both literacy and skill-training programs is general community development work. Community development work being done through the Ministry of Public Education has been concentrated in two areas: the Rio Coco and the island of Omotepe in Lake Nicaragua. Again, because of poor organization and lack of funds, little has actually been accomplished except in isolated cases. More has been done in this respect by the various international agencies such as USAID, CARE, CRS, UNESCO and the Peace Corps where communities have been organized to accomplish specific purposes (building schools, obtaining electricity and potable water, establishing cooperatives, building health centers, etc.).

In February of this year, however, a related program was started by the Nicaraguan government with the assistance of several international agencies and with the full cooperation of the Ministries of Health, Agriculture and Public Education. This program is based upon and expands a prior program, the Integrated Program of Applied Nutrition and Farm Schools (PINAGE), which was operated mainly through the existing farm schools and involves the Food and Agriculture Organization (FAO), UNESCO, the World Health Organization, and UNICEF.

This program is being done on a large-scale pilot basis in three Departments - Masaya, Granada and Carazo and involves 212 rural schools with 865 teachers and almost 35,000 students. Although it is aligned mainly toward the improvement of all aspects of primary education in those rural schools, it does require organized community efforts and has, as one of its goals, overall community development.

218

Estimated Flow of Funds by Activity
 (in thousands US. Dollars)

	1973			1974			1975			1976			TOTAL	TOTAL		
	AID	CON	O.S.*	AID	CON	O.S.	AID	CON	O.S.	AID	CON	O.S.		AID	CON	O.S.
1.a. In-Service Prof. Trg.	-	-	-	164	60	-	163	59	-	158	57	-	661	485	176	-
1.b. Nat. Educational Center	267	54	-	22	76	-	22	76	-	22	76	-	615	333	282	-
1.c. EDUCREDITO	125	-	25	125	-	25	125	-	25	125	-	25	600	500	-	100
2.a. Curriculum	38	99	-	28	111	-	24	107	-	24	107	-	538	114	424	-
2.b. Ed. Mat. Centers	122	42	-	48	34	-	48	34	-	48	34	-	410	266	144	-
2.c. Textbooks	-	110	-	-	110	-	-	110	-	-	110	-	440	-	440	-
2.d. Guidance & Counseling	12	29	-	18	27	-	12	27	-	18	27	-	170	60	110	-
2.e. Inspection & Superv.	76	108	-	48	108	-	48	108	-	48	108	-	652	220	432	-
2.f.(1) Rural Primary Schools	84	279	-	-	477	-	-	478	-	-	478	-	1796	84	1712	-
2.f.(7) Urban Primary Schools	244	15	-	272	163	-	308	164	-	308	164	-	1638	1132	506	-
2.f.(3) Primary School Annexes	-	-	-	97	10	-	97	21	-	97	31	-	333	291	62	-
2.f.(4) Tech.Voc.Inst.Managua	493	37	-	-	30	-	-	40	-	-	89	-	689	493	196	-
2.g. Adult Education	-	59	-	-	55	-	-	44	-	-	44	-	202	-	202	-
3.a.(1) Personnel Syst. Reform	-	67	-	24	51	-	24	51	-	-	51	-	268	48	220	-
3.b.(1) Exp. Basic Cycle	267	30	-	22	84	-	22	84	-	22	84	-	615	333	282	-
3.b.(2) Research & Evaluation	75	15	-	252	41	-	246	39	-	246	39	-	953	819	134	-
Implementation Unit	8	80	-	-	89	-	-	89	-	-	89	-	355	8	347	-
Maintenance	-	50	-	-	75	-	-	75	-	-	100	-	300	-	300	-
Contingency	125	75	-	-	-	-	-	-	-	-	-	-	200	125	75	-
	1936	1149	25	1120	1601	25	1139	1606	25	1116	1688	25	11455	5311	6044	100

* Other Nicaraguan Sources

UNCLASSIFIED

2/19

Estimated Project Cost
Sources of Funds
(Thousands of U.S. dollars)

Components	TOTAL	AID Loan. Dollar Cost	Local Cost	Nicaragua			TOTAL
				Total Nicaragua	GON	Other Sources	
EDUCREDITO	500		500	100	-	100	600
Technical Assistance	504	504	-	-	-	-	504
Participant Training	214	214	-	50	60	-	274
Research & Pilot Projects	555	-	555	-	-	-	555
Seminars	-	-	-	59	-	-	59
Personnel	-	-	-	3,399	3,399	-	3,399
Books	59	59	-	50	50	-	119
Printing	-	-	-	320	320	-	320
Travel & Per Diem	485	-	485	-	-	-	320
Miscellaneous Support	-	-	-	372	372	-	372
Construction	1,782	125	1,657	1,026	1,026	-	2,808
Equipment & Material	887	887	-	96	96	-	983
Maintenance & Repair	-	-	-	300	300	-	300
Furniture	-	-	-	277	277	-	277
Vehicles	200	200	-	-	-	-	200
Contingency Fund	125	125	-	75	75	-	200
	5311	2114	3197	6144	6044	100	11,455
Estimated Value-Land	-	-	-	1030	1030	-	1,030
TOTAL	5311	2114	3197	7174	7074	100	12,485

220

SUMMARY OF ESTIMATED PROGRAM COSTS
(in thousands of U.S. dollars)

<u>ACTIVITY</u>	<u>Total Cost</u>	<u>Cordoba Cost</u>	<u>Dollar Cost</u>
<u>Upgrade Qualifications Level of Teachers and Professionals</u>	<u>1,876</u>	<u>1,728</u>	<u>148</u>
In-Service Professional Training	661	661	
National Education Center (NEC)	615	467	148
Pre-Service Professional Training University Level (EDUCREDITO)	600	600	
<u>Improve Educational Methods and Facilities</u>	<u>4,324</u>	<u>3,331</u>	<u>993</u>
Curriculum	538	424	114
Educational Materials Center	410	180	230
Textbooks	440	440	-
Guidance and Counseling	170	110	60
Inspection and Supervision	652	432	220
Facilities and Equipment	1,912	1,543	369
Accelerated Adult Education	202	202	-
<u>Improve Management, Administration, Research, and Planning Capabilities of the MPE.</u>	<u>5,255</u>	<u>4,282</u>	<u>973</u>
Provide Technical Advisors, Scholar- ships and other assistance to help the MPE in key areas. (Includes Puestos Claves)	3,866	3,866	-
Research, Educational Technology, Science Innovations and Experimental Schools.	1,389	416	973
	<u>11,455</u>	<u>9,341</u>	<u>2,114</u>

221

CONSTRUCTION ELEMENT COST SUMMARY
\$000

<u>Element</u>	<u>Constr.</u>	<u>Surveys</u>	<u>A & E</u>	<u>Superv.</u>	<u>TOTAL</u>
Primary -					
Rural	987.0	19.0	--	20.0	1,026.0
Urban	1,074.0	5.0	32.0	21.0	1,132.0
Experiment'l	167.0	0.2	8.4	3.4	179.0
Prim.					
Annexes	178.0	1.3	9.0	3.7	192.0
Mtls.Prod.C.	33.3	--	2.0	0.7	36.0
ITV	206.3*	0.2	8.2	3.3	218.0
NEC	167.0	0.2	8.4	3.4	179.0
Totals:	2,812.6**	25.9	68.0	55.5	2,962.0

* Includes \$7,500 for ITV-Student construction, and \$36,000 for grounds paving, outside lighting, and room addition to second floor of an existing building.

** Foreign exchange costs: \$ 85,000
 Local currency costs \$2,727,600
 Surveys, A&E and Supervision are local currency costs

222

UNCLASSIFIED

ANNEX VII, Exhibit 2
Page 1 of 1

CONSTRUCTION PROGRAM

BY

BUILDING & AREA

<u>Item</u>	<u>No. of Buildings</u>	<u>Construction Area - M²</u>
Primary		
Rural	135	23,625
Urban	33	15,675
Experimental	1	2,460
Primary Annexes	9	2,142
ITV	6	1,800
Mtls. Prod. Cen.	1	340
NEC	3	2,460
	<hr/>	<hr/>
TOTALS	188	50,366
	<hr/>	<hr/>

UNCLASSIFIED

223

UNCLASSIFIED

ANNEX VII, Exhibit 3
Page 1 of 1

CONSTRUCTION PROGRAM

UNIT COST DATA

<u>Item</u>	<u>M²</u>	<u>Construction</u>		<u>All A-E</u>	
		<u>Total Cost</u>		<u>Total Cost</u>	
		<u>\$000</u>	<u>\$/M²</u>	<u>\$000</u>	<u>\$/M²</u>
Primary					
Rural	23,625	987.0	42	39.0	1.65
Urban	15,675	1,074.0	69	58.0	3.70
Experimt '1	2,460	167.0	68	12.0	4.90
Primary					
Annexes	2,142	178.0	83	14.0	6.55
ITV	1,800	162.8	90	11.7	6.50
Mtls.Prod.C.	340	33.3	98	2.7	7.95
NEC	2,460	167.0	68	12.0	4.90

UNCLASSIFIED

224

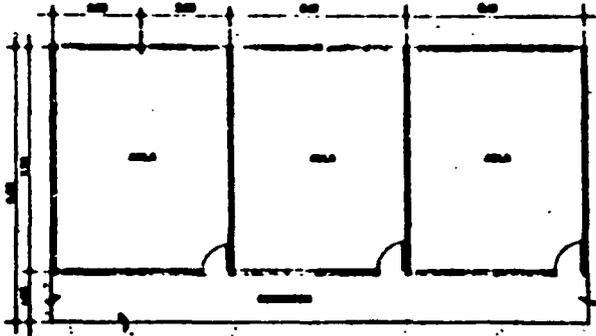
UNCLASSIFIED



ELEVACION Esc: 1/100



ELEVACION Esc: 1/100



PLANTA ARQUITECTONICA Esc: 1/100



SECCION TRANSVERSAL Esc: 1/100

ELEVACION COLATA Esc: 1/100

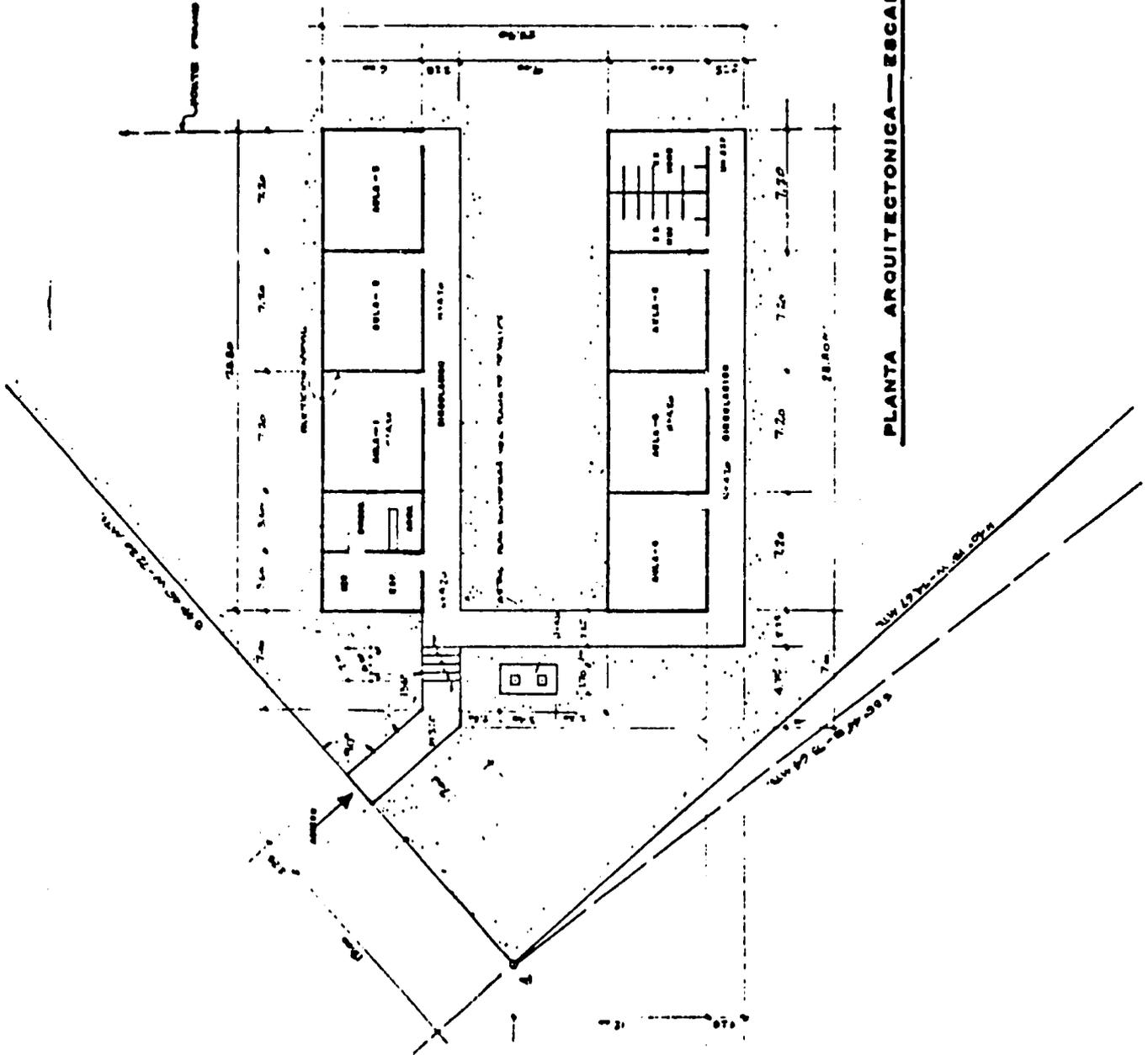
RURAL PRIMARY SCHOOL

CONSTRUCCIONES Y MANTENIMIENTO DE
EDIFICIOS PUBLICOS
MINISTERIO DE OBRAS PUBLICAS

GOBIERNO DE NICARAGUA
PROYECTO ESCUELAS RURALES

PLANTA Y ELEVACIONES ARQ	
PROYECTADO POR	CONSTRUIDO POR
REVISADO POR	APROBADO POR
FECHA	ESCALA

Handwritten initials or mark.

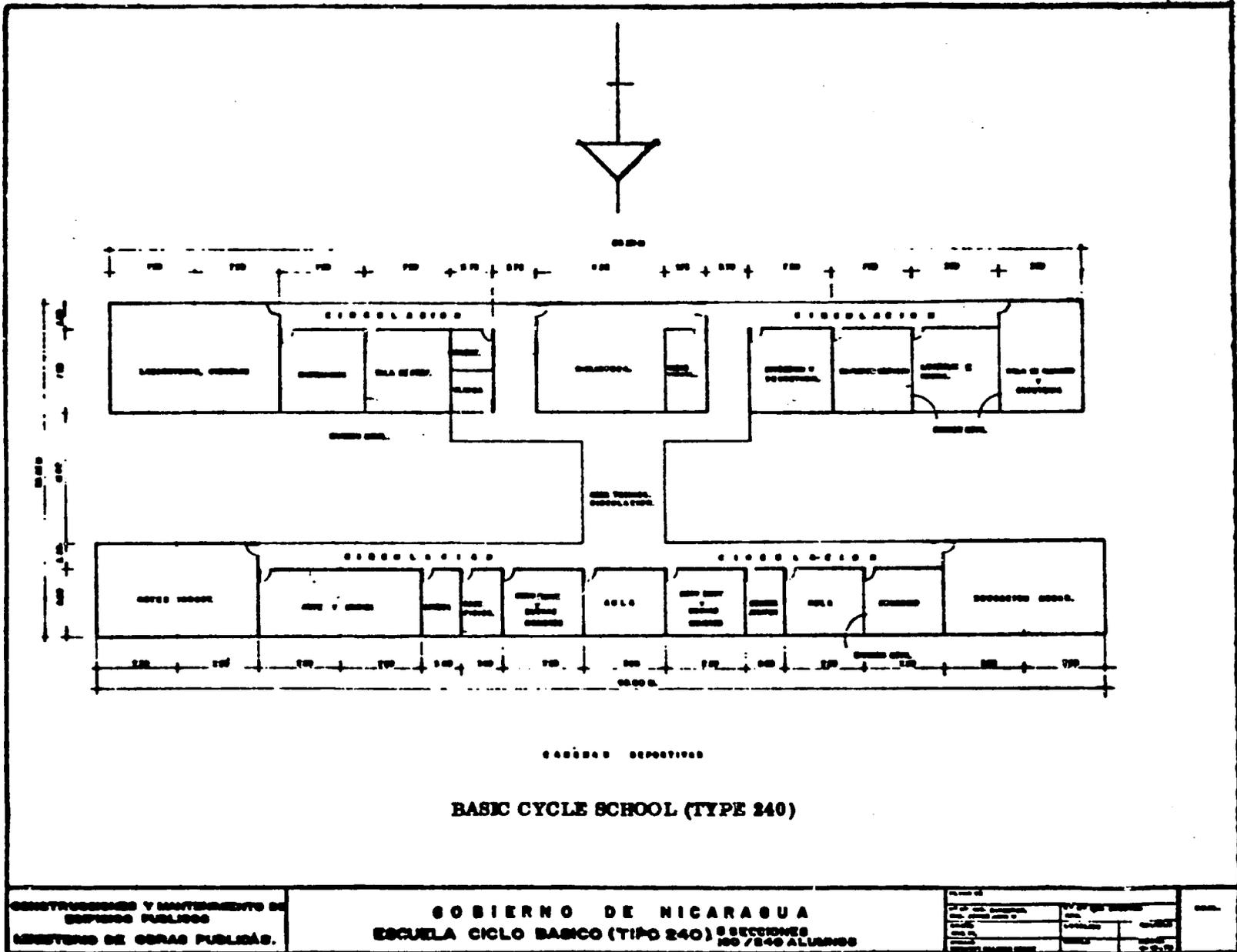


PLANTA ARQUITECTONICA — ESCALA 1:100

URBAN PRIMARY SIX ROOM SCHOOL

226

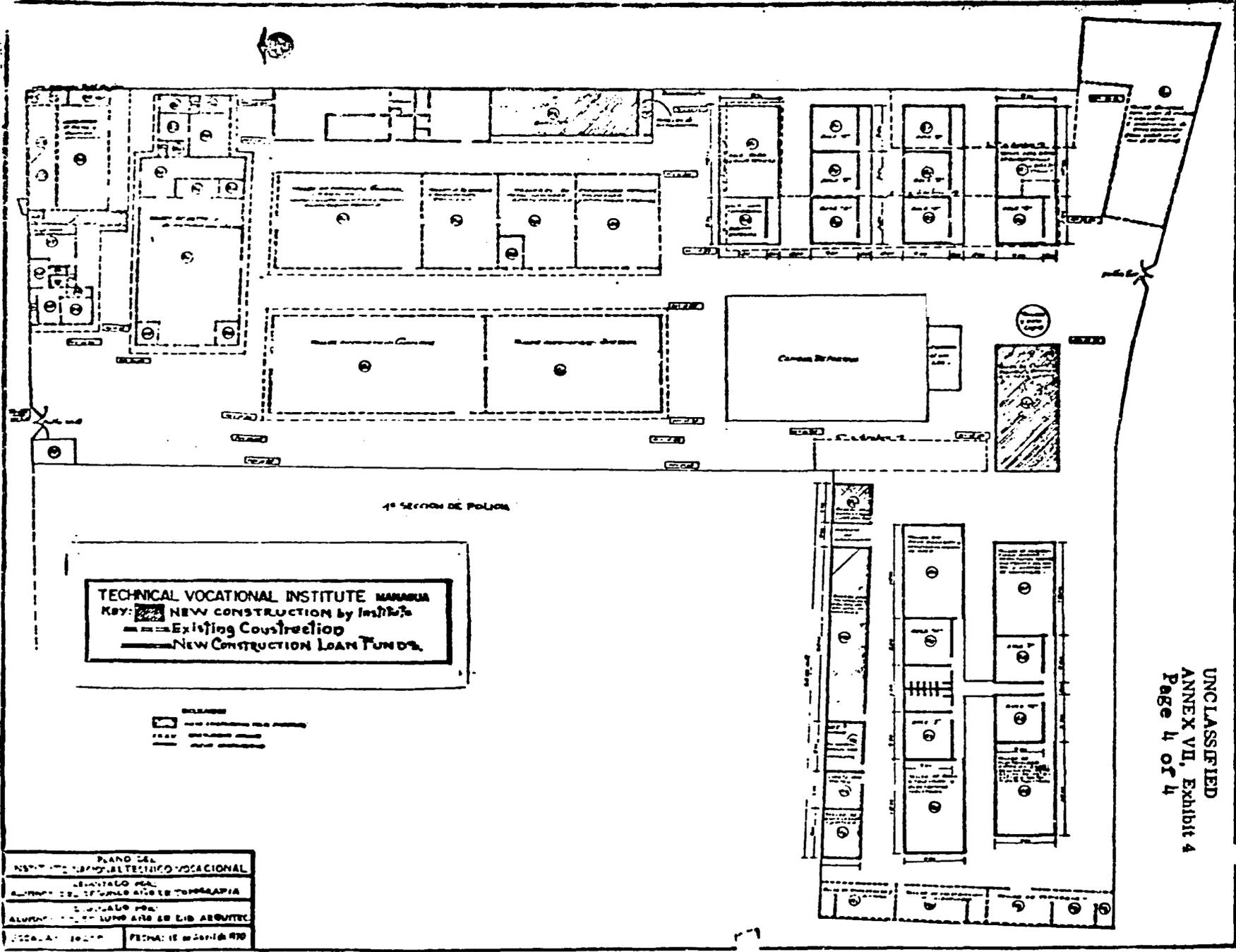
UNCLASSIFIED



227

UNCLASSIFIED
ANNEX VII, Exhibit 4
Page 3 of 4

UNCLASSIFIED



UNCLASSIFIED
ANNEX VII, Exhibit 4
Page 4 of 4

822



MINISTERIO DE EDUCACION
PUBLICA

Managua, D. N. , January 28, 1972

Mr. William R. Haynes, Director
Agency for International Development
Managua, Nicaragua

ARO DEL DESARROLLO
AGRO-INDUSTRIAL

File # 7-10
RE: Letter No. 10577, MEP
to Mr. Haynes, dated
May 31, 1971

Dear Mr. Haynes:

As you know the "Plan Nacional de Desarrollo Educacional" was completed with the assistance of advisory services from SALA in the latter part of 1971. This plan has been reviewed by a working committee of the Ministry of Public Education with the results that a new loan Proposal has been prepared incorporating many aspects of the plan.

This new loan proposal was discussed with President Somoza on the 24th of January 1972, and he has instructed me to request a loan in the amount of \$64,421,000 from your Agency. President Somoza has notified the Coordinating Committee of this action. Also a copy of this letter and enclosures is being sent to the Coordinating Committee. Enclosed are the following annexes:

- | | |
|---------|--|
| Annex A | Major Problems Identified by the National Plan for Educational Development |
| Annex B | Major Objectives of the Educational Sector Loan |
| Annex C | Financial Components of Educational Sector Loan |

It is requested that you substitute this new loan request for the one I made in the above reference. In reviewing this new request, you will



MINISTERIO DE EDUCACION
PUBLICA

UNCLASSIFIED
ANNEX VIII, Exhibit 1
Page 2 of 6

- 2 -

Managua, D. N.

AÑO DEL DESARROLLO
AGRO-INDUSTRIAL

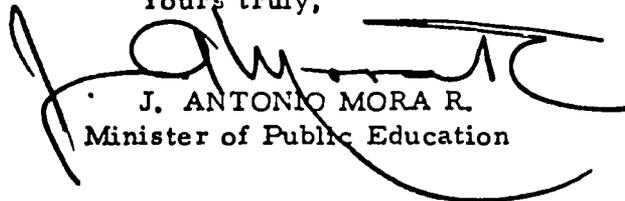
Mr. William R. Haynes

January 28, 1972

find that this includes many aspects which will improve the entire educational sector.

I would be happy to provide additional information which you may require in this matter. I am sure that a new loan as requested would be as beneficial as the present loan has been for the children of Nicaragua.

Yours truly,



J. ANTONIO MORA R.
Minister of Public Education

cc:
Coordinating Committee
Arch.

Encl. a/s

ems. -



UNCLASSIFIED

230



MINISTERIO DE EDUCACION
PUBLICA

Managua, D. N.

ANNEX A

MAJOR PROBLEMS IDENTIFIED BY THE NATIONAL PLAN FOR
EDUCATIONAL DEVELOPMENT

1. THE NEED FOR CONTINUED IMPROVEMENT OF PRIMARY EDUCATION
2. THE POSSIBLE USE OF "TRANSITIONAL SCHOOL", BETWEEN THE PRIMARY AND SECONDARY LEVELS
3. THE NEED FOR CONTINUED IMPROVEMENT AND EXPANSION OF SECONDARY EDUCATION WITH GREATER EMPHASIS ON VOCATIONAL TRAINING
4. THE NEED TO ESTABLISH AN EDUCATIONAL MATERIALS CENTER AND IN-SERVICE TRAINING INSTITUTE
5. THE NEED TO COORDINATE AND EXPAND GUIDANCE SERVICES IN THE SCHOOLS
6. THE NEED TO IMPROVE COMMUNITY RELATIONS WITH AND INVOLVEMENT IN, EDUCATION, AND TO PROVIDE COMMUNITY EDUCATIONAL PROGRAMS
7. THE NEED TO UPGRADE, REFINE AND MODIFY EXISTING SUPERVISORY SERVICES, AT BOTH THE PRIMARY AND SECONDARY LEVELS
8. THE NEED TO IMPROVE THE SYSTEMS CURRENTLY USED FOR MAINTAINING, UPDATING AND UTILIZING, PERSONNEL AND STUDENT RECORDS AND FOR HIRING AND PLACING TEACHERS IN SCHOOLS
9. THE NEED TO UPGRADE DATA-GATHERING AND PROCESSING CAPABILITIES
10. THE NEED FOR A VIABLE DOCUMENT ENUMERATING EDUCATION EMPLOYEE DUTIES AND BENEFITS

UNCLASSIFIED

231



MINISTERIO DE EDUCACION
PUBLICA

Managua, D. N.

UNCLASSIFIED
ANNEX VII Exhibit 1
Page 4 of 6

AÑO DEL DESARROLLO
AGRO-INDUSTRIAL

--||--

11. THE NEED FOR A NEW MINISTRY OF PUBLIC EDUCATION FACILITY DESIGNED IN ACCORDANCE WITH THE PROJECTED NEEDS AND WORK REQUIREMENTS OF THE VARIOUS DEPARTMENTS AND OFFICES OF THE MINISTRY

12. THE NEED TO EXPAND AND DIVERSIFY HIGHER EDUCATION PROGRAMS IN KEEPING WITH NATIONAL DEVELOPMENT PLANS AND IN COORDINATION WITH THE DEVELOPMENT OF THE REST OF THE EDUCATIONAL SYSTEM

UNCLASSIFIED

232



MINISTERIO DE EDUCACION
PUBLICA

Managua, D. N.

UNCLASSIFIED
~~ANNEX VIII~~, Exhibit 1
Page 5 of 6

ANNEX B

AÑO DEL DESARROLLO
AGRO-INDUSTRIAL

MAJOR OBJECTIVES OF THE EDUCATIONAL SECTOR
LOAN

1. IMPROVE THE QUALITY AND EFFICIENCY OF THE EDUCATIONAL SYSTEM;
2. IMPROVE THE RESEARCH, EXPERIMENTATION, PLANNING AND MANAGEMENT CAPABILITY OF THE SYSTEM; AND
3. INCREASE THE QUANTITY AND IMPROVE THE QUALITY OF FACILITIES

UNCLASSIFIED

233



MINISTERIO DE EDUCACION
PUBLICA

Managua, D. N.

EDUCATIONAL SECTOR LOAN

UNCLASSIFIED
~~ANNEX VIII~~, Exhibit 1
Page 6 of 6

ANNEX C

AÑO DEL DESARROLLO
AGRO-INDUSTRIAL

<u>No.</u>	<u>ACTIVITY</u>	<u>AID</u>	<u>NICARAGUAN COUNTERPART</u>
1.	Research, Educational Technology, Science Innovations, and Experimental Schools	1. 995	770
2.	Guidance and Counseling	672	3. 500
3.	Educational Materials Center	840	945
4.	Pupil and Personnel Accounting	175	350
5.	Literacy and Skills Training	1. 638	1. 141
6.	Technical Assistance	3. 360	595
7.	Participant Training Overseas	1. 134	784
8.	Personnel (Additional Positions)	2. 975	1. 785
9.	Textbooks	1. 785	2. 205
10.	School Construction	32. 340	51. 485
11.	Ministry of Education Facility	3. 675	3. 360
12.	Teacher Training Facility	7. 700	4. 900
13.	In-Service Professional Training Center	1. 456	1. 960
14.	Pre-Service Professional Training University Level	2. 800	1. 400
15.	Contingency	<u>1. 876</u>	<u>2. 254</u>
	TOTAL	64. 421 (\$9. 203)	77. 433 (11, 062)

UNCLASSIFIED

234



SECRETARIA DE LA PRESIDENCIA
DE LA REPUBLICA
Managua, D. N.

UNCLASSIFIED
013 ANNEX VIII, Exhibit 2
Page 1 of 1

22 de Febrero de 1972

Mr. William R. Haynes, Director
Agencia Internacional de Desarrollo
MANAGUA, D.N.-

Estimado Señor Haynes:

Tengo el gusto de dirigirme a usted para expresarle que el Comité Coordinador ha dado su aprobación a la solicitud de préstamo que por un monto de \$64,421,000.00 presentó ante esa Agencia el Ministerio de Educación Pública en nota No.3894 de fecha 28 de enero pasado, para impulsar el desarrollo integral de la educación nicaragüense.

Aprovecho la oportunidad para reiterar a usted las muestras de mi especial consideración y aprecio.

LUIS VALLE OLIVARES
Secretario de la Presidencia de la República y
Presidente del Comité Coordinador de Planificación
Nacional

LVO/aap.

UNCLASSIFIED

235



UNITED STATES AID MISSION TO NICARAGUA

AGENCY FOR INTERNATIONAL DEVELOPMENT
AMERICAN EMBASSY
MANAGUA, NICARAGUA

UNCLASSIFIED
ANNEX VIII, Exhibit 3
Page 1 of 1

March 9, 1972

The Honorable
Minister of Public Education
Ing. J. Antonio Mora R.
Ministry of Public Education
Managua, Nicaragua

RE: Letter 3570 Minister Mora to Mr. Haynes
dated January 28, 1972 and letter No. 01359
Dr. Luis Valle Olivares to Mr. Haynes
dated February 22, 1972

Dear Mr. Minister:

The purpose of this letter is to advise you that on the 3rd of March, 1972, a meeting to consider a request for intensive review for your loan application was held in Washington, D.C. Dr. Peter E. Tobia and Mr. Allen Goldstein represented this Mission at the meeting. I am happy to advise you that the Committee approved of performing an intensive review of this request.

Dr. Tobia has advised me that he reviewed the results of the meeting with you and Professor Raúl Quintanilla on the 7th of March, 1972; also that in this meeting, you indicated that you would make available key members of your Ministry to work with members of this Mission and personnel from AID/W to complete the necessary review.

Kindly provide me with a list of the names of personnel from your Ministry and any other Ministry or institution who will constitute a Task Force for preparing this intensive review. It appears feasible, at this time, that with a considerable amount of team work it will be possible to present the completed loan paper to AID/W prior to the end of May; however, to accomplish this task, in a timely manner, you should realize that the Nicaraguan Task Force must concentrate primarily on this activity.

Your prompt reply to this letter will be appreciated.

Yours truly,

William R. Haynes
Director

UNCLASSIFIED

236



MINISTERIO DE EDUCACION
PUBLICA

Managua, D. N. , April 18, 1972.

Mr. William R. Haynes, Director
USAID/Nicaragua Mission
American Embassy
Managua, Nicaragua

RE: Letter from Mr. Haynes to
Minister Mora dated March
9, 1972.

Dear Mr. Haynes:

Thank you very much for your letter of the 9th of March 1972 in which you advised me of the successful results of the intensive review meeting of the loan application for Education. Shortly after receipt of your letter, I appointed key persons from the Ministry of Public Education to work with personnel from your Mission on the completion of the paper which is scheduled to be presented to your Washington Office in May 1972. In addition to personnel from the Ministry of Public Education, several persons from other agencies were asked to assist in this work. Enclosed is a copy of the list of persons who are assigned to this task.

For your information, I have advised all concerned that this task of planning, providing information, data, and etc. for the completion of the intensive review has number one priority in this Ministry. I am sure that your personnel will receive the fullest cooperation of everyone involved in this important task.

UNCLASSIFIED

237



MINISTERIO DE EDUCACION
PUBLICA

Managua, D. N.

UNCLASSIFIED
ANNEX VIII, Exhibit 4
Page 2 of 4

- 2 -

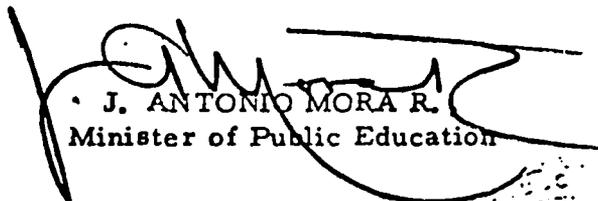
Mr. William R. Haynes

April 18, 1972

It is my intention to use key members of this group in the implementation phases of the loan in order to capitalize upon their knowledge and experience gained in the preparation of the intensive review.

Thank you again for the good news.

Sincerely yours,


J. ANTONIO MORA R.
Minister of Public Education

Encl. a/s

cc: Dr. Luis Valle Olivares, Chairman
Coordinating Committee
Dr. Peter E. Tobia, AID



ems. -

UNCLASSIFIED

238



MINISTERIO DE EDUCACION
PUBLICA

Managua, D. N.

PERSONNEL ASSIGNED FOR COMPLETION OF INTENSIVE
REVIEW FOR EDUCATION SECTOR LOAN

MINISTRY OF PUBLIC EDUCATION

a) General Coordinator

Prof. Raúl Quintanilla, Director, Planning Office

b) Planning Office

Prof. Sergio Villagra C., Sub-Director
Prof. Agustín Acevedo L., Curriculum Officer
Lic. Orlando Vilchez C., Economist
Prof. Cristóbal Espinoza, Chief of Statistics Section
Lic. Carlos Jimenez Cajina
Lic. Fernando García

c) Administrative Services

Dr. José María Tercero R., Director
Mr. Carlos Bojorge, Escalafon Officer

d) Secondary Education

Prof. Reynaldo Núñez, Director
Prof. Ariel González, Assistant
Prof. Felix Pérez Ch., Sciences Supervisor
Dra. Esperanza Navas de Gadea, Sciences Supervisor

e) Primary Education

Prof. Raúl Dávila M., Director
Prof. William Alemán
Prof. José Delgadillo León

f) School Construction Office

Arq. William Vargas, Director
Lic. Sergio Maltez, Administrative Assistant



MINISTERIO DE EDUCACION
PUBLICA

Managua, D. N.

-2-

g) Vocational Education

Prof. Salvador Rocha, Director, Vocational Technical Institute

h) Industrial Arts

Prof. Juan Rivas V., Director

i) Educational Materials Production

Prof. Manuel Sobalvarro, Chief, Audiovisuals Department

j) Agriculture Education

Ing. Eliseo Carranza
Ing. Silvio Echaverri

k) Library

Prof. Luisa Cárdenas

Counterpart of Mr. William H. Miller of AID

Lic. René Herrera, Ministry of Public Education

EDUCREDITO

Dr. Roger Quant P., Executive Secretary, INDE
Dr. Bayardo García, General Manager

Polytechnic Institute

Dr. Norberto Herrera, Director

National University of Nicaragua (UNAN)

Prof. Guillermo Rosales H., Director, School of Sciences Education

National Construction - Ministry of Public Works

Ing. Jorge Hayn, Director

240

Case



INTER-AMERICAN DEVELOPMENT BANK
WASHINGTON, D. C. 20577

April 25, 1972

CABLE ADDRESS
INTAMBANC

Mr. Frederick Schieck
Office of Development Resources
Bureau for Latin America
Agency for International Development
Department of State
Washington, D.C. 20523

Dear Mr. Schieck:

In response to your letter of March 6, 1972, we have determined that the IDB is not interested in financing the Nicaraguan loan proposal for educational development at the primary and secondary levels.

The IDB has made two loans for higher education in Nicaragua, and has pending four loan proposals in this sector - two at the university level and two for technical-vocational education. Although the basic objectives of the AID proposed project parallel those of projects currently under IDB consideration, an effort should be made to assure coordination among the Government's programs in the education field.

Sincerely,

Sidney Schmukler
Assistant Program Advisor

UNCLASSIFIED

241

MINUTES

Export-Import Bank - AID Liaison Group

811 Vermont Avenue, N.W. - Room 1275

March 23, 1972

Present: Export-Import Bank
Seymour Pollack

AID
Lawrence Berlin

The Eximbank representative stated that the Board of Directors had reviewed the following applications and decided to return them to AID for the reasons indicated. (See agenda of March 23, 1972)

Regional - Adean Development Corporation \$15 million
(Relending)

The Bank is expressing no interest in this proposal since it is apparent that concessionary repayment terms are required to achieve the purposes of this project.

✓ Nicaragua - Government of Nicaragua \$9.2 million
(Education Sector Loan)

The Bank is returning this application to AID since it is clear that the project requires a concessionary type AID loan and therefore would not be suitable for Eximbank consideration.

Bolivia - Government of Bolivia \$3 million
(Community Development)

The Bank is returning this application to AID since heavy local cost financing and concessionary repayment terms are required.

Korea - Government of Korea \$1.9 million
(Educational Project)

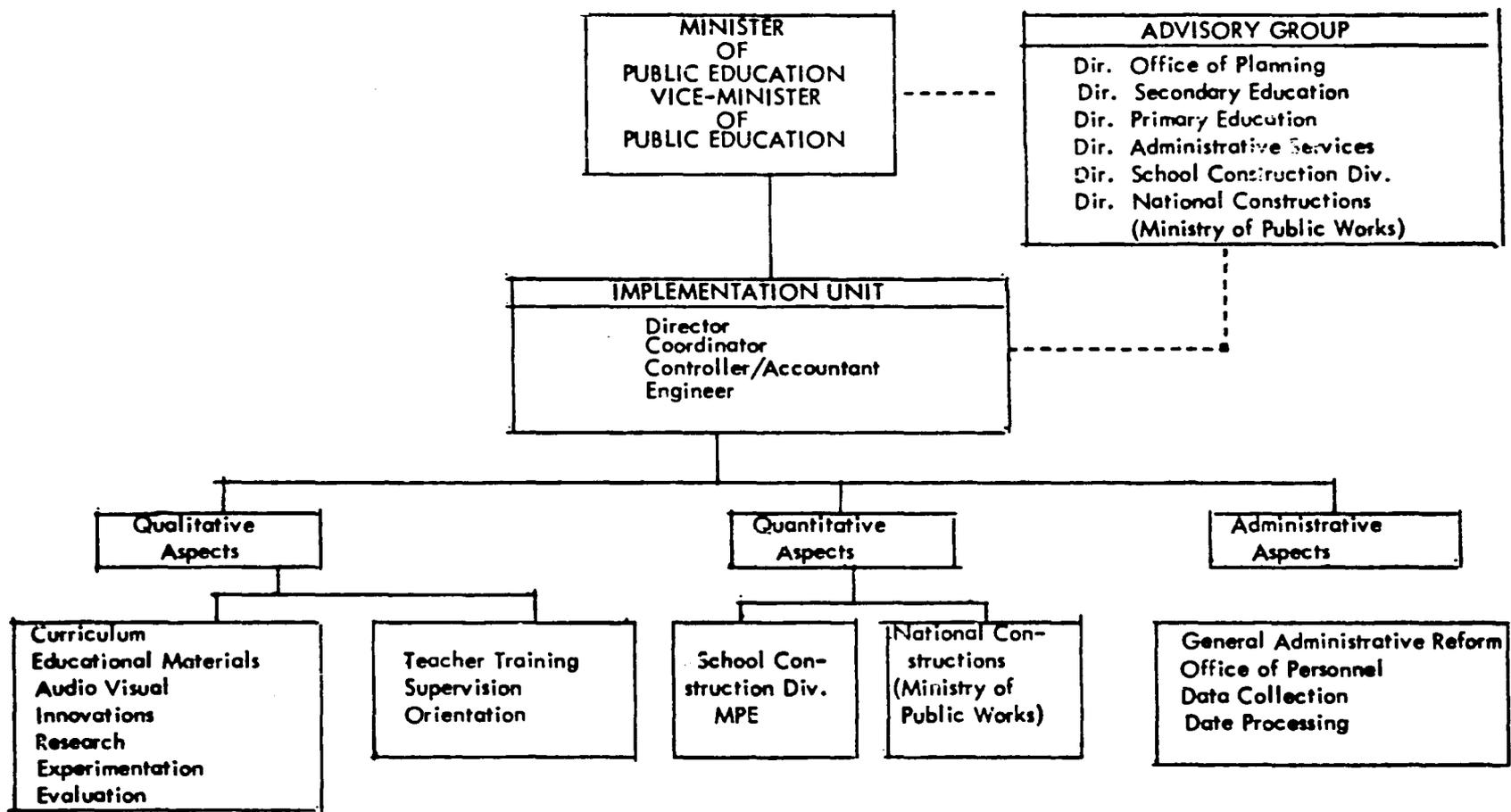
Since the feasibility of this loan depends on concessionary repayment terms, the Bank is expressing no interest in the project.

UNCLASSIFIED

BEST AVAILABLE COPY

242

ORGANIZATIONAL CHART



243