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The assistance provided to Nicaragua following the earthquake in December 1972 could have been more effective had all projects been completed on time and had the Nicaraguan Government provided adequate maintenance of projects after they were completed. Findings/Conclusions: The assistance greatly helped in taking care of immediate needs and restoring public services and facilities. Many of the Las Americas housing units, constructed in May 1973 still lack indoor bathroom facilities, however, and the reconstruction of some public facilities is 2 years behind schedule. Recommendations: The Administrator of the Agency for International Development should stress to the Nicaraguan Government the need to complete the housing and reconstruction programs in the shortest possible time and, in considering future levels of assistance to the Nicaraguan Government, take into account the manner in which facilities previously financed by the Agency are maintained. The Secretary of the Treasury should inform U.S. representatives to international organizations that they should carefully consider the maintenance performance of the Nicaraguan Government in voting on future assistance programs. The Secretaries of State and the Treasury and the Administrator of the Agency for International Development should seek to formalize coordination so that complete and current information on the progress of planned and ongoing projects is available to the Agency and the other donors. (Author/SC)

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REPORT OF THE COMPTROLLER GENERAL OF THE UNITED STATES

Nicaragua--An Assessment Of Earthquake Relief And Reconstruction Assistance

In December 1972, Managua was struck by a devastating earthquake that leveled about half the city, killed 10,000 and injured 20,000 people, destroyed over 40,000 homes, and left over 160,000 people homeless. To assist in the relief and reconstruction of Managua, the Agency for International Development and the international financial institutions provided assistance of about \$143 million.

The assistance greatly helped in taking care of immediate needs and restoring public services and facilities. It could have been more effective had some programs been completed on time and adequate provision been made for maintaining the facilities constructed. Many of the Las Americas housing units constructed in May 1973 still lack indoor bathroom facilities, and the reconstruction of some public facilities is two years behind schedule. To speed up development, the Agency Mission in October 1976 assigned additional personnel to the programs.



COMPTROLLER GENERAL OF THE UNITED STATES
WASHINGTON, D.C. 20548

B-169521(.02)

To the Chairman and
Ranking Minority Member
Subcommittee on Foreign Assistance
Committee on Foreign Relations
United States Senate

In response to your joint request of June 4, 1976, we have reviewed earthquake relief and reconstruction assistance provided to Nicaragua by the Agency for International Development and the international financial institutions with which the United States is affiliated. As requested by your offices, formal agency comments were not obtained.

We invite your attention to the fact that the report makes recommendations to several agencies. As you are aware, section 236 of the Legislative Reorganization Act of 1970 requires heads of Federal agencies to submit statements concerning the actions they have taken on our recommendations to the House Committee on Government Operations and the Senate Committee on Governmental Affairs not more than 60 days after the date of the report and to the House and Senate Committees on Appropriations with the agency's first request for appropriations made more than 60 days after the date of the report. We will be in touch with your office in the near future to arrange for release of the report so that the requirements of section 236 can be set in motion.

We wish to acknowledge the cooperation extended to our staff by the Agency for International Development and the international financial institutions.

A handwritten signature in black ink, reading "James A. Atchefs".

Comptroller General
of the United States

REPORT OF THE
COMPTROLLER GENERAL
OF THE UNITED STATES

NICARAGUA--AN ASSESSMENT
OF EARTHQUAKE RELIEF AND
RECONSTRUCTION ASSISTANCE

D I G E S T

To assist in the relief and reconstruction of downtown Managua--capital city of Nicaragua--almost totally destroyed by an earthquake in December 1972, the United States and the international financial institutions provided about \$143 million in grant and loan assistance.

This assistance helped to

- alleviate immediate hardships of hundreds of thousands of people;
- strengthen Nicaraguan planning and implementing agencies; and
- establish a new less concentrated, safer Managua.

However, the assistance could have been more effective had all projects been completed on time and had the Nicaraguan Government provided adequate maintenance of projects after they were completed. There was need also for improved health and safety conditions at the Las Americas housing project financed by the Agency for International Development and for improved coordination of assistance programs.

GAO recommends that the Administrator of the Agency for International Development:

- Stress to the Nicaraguan Government the need to complete the housing and reconstruction programs in the shortest possible time consistent with efficiency and economy so that the hardships that resulted from the earthquake can be finally alleviated. (See pp. 30 and 48.)
- In considering future levels of assistance to the Nicaraguan Government, take into account the manner in which facilities

previously financed by the Agency are maintained. GAO also recommends that the Agency's Mission Director inform the Nicaraguan Government that the adequacy of the maintenance of facilities will be considered in establishing future levels of assistance. In this connection, the need for adequate maintenance and sanitary and safety conditions at the Las Americas project should be stressed. (See pp. 20 and 49.)

GAO further recommends that:

--The Secretary of the Treasury inform the U.S. representatives to international organizations that they should carefully consider the maintenance performance of the Nicaraguan Government in voting on future assistance programs. (See p. 20.)

--The Secretaries of State and the Treasury and the Administrator of the Agency for International Development seek to formalize coordination so that complete and current information on the progress of planned and ongoing projects is available to the Agency for International Development and the other donors. (See p. 30.)

The 1972 earthquake killed 10,000 and injured 20,000 people in downtown Managua and destroyed 40,000 to 50,000 housing units occupied by 160,000 to 250,000 people, 1,650 hospital beds, and 1,100 classrooms. The destruction had been estimated at between \$300 million and \$860 million.

In the beginning the United States provided about \$12.5 million in grant assistance, which included \$3 million to construct 11,000 housing units called Las Americas. The Organization of American States provided \$300,000 for the housing units. The assistance was only marginally successful because after the units were completed, only 30 to 50 percent were occupied during the first 6 months, and most of the funds provided by the Organization of American States were used for projects not related to the earthquake. (See p. 47.)

To upgrade the Las Americas units, which had no individual water and sewage connections, and to construct additional units, the Agency for International Development provided \$15 million in loan assistance. The improvements have been proceeding so slowly that some occupants have been living in substandard housing for over 3 years. Also, if the project is not to become a slum and injurious to its occupants, maintenance and health, sanitary, and safety conditions must be improved. (See p. 47.)

To improve Nicaraguan planning and implementing capabilities, the Agency for International Development and the international financial institutions provided \$4 million in grant technical assistance, with the Agency for International Development providing an additional \$3 million in loan assistance as part of relief and reconstruction loan assistance. The technical assistance helped to plan a massive program of relief and reconstruction assistance, but probably could have been more useful had all of it been provided on a timely basis and had recipient Nicaraguan organizations more effectively coordinated their activities. (See ch. 2.)

During the first 6 months after the earthquake, the Agency for International Development, the World Bank, and the Inter-American Development Bank agreed to provide concessionary loans totaling \$57 million to help restore essential public facilities and services. Rubble from destroyed buildings was cleared away, hospitals and classrooms were built to replace those destroyed, and telecommunications and other facilities were restored. This assistance could have been more effective if some programs had been completed on time and if adequate provision had been made for maintaining the public facilities. For instance, one hospital was completed a year later than originally planned, the Nicaraguan Government was 2 years late in submitting a school maintenance plan, and some housing units financed by the World Bank were only nearing completion over 3 years later. (See ch. 3.)

To help construct public facilities to support a new decentralized Managua, the Agency for International Development is providing \$30

million in loan funds and the Central American Bank for Economic Integration about \$5 million. The program started over 2 years ago and is proceeding very slowly. Delays of up to 2 years are being predicted, principally because of the (1) lack of effective guidance and coordination between the Government of Nicaragua planning and executing agencies and (2) long delays incurred between the submission of plans and projects to the Agency for International Development and their approval. In recognition of this problem, the Mission in October 1976 devoted additional efforts to the program in an attempt to speed up the completion of the project. (See ch. 4.)

The Mission and representatives from the international financial institutions hold monthly informal meetings, but GAO believes a more formal coordination mechanism is needed. Several Agency for International Development reconstruction programs are directly related to those being financed or planned by other donors. (See ch. 4.)

GAO's review was made upon a joint request by the Chairman and the Ranking Minority Member, Senate Subcommittee on Foreign Assistance. At the request of the office of the Committee, GAO did not ask the agencies for formal written comments on this report. GAO did however obtain written Mission comments while in the country and included them where appropriate.

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ABBREVIATIONS

AID	Agency for International Development
GAO	General Accounting Office

CHAPTER 1

INTRODUCTION

On December 23, 1972, Managua was struck by the most devastating earthquake since 1931, which killed 10,000 and injured 20,000 people and destroyed or severely damaged almost all government offices, the important financial center, and the entire commercial section, including about 2,500 small-scale manufacturing and retail trading firms. The destruction has been estimated at between \$300 million and \$860 million, including between 40,000 and 50,000 housing units occupied by an estimated 160,000 to 250,000 people, four hospitals with a total of 1,650 beds, about 4.3 million square feet of commercial buildings and warehouses, and 1,100 classrooms.

To assist in the immediate relief and recovery, the United States and the international financial institutions have provided about \$143 million in assistance. In June 1976 the Chairman and the Ranking Minority Member of the Subcommittee on Foreign Assistance, Senate Committee on Foreign Relations, requested that we make a comprehensive review of Nicaraguan disaster relief and reconstruction programs funded by the United States and international financial institutions with which the United States is affiliated. (See app. I.)

BACKGROUND

Nicaragua is the largest of the Central American republics. It extends from the Atlantic coast to the Pacific coast, and contains an area of about 50,000 square miles, roughly the size of Iowa.

The country has an estimated 2.3 million inhabitants, 450,000 of them in Managua, and is growing at an annual rate of 2.8 percent. It has a population density of about 37 persons per square mile as compared to about 59 persons per square mile in the United States.

The per capita gross national product rose from about \$347 in 1969 to \$670 in 1974. This compares to the Latin American high for 1974 of \$1,970 in Venezuela and a low of \$170 in Haiti. However, the Embassy noted that the maldistribution of income is pronounced, with half the population earning an average per capita income of \$120, and the rest an average of nearly \$1,300.

The gross domestic product prior to the earthquake was about \$724 million and was increasing at a rate of about

4.6 percent but dropped to 1.7 percent. However, in 1974 as a result of the favorable situation in the agricultural sector and the great impetus of the reconstruction projects, the growth rate increased to 12.8 percent in real terms. In 1975 the rate dropped to 4.2 percent, but for 1976 a real growth rate of 6.5 percent is expected based primarily on the favorable agricultural situation. Sharply higher prices for coffee and cotton, together with higher volumes of meat and sugar exports contributed to increased economic growth.

Employment and production

About 46 percent of the labor force is employed in agriculture and its output constitutes about 25 percent of the gross domestic product. Corn, rice, beans, and milk are cultivated largely for domestic needs and cotton, coffee, sugarcane, and meat are export commodities. Trade and finance employ only about 1 percent of the labor force but contribute about 22 percent to the gross domestic product. Manufacturing employs about 13 percent of the labor force and contributes about 18 percent to the gross domestic product.

Debt management, revenue, and expenditures

The Agency for International Development (AID) and the international agencies have expressed concern that Nicaragua's existing and projected external debts will impose a heavy burden on its economy. AID noted that Nicaragua's 1975 annual debt-servicing requirements totaled \$69.3 million, or 15.2 percent of exports, and that the projected 1979 total is about \$140 million, or 21.5 percent of exports. Part of this large debt resulted from borrowings by the government from commercial banks abroad, which according to a U.S. official lacked economic rationale.

Nicaraguan revenues from direct and indirect taxes increased from about \$119 million in 1973 to about \$165 million in 1974, mainly due to emergency taxes imposed shortly after the earthquake. In 1975 a new tax law rescinded the emergency tax and added a new progressive tax which resulted in about the same revenue as for 1974. This, however, was approximately \$17 million less than budgeted because of the poor performance of the economy.

In 1973 and 1974, total revenues exceeded total expenditures by about \$45 million. In 1975, however, there was a deficit of \$110 million, and for 1976 a deficit of about \$97 million has been predicted. The deficit largely results

from the unexpectedly low tax revenues caused by the granting of income tax exemptions to promote industrial development.

AID noted that future tax reforms are not currently known to be under discussion but that the need for increased revenues or reduced expenditures will become more obvious as the Nicaraguan 5-year plan draws to a close in 1979.

Balance of trade and payments

Nicaragua's major export market is the United States, and approximately one-third of its imports come from the United States. In the years following the earthquake, Nicaragua's trade deficit ranged from \$49 million to \$181 million. However, it is estimated that in 1976 Nicaragua will have a trade surplus of \$29 million, with exports totaling \$499 million and imports totaling \$470 million. This expected trade surplus will be offset by an \$82 million negative balance of services, or a total trade and service deficit of \$53 million. However, net capital inflows of about \$78 million will result in a \$25 million increase in international reserve in 1976.

AID AND INTERNATIONAL AGENCIES' ASSISTANCE

From fiscal years 1970 to 1972, the level of external assistance provided by AID and the international agencies amounted to about \$154 million, including about \$21 million from AID. Between fiscal years 1973 and 1976, total assistance provided was about \$237 million, with AID providing approximately \$120 million. Commercial bank loans increased during this period from about \$88 million to \$254 million.

AID assistance after the earthquake consisted of loans and grants totaling about \$95 million for earthquake relief and reconstruction and about \$25 million for rural development, health, population, and special studies. International agency grant and loan assistance for earthquake relief and reconstruction amounted to about \$48 million. (See app. II for details on earthquake loan assistance.)

SCOPE OF REVIEW

Our review was conducted in Washington and in Nicaragua. We reviewed selected aspects of the planning, programing, site acquisition, and maintenance of AID-financed projects. We visited and examined relief and reconstruction projects financed by AID and the international financial institutions

and talked with officials of these organizations and Nicaraguan agencies. We did not, however, because of the passage of time, look into immediate relief assistance, such as caring for the injured and feeding the homeless.

MAP OF MANAGUA

The following map shows the area of Managua that was destroyed and the expansion of the city since the earthquake.

CHAPTER 2

EFFECTIVENESS OF TECHNICAL

ASSISTANCE ON NICARAGUAN PLANNING

AND IMPLEMENTING CAPABILITIES

AID and the international agencies have provided or programed more than \$7 million in technical assistance and support to assist Nicaraguan Government organizations in planning and implementing reconstruction. This assistance helped to strengthen existing organizations and to create new ones to plan, coordinate, and execute a massive program of reconstruction activities. The assistance could have been more useful had all of it been provided on a timely basis and had recipient Nicaraguan organizations more effectively coordinated their activities. Better use of technical assistance might have prevented delays in completing and implementing AID relief and reconstruction assistance.

TECHNICAL ASSISTANCE PROVIDED

The Nicaraguan agencies called upon to plan and implement the massive program of reconstruction and development of Managua (see app. III) were considered small and, at best, only adequate. To bolster their capabilities, AID, the U.N. Development Program, and the Organization of American States agreed to undertake a massive program of foreign technical assistance. Technical assistance was also provided by the Inter-American Development Bank and some foreign countries.

This assistance, some of which was still continuing as of November 1976, consisted of grants and loans for special studies, hiring of foreign experts, and direct support of Nicaraguan agencies and personnel.

Agency for International Development

Under a grant assistance agreement, as revised in June 1975, AID provided approximately 170 staff-months of technical advisory services, at a cost of \$1,034,000. The assistance was provided to the Vice Ministry of Urban Planning and the Ministries of Labor, National District, and Finance for systems analysis, municipal tax collection, urban planning, antiseismic construction, human resources development, and traffic engineering.

In March 1976 the grant program was increased by \$515,000 to \$1,649,000 to provide approximately 107 staff-months of technical assistance with emphasis shifting from planning assistance to implementation assistance of approved reconstruction plans.

AID, in December 1976, stated that the program financed 6 long-term advisors and 12 short-term advisors for 2 weeks to 6 months. The advisors included urban planners, architects, structural engineers, an appraisal specialist, urban economists, and sociologists.

AID also, as part of its relief and reconstruction loans, committed \$3,121,000 for technical assistance and support, some of which financed Nicaraguan contracts with the Central American Institute for Business Administration. Under one of these earlier contracts, the Institute assisted the Nicaraguan Government in formulating a general strategy for reconstruction and development.

U.N. Development Program

The U.N. technical assistance program of \$1.5 million is being carried out in cooperation with AID and the Organization of American States. In August 1973 a U.N. official made a comprehensive survey of technical assistance requirements in Managua and proposed that financing for the assistance be shared by the U.N. Development Program, the Organization of American States, and AID.

The two main U.N. programs provided technical assistance for vocational training in the construction industry and planning experts for the Vice Ministry of Urban Planning. Vocational training assistance, completed in September 1976, involved four long-term experts and a few consultants for 3 or 4 months. The Vice Ministry of Urban Planning was provided with eight experts whose employment ranged from 6 months to 2-1/2 years. Assistance in this area was completed by December 1976. Other projects received assistance from nine other experts.

Organization of American States

About \$500,000 was allocated through the Organization's country and regional programs for such projects as seismic risks and related construction standards, regional planning and budgeting and assistance to the Vice Ministry of Urban Planning. As of November 1976, most of the activities had been completed.

Initially, the Organization of American States served as a focal point for coordinating the technical assistance among the various international agencies and helped to plan joint technical assistance to the Vice Ministry of Urban Planning.

Inter-American Development Bank

In about June 1973, the Bank agreed to provide \$394,000 to the National Planning Office and two autonomous agencies to implement its reconstruction infrastructure loan. The assistance to the National Planning Office financed the services of U.N. experts in operational and development planning.

ACCOMPLISHMENTS AND PROBLEMS

An AID consultant in June 1975 stated the technical assistance program has succeeded in substantially revising and improving reconstruction planning, particularly in integrating the different efforts of the Vice Ministry of Urban Planning and in producing the Immediate Action Reconstruction Program. This document, as the consultant states, provides a first effort to effect'ly convert general planning perspectives into specific programs and program actions. In the past, the lack of such program specifications and guidance has been a serious weakness in reconstruction planning. A report prepared by consultants in March 1976 stated that the technical assistance program generally has been remarkably effective. However shortcomings or problems in the technical assistance programs have been pointed out. For example:

- A consultant in June 1975 stated that planning improvements have not removed all confusions and inefficiencies in planning and that coordination of planning, implementation, and operations among public service agencies still is a major problem. He also noted that continued U.N. delay in providing an infrastructure engineer will prove costly to the program.
- AID officials in September 1975 and March 1976 stated that significant delays have occurred in recruiting experts to be provided by the international agencies. The U.N. Development Program has been able to provide only seven of the nine long-term advisors originally programmed.
- The consultant report of March 1976 stated that some foreign technical advisors have had difficulty

in fitting their work experiences into the operational needs of the agencies they were advising.

--An official of the Vice Ministry of Urban Planning said in November 1976 that too many technical advisors were provided during the same time, so they were not used to the fullest capacity.

CONCLUSIONS

We believe that technical assistance helped the Nicaraguan Government to plan and implement a massive program of relief and reconstruction. Delays have been encountered in implementing and completing some reconstruction programs, which may be attributable in part to problems in providing technical assistance.

Whether the technical assistance effectively strengthened the abilities of Nicaraguan agencies to perform future tasks without external funds and experts cannot be evaluated until the major reconstruction program is completed and the foreign experts have departed.

CHAPTER 3

EMERGENCY PROGRAMS OF

RECONSTRUCTION ASSISTANCE

Shortly after the earthquake, the United States, the World Bank, and the Inter-American Development Bank, entered into concessional loan agreements to help restore and reconstruct public services and facilities, and support the Government of Nicaragua's employment and budgetary programs. In February 1973 AID provided about \$20 million in loan assistance. And, in June the Inter-American Development Bank and the World Bank provided about \$17 million and \$20 million, respectively. (See app. II.)

In reviewing some of the programs, we noted that the assistance could have been more effective had the programs been completed on time and adequate provisions made for maintaining the public facilities constructed.

AID PROGRAM ASSISTANCE

About 6 weeks after the earthquake, AID entered into an agreement with the Nicaraguan Government to provide \$15 million in emergency assistance on concessionary terms. The loan was to help cover an expectedly large budget deficit resulting from substantial reductions in revenues and new spending requirements, both attributable to the earthquake. Public works activities which lend themselves to relatively swift implementation were selected, and support was provided to AID projects implemented or programmed prior to the earthquake to accelerate their completion.

The program loan materially assisted the Nicaraguan Government in its immediate relief and restoration efforts. However, the program deviated somewhat from its original purpose of immediate response by the extension of hospital construction more than 1 year beyond its scheduled completion date. Also, provision for maintenance and fire protection at some of the hospitals appears to be inadequate.

Activities financed

The \$15 million loan agreement was signed on February 9, 1973, and originally provided for a final disbursement date of June 30, 1974. This date was extended four times to the final date of March 31, 1976.

The final loan report, dated in July 1976, showed the following activities financed under the loan.

Demolition and rubble removal	\$4,327,902
Hospitals and associated buildings	4,608,066
Hospital equipment	784,416
Restoration of major drainage channels	1,465,932
Counterpart funds for prior loans	1,742,693
Technical assistance	973,939
Repair and construction of public buildings	677,216
Road construction	381,316
Deobligated	<u>38,520</u>
Total	<u>\$15,000,000</u>

The agreement allowed the use of up to \$3.9 million for financing Nicaraguan counterpart requirements for three ongoing and one concurrent AID loans for rural electrification, highways, education, and feasibility studies. However, in December 1973, as its revenues improved, the government re-assumed its responsibility for loan counterpart requirements.

Demolition and rubble removal

The program was carried out by the civilian reconstruction corps, which was created in January 1973 as an agency of the Ministry of Public Works, and by 16 private contractors. The civilian reconstruction corps completed salvage operations in December 1973 and employed 3,500 people at its height. The cost of the program was originally estimated at about \$2.1 million, but in January 1974 the estimate was revised to about \$1.2 million. AID noted in February 1974 that the savings in this activity would be used to expand Velez Paiz Hospital and other projects.

The demolition of 336 buildings and rubble removal in the destroyed area was carried out by both local and U.S. contractors. The work was completed by June 1974 and cost \$3,145,000, about \$30,000 more than the original estimate. The demolition of buildings destroyed or damaged beyond economical repair and the removal of the rubble provided employment for many people and removed hazardous conditions. However, all damaged buildings were not demolished; and the center of the city, as shown in the following picture, still has somewhat the appearance of having been involved in an air raid, although the earthquake happened 4 years ago.



DOWNTOWN MANAGUA

Officials of the Vice Ministry of Urban Planning said that a court order prevented the demolition of the buildings. However, it provided that if the buildings were not repaired, the owners would have to pay for their demolition and subsequent removal. The Vice Ministry, through public notices, in late 1976 was requesting the owners to repair or demolish the buildings; otherwise the buildings will be removed by the government.

Hospital construction

The construction and equipping of two new hospitals and the renovation, extension, and equipping of an existing building helped to restore about 825 of the approximately 1,650 hospital beds lost as a result of the earthquake. Benefits from the program, however, were not fully realized until November 1976 because of construction and equipment delays.

The Velez Paiz Hospital, constructed as a cancer hospital, was not equipped or used as a hospital but was used as a nursery school. After the earthquake, it was expanded and renovated during three separate phases by the Ministry of Public Works. The first expansion started in February 1973 and was essentially completed in June 1973. Hospital operations began in May 1973, just before the start of the rainy season, when 600 hospital patients living in tents were moved into any available space. The second expansion began in July 1974 and was completed in December 1974. The final expansion began in March 1975 and was essentially completed by the contract termination date of March 31, 1976. However, the maternity section was not equipped to open until November 1976.

Delays during the final phase, according to AID, resulted from the inability of the Nicaraguan Government to provide an experienced hospital planner, develop architectural and engineering plans, and finance necessary equipment. AID in December 1975 agreed to authorize \$350,000 in loan funds for specialized medical and hospital equipment although the original agreement called for only fixed equipment, such as kitchen and laundry equipment.

The Occidental and Oriental Hospitals, serving the western and eastern sections of the city, are of identical design, and each has a capacity of 250 beds. They were designed as full service hospitals; however, the Oriental is designated as an emergency hospital and the Occidental as a specialty hospital. Patients receiving treatment at the Oriental will generally complete their hospitalization

there unless they require specialized care available only at the Occidental.

Construction contracts were signed in May 1973 with an estimated completion date of February 1974. The Oriental Hospital was completed in June 1974 and the Occidental Hospital in March 1975. Construction was delayed by a month-long general labor strike, numerous Nicaraguan change orders modifying the building design and providing for construction of a warehouse/repair facility at each location, investigation of a possible earthquake fault on the site, heavy rains, and the financial insolvency of the contractor.

Inadequate maintenance and safety equipment

In discussions with AID and Nicaraguan officials as well as in our visits to the three hospitals, we noted an overall maintenance and safety problem. For instance, we were told that equipment at the Oriental and Velez Paiz Hospitals was being used improperly because operating manuals in English were not translated into Spanish. At the Velez Paiz Hospital, water leaks were causing damage to the hospital's interior. Large standing pools of water on the lawn adjacent to the Occidental Hospital were caused by a broken sprinkler system, and the administrator of the hospital agreed that something had to be done because these pools were potential breeding places for mosquitoes. We were also told at the Occidental that its repair facility lacked adequate power.

We noted the lack of fire protection at the Velez Paiz Hospital and the need for fire extinguishers at the Occidental Hospital. None of the hospital buildings are protected from lightning. In several instances, safety panels have been removed from electrically operated equipment, exposing personnel to electrical shock hazards. In addition, personnel were exposed to the danger of being burned by uninsulated steam lines in the laundry.

The Mission said that it was aware of most of the maintenance shortcomings and has and will continue to take action and that:

--Before the Oriental Hospital was completed in June 1974 every possible influence was exerted to have the Nicaraguan Government obtain operation, maintenance, and spare parts manuals for all equipment. Payments on installed equipment were suspended for almost 2 months and the manuals were eventually obtained by the government.

--The director and administrator of each hospital has been continuously cautioned about the importance of maintenance and safe operation of equipment. A World Health Organization hospital maintenance engineer tried for almost a year to instruct the personnel of all hospitals in correct operation and maintenance procedures. The Mission secured a Peace Corps engineer for 3 weeks to instruct hospital personnel in boiler operation and maintenance and has requested his services again.

--It was instrumental in obtaining a retired hospital director from the International Executives Corps. He is expected to arrive in Nicaragua soon to help operate the three AID-financed hospitals.

--The AID health-sector loan allocates \$400,000 to build and equip a national hospital maintenance facility and \$100,000 for related technical assistance.

The Mission told us before our departure from Nicaragua that the water leaks have been corrected, the inadequate power at the repair shop can be easily remedied, and fire extinguishers have been installed in the Occidental Hospital. The firefighting capability at the Velez Paiz Hospital is admittedly deficient, and the Nicaraguan agency responsible for enforcing the fire code has been requested to investigate and correct the deficiency. The Mission believes the cost of \$15,000 per hospital of installing lightning protective systems is not justified because of the minimal risk involved.

AID EDUCATIONAL ASSISTANCE

The earthquake destroyed or damaged approximately 1,100 of about 1,700 classrooms in Managua. To assist in restoring these classrooms and to provide some technical assistance, equipment, and books, AID agreed in February 1973 to provide concessionary loan funds of \$5.3 million (loan 027). Also, approximately \$1.4 million of the Nicaraguan contribution of about \$5.8 million for the project was provided from AID's program loan funds (loan 028).

The erection of temporary classrooms allowed the schools to open in June 1973, enabling 17,000 students to continue their education with a loss of only 12 weeks. However, the full benefits of the program were not achieved as soon as they could have been due to long delays in erecting and equipping some of the permanent classrooms financed by AID. Some units only became ready for occupancy in late

1976. Also, continuing lack of adequate provision for maintenance by the Nicaraguan Government will result in the deterioration of the facilities.

The Nicaraguan Government used the \$1.4 million of AID's program loan funds for 244 temporary classrooms, textbooks, and technical assistance. By June 1973, 207 of these classrooms were erected and the rest were completed by September. As the permanent classrooms became available, many of the temporary buildings were relocated to rural areas. The AID funds also helped the Ministry of Education to establish a project implementation unit to administer educational assistance. In 1974 the unit was completely supported by the Ministry of Education and unit responsibilities now include coordination of AID, World Bank, and U.N. education assistance.

Undue delays

Between June and December 1973, under AID loan 027, a total of 834 prefabricated classrooms, 384 from a Nicaraguan firm and 450 from a U.S. firm, were contracted for and delivered. All the units, however, were not promptly erected and 115 were only nearing completion in November 1976--3-1/2 years later. The principal reason for the delay, according to AID, was in obtaining land and securing land titles, and bids for the final phase were not opened until May 1976.

Some schools, however, are not fully equipped due to the failure of the Ministry of Education to enforce its supplier contracts. As of November 1976, at least 15 percent of the U.S.-contracted equipment had yet to be received. Similar problems have been experienced with non-U.S. suppliers.

The Mission said that the Ministry of Education did not call in the performance bonds because it felt that canceling the contracts and seeking new bids would cause greater delays. Also, some items were held in the transportation warehouse because the Ministry of Education was in arrears in its payment to an airline on a matter not connected with the AID-financed loan. With the advent of a new Minister of Education in mid-1976, steps were taken to solve the problem.

Inadequate provision for maintenance

The loan agreement provides that the Nicaraguan Government must provide a satisfactory maintenance plan to AID and budget \$200,000 for maintenance during the life of the project. The maintenance plan was due within 1 year of the first disbursement in September 1973; but it was not until September 1976 that a draft plan was submitted, and maintenance apparently was not adequately provided for.

As a result, in October 1976 AID agreed to a Nicaraguan request to allow approximately \$64,000 of Nicaraguan-owned counterpart funds to be used for the maintenance of schools. AID stated to the Minister of Finance that in the future the Nicaraguan budget should include adequate funds to maintain the AID-financed schools. The maintenance problem may result from the fact that the Ministry of Education is responsible for the construction of the buildings but the Ministry of Public Works is responsible for their maintenance.

In November 1976 the Mission stated that on several occasions it had brought to the attention of the Ministry of Education the requirement for a comprehensive maintenance plan. Also, the Mission said a letter to the Ministry was being prepared to provide guidance on a time-phased implementation schedule which would serve to insure adequate attention being devoted to the continuous maintenance program.

WORLD BANK IMMEDIATE RECONSTRUCTION ASSISTANCE

In May 1973, the Directors of the World Bank approved an International Development Association loan for \$20 million to provide

- \$8 million for sites and services housing projects, including community facilities in Managua and secondary cities;
- \$2.5 million for industrial sites and services in secondary cities to help provide jobs for low-income persons;
- \$2 million for the construction of four temporary secondary schools, two permanent multilateral secondary schools, and one permanent technical institute, to replace classrooms destroyed by the earthquake;

--\$2.5 million to repair and rehabilitate existing water supply installations; and

--\$5 million to repair and rehabilitate existing electric power installations, extend the distribution network, and fund the power company's 1973-74 work program.

The World Bank does not have a resident representative in Nicaragua. World Bank officials in Washington in September 1976 stated that the project is generally going well but there are some problems. In Managua, the sites and services housing and education construction is moving slower than the Bank would like to see. Outside of Managua, the power, water, and sites and services projects are progressing more rapidly probably because of their physical location and better local administration.

As of October 1976, \$15 million of the loan had been disbursed, and according to Treasury officials responsible for U.S. participation in international organizations, the loan is being disbursed in a normal manner.

INTER-AMERICAN DEVELOPMENT BANK
EMERGENCY LOAN

In April 1973, the Bank approved a \$16.7 million emergency loan to assist in financing

--telecommunications (\$1.7 million) to repair or replace destroyed buildings and equipment,

--universities (\$1.2 million) to provide temporary facilities for the Central American University and the National University,

--small and medium industry credit (\$4.5 million) to provide credits to facilitate the reconstruction or reinitiation of operations of small and medium enterprises that were affected by the earthquake,

--rural credit (\$6 million) to provide new areas of operation to help the country become self-sufficient in food and provide employment away from urban centers, and

--construction and building materials credits (\$7 million) to help industry meet the demands caused by the earthquake.

The loan provided for financing about 82 percent of a total program of approximately \$20.4 million. In September 1976, Treasury officials stated that the loan was being disbursed at a reasonable rate, and in October 1976 the Inter-American Development Bank representative in Nicaragua told us there were no major problems with the loan although a few subprograms had been canceled. The loan was 92 percent disbursed by the end of October 1976.

CONCLUSIONS

During the first 6 months after the earthquake, the Nicaraguan Government entered into concessionary loan agreements totaling about \$57 million with AID, the World Bank, and the Inter-American Development Bank. This assistance, which amounted to about \$25 for each citizen, was essentially justified on the basis of providing immediate reconstruction relief to Managua and its residents. Some temporary classrooms were rapidly constructed, rubble and dangerous buildings removed, telecommunications lines repaired, and hospital patients sheltered. In a few cases, however, projects were unduly delayed, such as the construction of one hospital for over a year and a number of classrooms for up to 2 years. Also, some housing units financed by the World Bank were only nearing completion in November 1976--3-1/2 years later.

If the program is to continue to be reasonably successful, the Nicaraguan Government must devote greater attention and resources to the proper maintenance of the facilities constructed. As shown during our review, the government and its agencies are not providing for adequate maintenance of the hospitals and classrooms constructed under the emergency programs of loan assistance. The AID Mission is aware of the government's shortcomings in the maintenance area and is trying to improve the situation through instruction, persuasion, and the funding of a national health maintenance center.

RECOMMENDATIONS

We recommend that the Administrator of AID, in considering future levels of assistance to the Nicaraguan Government, take into account the manner in which facilities previously financed by AID are maintained. We also recommend that the AID Mission Director inform the Nicaraguan Government that the adequacy of the maintenance of facilities will be considered in establishing future levels of assistance.

We further recommend that the Secretary of the Treasury inform the U.S. representatives to international organizations that, in voting on future assistance programs, they should carefully consider the maintenance performance of the Nicaraguan Government.

CHAPTER 4

REBUILDING A DECENTRALIZED MANAGUA

To avoid the devastating damage to life and property that occurred in the 1972 earthquake as a result of the heavy concentration of buildings and public facilities in the old center of Managua, the city is being spread out over a wider geographic area. Active urban land use has almost tripled, from 13.2 square miles in 1972 to some 36 square miles in 1976. New housing, shopping, and business areas and related streets and public facilities have been constructed and are being planned by private enterprise and the government on vacant land on the outskirts of Managua.

For the initial 5-year phase which began in 1974, public infrastructures and services for the new decentralized Managua will cost approximately \$76 million. AID is providing loan funds of \$30 million, the Central American Bank for Economic Integration about \$5 million, and the Government of Nicaragua the balance. In addition the Inter-American Development Bank is considering providing \$28 million in loan funds to finance an outer beltway around the city.

The construction of public infrastructures is proceeding very slowly. Delays of up to 2 years are being predicted, principally because of (1) the lack of effective guidance and coordination between government planning and executing agencies and (2) the time lost between submission of plans and projects to AID and their approval.

IMMEDIATE ACTION RECONSTRUCTION PROGRAM

By May 1974 AID said Managua had shifted from the emergency period characterized by immediate relief and recovery activities to actual construction and development. The urban core of old Managua was closed off to construction, and as of November 1976 no reconstruction had begun in this area. As a result, public and private development was directed toward the outskirts and former suburban areas. This lower density, deconcentrated type of development had been recommended by planning experts to minimize the loss of life and property expected from future earthquakes.

To assist in the reconstruction and development, AID and the Government of Nicaragua entered into an agreement in November 1974 which resulted in the Immediate Action Reconstruction Program. (See app. IV for details on financing the Program.) Under this Program, AID is providing concessionary loan funds of \$30 million (\$20 million under

a November 1974 agreement and \$10 million under an October 1975 agreement--see app. II) and the government \$41 million.

A prerequisite to the disbursement of most AID funds was the preparation of a major reconstruction plan. It was envisioned that there would be a 20-year plan and a 5-year plan. The short-range plan, the Immediate Action Reconstruction Program, was completed in April 1975 with foreign technical assistance and approved by AID in May, as satisfying the condition precedent to the disbursement of funds. The long-range plan is now in preparation.

The Program is financed through four funds financed jointly by AID and the Nicaraguan Government. A land purchase fund is financed entirely by the government. The following table shows the amounts programmed and disbursed.

<u>Funds</u>	Amount disbursed as of late 1976					
	<u>AID loan</u>	<u>Nicaraguan contribution</u>	<u>Total</u>	<u>AID disbursements</u>	<u>Nicaraguan disbursements</u>	<u>Total</u>
	(millions)					
Reconstruction	\$16.0	\$16.9	\$32.9	\$ -	\$ 7.5	\$ 7.5
Land purchase	-	15.0	15.0	-	6.6	6.6
Program implementation	4.8	3.6	8.4	.2	2.4	2.6
Small enterprises credit	3.2	3.2	6.4	.6	.5	1.1
Health sector	<u>6.0</u>	<u>2.3</u>	<u>8.3</u>	<u>1.0</u>	<u>.1</u>	<u>1.1</u>
Total	<u>\$30.0</u>	<u>\$41.0</u>	<u>\$71.0</u>	<u>\$1.8</u>	<u>\$17.1</u>	<u>\$18.9</u>

Reconstruction

This fund is used for such high-priority, public-sector activities as road construction, street paving, water and sewage lines expansion, street lights, telephone service, and lining of drainage channels, in areas that promote the deconcentration of Managua. This fund also provides for the development of open and green areas throughout Managua and expands public services for the lowest income groups.

An important component of this activity is the establishment of four district centers, each of which will include a market, day-care center, bus terminal, municipal office, communication office, fire station, police station, and multi-purpose building. One of these centers will serve AID's Las Americas low-income housing project.

During the course of our review, in a preliminary report, AID auditors noted that the government has not established standard building specifications for all district centers and that the land procured for one of the centers is not sufficient to accommodate the planned facilities and they will have to be redesigned, canceled, or relocated. The Mission, in response, said it will require standard building specifications to be established and has requested the government to clarify the land situation before proceeding with design and construction of the center.

Land purchase

The purchase of land and rights-of-way is being financed through this fund. AID auditors noted that as of September 30, 1976, the government had spent about \$5.6 million for land but that adequate property descriptions, evidence of title, and related documents had not been provided to AID and the values assigned may be inflated.

The Mission said it will request this information before approving any construction and is considering engaging a local Nicaraguan lawyer to review all land certifications.

Program implementation

This fund will provide assistance to Nicaraguan executing agencies in developing and implementing reconstruction activities; supervising specialized studies and surveys for reconstruction planning and design competition for Managua's destroyed urban areas; and planning specialized urban and national reconstruction. The effectiveness of this and other technical assistance provided to the government to improve its planning and implementation capabilities is discussed in chapter 2.

Small enterprises credit

This fund provides credits and technical assistance for reconstructing or expanding Managua's small enterprises in deconcentrated geographic areas, attacking critical supply bottlenecks that tend to slow down reconstruction efforts, and giving lower-income citizens the opportunity to reestablish or expand their enterprises.

As of September 30, 1976, the Central Bank of Nicaragua had approved 555 loans totaling about \$1.5 million, as shown in the following chart.

<u>Range</u>	<u>Number of loans</u>	<u>Total value</u>
\$ 143 to \$ 5,000	487	\$ 583,328
5,000 to 10,000	46	391,932
10,000 to 28,571	19	400,570
28,571 to 40 000	<u>3</u>	<u>146,797</u>
Total	<u>555</u>	<u>\$1,522,627</u>

AID's auditors stated in November 1976 that several of these loans were made for use outside the geographical area considered in the reconstruction plan. The Mission, however, said that although some loans were not within the main area of reconstruction, they were in the general Managua area and were permitted under the loan agreement. We noted that the loan agreement is broad enough to permit these loans as long as they are in the Managua area and preference is given to those individuals and small enterprises that lost their businesses as a result of the earthquake.

Health sector

This fund was authorized as part of the \$10 million agreement signed by AID in October 1975 and is used for potable water systems, sewers and storm drains, health clinics featuring preventive care, and credits for water and sewer connections for low-income residential areas within the Managua area.

We visited various communities and observed the installation of water and sewer connections to individual homes and the construction of storm drains. Residents we spoke with said they were pleased to have the new services as they will improve the sanitary conditions of their homes. A photograph of the installation of a sewer connection is shown on the following page.

Repayments for individual water and sewer connections are deposited in a revolving fund which will be used to finance additional connections. AID's auditors told us in November 1976 that the government had not submitted the required monthly financial reports on the operation of the revolving fund. The Mission said it has requested that these required monthly reports be provided.

Delays in implementation

To identify the problems in implementing the program, we spoke to Nicaraguan and Mission officials and contractor technicians and reviewed pertinent Mission records. We believe



INSTALLATION OF A SEWER CONNECTION

the delays are due principally to the lack of effective guidance and coordination between Nicaraguan planning and executing agencies and the long time the Mission took to review, approve, or reject plans and projects submitted.

These views were confirmed by auditors from the AID office of the Auditor General, whose preliminary report, prepared during our incountry visit, stated that (1) there is no one responsible, on a full-time basis, within the Nicaraguan Government to assure that project goals and objectives are met and (2) the Mission does not always approve or disapprove Nicaraguan requests in a timely manner.

The Mission said in December 1976 that normal Nicaraguan bureaucratic processes are responsible for many delays and that the interagency and interdisciplinary relationships necessary for the complicated reconstruction program are new to the Nicaraguan Government. Therefore, institutional bottlenecks are to be expected in a program of this magnitude and time frame.

The Mission further stated that the full application of AID's own procedures for procurement and contracting also causes delays. It noted, however, that AID officials help Nicaraguan personnel to prepare the required documents and that reviews are often made on an informal basis to save time.

Mission actions to improve implementation

During our review, the Mission took several actions to expedite the effective implementation of the Immediate Action Reconstruction Program and to assure more complete coordination with the appropriate Nicaraguan agencies.

On October 28, 1976, the AID Director sent a letter to the Ministers of Finance, the National District, and Public Works; the Director of the Office of Implementation and Coordination; and the Vice Ministry of Urban Planning stating that:

"Because of the urgency of completing as soon as possible the projects financed by subject loan, AID has reviewed its organization and procedures to determine how we might function more rapidly in cooperating with your government relative to the execution of these projects."

The letter further stated that, to increase resources available for loan implementation and to reduce steps in decision-making on loan implementation, the Deputy Mission Director has been designated as full-time Director of Reconstruction Programs. The Director said they would like to meet with the Nicaraguan officials soon to consider what other measures might be taken jointly to expedite completion of the loan projects.

The Mission assigned two employees to work full time with the Director of Reconstruction and was seeking to hire at least one additional local engineer to help in reviewing design proposals.

In December 1976 the Mission informed us that an engineering reassessment of construction time required for each project will be made. According to the Mission, this will result in a more realistic time schedule on which to request an extended terminal disbursement date from AID headquarters. The Nicaraguan Government is to come up with revised allocations of manpower and a more effective system delegating authority, in order to implement projects more expeditiously.

INTERNATIONAL RECONSTRUCTION ASSISTANCE AND COORDINATION

Closely tied in with AID's Immediate Action Reconstruction Program is the planned financing of a wholesale market center by the Central American Bank for Economic Integration and the outer beltway around Managua by the Inter-American Development Bank. If these projects are not constructed or are only partially constructed, AID and the Nicaraguan Government will have to redesign a portion of their reconstruction plan.

To insure optimum use of available funds, close coordination will be required among all concerned parties. Lack of effective coordination resulted in more than 300 homes being constructed on the proposed right-of-way of the outer beltway and in their subsequent demolition. There were, however, mitigating circumstances. This happened shortly after the earthquake when most government agencies were operating from temporary buildings and priority attention was being given to immediate relief efforts.

Wholesale market

On July 25, 1975, the Central American Bank for Economic Integration agreed to provide \$4.5 million to the Nicaraguan

Government to finance a wholesale market and related equipment and technical assistance. (See app. II.)

The market, consisting of 13 buildings with parking and sanitary facilities, will be located on 29 acres on the outskirts of Managua near the proposed outer beltway. A Nicaraguan official stated that the market will change the traditional structure of the antiquated markets that have been in operation since the founding of Managua.

The roads leading to the market will be financed in part by AID and Nicaraguan funds under the Immediate Action Reconstruction Program and will be connected to the outer beltway. Prequalification of construction firms for the market has begun, and the work is scheduled to start in mid-1977.

Outer beltway

Before the earthquake, the Nicaraguan Government had decided on the alinement for an outer beltway around the city of Managua. The Inter-American Development Bank has considered financing the highway for \$28 million, but no final action has been taken to date.

Some concern has been expressed on the need for a complete highway at this time and about possible profiteering by political officials from land holdings in the area.

During an Organization of American States meeting on Nicaraguan development plans in March 1976, AID noted that there was some discussion about taxing away of future windfall gains of land owners near the proposed outer beltway. In response to inquiries made at the meeting, the Nicaraguan National Planning Office representative reportedly stated the taxes and present valuations on the land were sufficient. This response, according to AID's understanding, was not satisfactory to the Inter-American Development Bank representative.

In our discussions with a Bank official, he stated the loan is probably being held up because of some adverse press publicity. He said the Bank made a study of the land owners in the path of the proposed beltway and found no unusual ownership, such as large tracts of land owned by a small number of individuals.

AID officials noted that if the highway is not built, they have alternate plans for connecting some of the roads planned under the Reconstruction Program.

Coordination among international organizations

From our discussion with AID and representatives of several international donor organizations in Managua, we learned that coordination among these groups is carried out informally. Generally, an informal meeting is held once a month and representatives from the International Monetary Fund, U.N. Development Program, Organization of American States, World Health Organization, Inter-American Development Bank, Central American Bank for Economic Integration, and the Agency for International Development exchange information on new proposals and projects which have been approved or rejected. No formal minutes are recorded. These meetings, begun last year with some encouragement by AID, are planned by the Inter-American Development Bank representative.

The Mission said that the multilateral organizations want to keep the meetings informal without taking minutes. It believes that it is adequately appraised of projects being conducted by other international lending agencies and that it is adequately monitoring the planning and implementation of those projects importantly related to AID-financed projects.

We, however, wonder how effective these meetings are, since the Mission had limited information on the programs being carried out by the international agencies, some of it limited to loan proposals and newspaper articles. No data was available on progress or problems encountered by other lending organizations.

For instance, the Mission was not aware of all the housing projects being financed by the World Bank and the Inter-American Development Bank, and no information was available on the financial aspects of the loans and projects. Also, while the Mission had no information available to show the type of reconstruction assistance provided by the Central American Bank for Economic Integration, it previously reported that the Bank had provided a significant amount of reconstruction assistance. Upon inquiry during our review, the Mission established that the Central American Bank's assistance was not specifically related to reconstruction projects. It said, however, that it was generally familiar with the wholesale market financed by the Central American Bank.

Peace Corps volunteers told us that about eight volunteers are working in the Las Americas housing development

but that they have limited knowledge of the improvement program and related activities being financed by the AID loan and there is no exchange of ideas between them and Mission personnel. The Mission Director said that he meets with the volunteers briefly upon their arrival in the country, but he agreed there should be more exchange of information.

AID headquarters recognized the need for improved coordination. In May 1976, an AID official said field coordination between AID and the U.N. Development Program resident representative had been satisfactory, but it could be improved since it had been casual and to a great extent based on exchanges of documents. The official said that one way of improving coordination would be to establish a mechanism to promote periodic exchanges of ideas and information between donor agencies and relevant Nicaraguan institutions. He also noted that the U.N. representative, through U.N. assistance to the Nicaraguan National Planning Office, is in a good position to influence the office to assume an active role in establishing a more effective procedure for project coordination on a regular basis.

CONCLUSIONS

The Immediate Action Reconstruction Program, when finally completed, should provide a more livable city for its citizens, particularly the poor majority. The Mission's recent actions to accelerate the program will, hopefully, prevent further delays in getting the benefits of the program to the people. The Mission, however, should attempt to formalize the coordination of its programs with other international donor organizations to obtain current information on the progress of planned and ongoing projects of other donors, to insure the most effective use of all funds.

RECOMMENDATIONS

We recommend that the:

- Administrator of AID stress to the Nicaraguan Government the need for more effective guidance and coordination between its planning and executing agencies so that the reconstruction program can be completed as soon as possible to alleviate the hardships still being experienced by some of the people of Managua as a result of the earthquake.
- Secretary of State, the Administrator of AID, and the Secretary of the Treasury through the U.S. representatives of the international lending agencies, stress the need to formalize coordination of all economic

assistance programs to Nicaragua. The suggestion made by an AID official that the Nicaraguan Planning Office assume a more active role in establishing a more effective procedure for project coordination on a regular basis should be pursued by AID and the international financial institutions.

--Administrator of AID stress the need to fully coordinate the AID program with Peace Corps personnel through regular meetings to exchange information and ideas.

CHAPTER 5

HOUSING RECONSTRUCTION ASSISTANCE

AID, the World Bank, and the Inter-American Development Bank are providing about \$45.5 million to the Nicaraguan Government to construct or to make permanent about 15,000 homes for low- and middle-income persons. However, more than 3 years after the earthquake, less than half the homes were built or converted to permanent units. (See app. V.)

The initial program of constructing 11,000 temporary shelters for 50,000 people was only marginally successful. During the first 6 months after being constructed, they were occupied by only 16,000 to 20,000 people and are now mainly being converted to permanent units. If the project is to be successful, maintenance and sanitary, health, and safety conditions must be improved.

NEED FOR ADEQUATE HOUSING

Before the earthquake, Managua had approximately 72,000 houses occupied by about 420,000 people. About 70 percent of these homes, according to AID, were constructed mostly with inferior materials, had dirt floors, and lacked essential services. For instance, a 1971 census noted that about 40 percent of the families occupied single rooms, 42 percent had no sewage services, 39 percent had no water service, and 9 percent had no electricity. Also, 48 percent of the people were renters.

The earthquake destroyed between 40,000 and 50,000 homes, damaged about 13,000, and displaced an estimated 160,000 to 250,000 people. The estimated dollar value of housing losses, including furniture, is about \$365 million. As of February 1976, about 9,000 of the damaged homes were repaired, and 27,000 new homes were constructed through private and public resources. The new units are in areas that were considered the outskirts of Managua before the earthquake and in some nearby cities, such as Leon, Granada, and Masaya.

LAS AMERICAS LOW-INCOME HOUSING

TO finance this project, AID made available a \$3 million grant and a \$15 million concessionary loan, the Organization of American States a \$300,000 grant, and the Nicaraguan Housing Bank about \$15 million. The unimproved homes completed in the spring of 1973 initially experienced low occupancy rates, and more than 3 years later many of them still lacked adequate sanitary facilities. Maintenance and health and safety

conditions must be improved, but the project is filling a valid need for low-income housing and should be completed as soon as possible.

Background

The project was initiated with the grant funds in January 1973 and the contribution of land valued at about \$3.3 million from the Nicaraguan Housing Bank. (See app. VI.) There were to be about 12,300 temporary units constructed to house some 50,000 low-income people who lost their housing in the earthquake. Work was completed rapidly to house as many people as possible before the start of the rainy season in April. The first units were occupied in February, and construction was completed in May 1973. The units consisted of one room, 15 feet by 15 feet. Generally, they were constructed of rough wooden siding and corrugated metal roofs; and they had dirt floors, no plumbing or electricity, and shared communal water facilities and outhouses. (See the photograph on the following page.)

However, only about 11,000 of the 12,300 units (5,500 duplex units) were constructed. The reduction in units probably resulted from the decision to use only \$90,000 of the Organization of American States donation for the project, with the balance of \$210,000 being used on projects about 190 miles away from Managua. In discussing this with officials of the Organization in Nicaragua and Washington, we learned that they were unaware of the changed use of the donation. We could obtain no specific reasons from AID Mission officials and Nicaraguan Housing Bank officials why the full \$300,000 grant was not used as planned.

In May 1973, shortly after the last unit was constructed, the Housing Bank started to make improvements, such as installing concrete floors, electricity, roads, and community facilities, to make the units more attractive and to increase their occupancy. It also constructed 500 cement units with sanitary facilities between existing adjacent wooden units. In December 1973 the Bank stated these improvements had cost it \$4.7 million.

To assist the Housing Bank with these improvements, the United States agreed to a \$15 million concessionary loan, with the Government of Nicaragua agreeing to provide \$7 million in additional financing. However, prior to final congressional approval, a staff survey team of the House Foreign Affairs Committee visited Nicaragua in January 1974 to look into the need for U.S. financing and the capability of the Nicaraguan Government to implement the improvements. The team's report



TYPICAL HOME IN SITE 4, STILL IN ORIGINAL CONDITION

recommended approval of the proposed loan but had reservations about the capacity of the Nicaraguan Government to carry out the proposed project in view of escalating building costs and possible lack of commitment to give a high priority to the project. The loan was approved July 15, 1974.

The improvement of the Las Americas project under the AID loan consists of making changes to the original homes and in constructing some new homes on the four previous sites and one new site. Rotted wooden support beams are being replaced with angle irons set in concrete, and each unit is being furnished with toilet and shower facilities contained in a cement or cinder block additions. Also, some units are having rooms added or provision is being made for additions at a later time. A program of home improvements credit and technical assistance under the loan will allow residents to upgrade and expand their homes.

When the program is completed there will be about 8,000 units, comprising 8 different styles ranging in price from about \$1,250 to \$4,000. About 3,000 of the units will be completely new structures. The reduction in units from the original 11,000 will result from combining units to serve larger families; from removing units to provide space for community facilities and roads; and, in some instances, by occupants taking down their homes and moving away with the material. This reduction in planned units will reduce the number of people living in the projects to about 40,000, or 10,000 less than originally planned.

Low initial occupancy

The units were constructed on a crash basis to house about 50,000 people. AID stated, however, that as of July 31, 1973, only 3,346 of the approximately 11,000 housing units were occupied, or about 30 percent. We estimated the total number of people in the units at 16,000. At the end of November, the rate increased to 52 percent based on the occupancy of 4,143 families (about 20,000 people) from a total availability of 8,000 units. The later figure was based on the doubling up of some units to accommodate larger families. Full occupancy was not achieved until late 1974, about 1-1/2 years after the units were constructed. Therefore, based on the low occupancy of the units during the first 6 months, it appears that the purpose for constructing these units was only marginally achieved.

Mission officials stated the low occupancy was due in part to a greater than anticipated reluctance of the earthquake victims to return to Managua or to leave the crowded homes of relatives for the uncertainty of a new housing project and possible unemployment.

Delinquent rental payments and control over funds

Rental collections have been a problem since the project was initiated. Collections, however, have been improving, and according to the Housing Bank the delinquency rate was about 16 percent as of June 1976. A detailed report on the length of time the residents were delinquent was being prepared in November 1976 but was not completed before our departure from the country.

Currently, the Housing Bank's policy is to concentrate collection efforts on those residents with 20 or more months of delinquency. Residents in a delinquent status will be requested to prepare a payment plan that would allow them to be current by the time improvements to their homes are completed. As a result of the Bank's efforts, some residents have paid 2 year's rent in one payment. Officials of the Bank stated that no forcible evictions have been made but 45 families left voluntarily after being told several times that they were many months behind in their rental payments and that if no arrangements were made to pay, they must leave.

Families initially entered into a 2-year contract in which they paid \$6 for a single unit and \$8.50 for a double unit each month. About \$3 of the monthly rental fee was used for garbage collection and maintenance, and the remainder was held in a trust fund to be used for a downpayment at the time the homes would be offered for sale to occupants. In a March 1976 report, the AID Office of the Auditor General noted that all rental payments were not being properly deposited to the trust fund. Subsequently, the Housing Bank informed AID that corrective action had been taken to insure proper maintenance of the trust fund. The balance in the trust account, according to Bank officials, was about \$708,000 as of June 1976.

We believe timely rental collections and proper maintenance of the trust fund are important to insure that funds are available for a downpayment when the homes are offered for sale to the occupants.

Slow construction progress

Although the temporary structures have been erected for about 3-1/2 years, and the AID improvement loan is over 2 years old, progress in converting to permanent structures is proceeding slowly. As the following schedule shows, only about 6 percent of the AID loan had been disbursed as of October 1976.

<u>Description</u>	<u>Funds</u>		
	<u>Programed</u>	<u>Committed</u>	<u>Disbursed</u>
Housing construction	\$13,400,000	\$3,287,683	\$581,052
Home improvement fund	700,000	-	-
Community improvement activities	700,000	700,000	318,150
Technical assistance to the Housing Bank	<u>200,000</u>	<u>133,401</u>	<u>52,737</u>
Total	<u>\$15,000,000</u>	<u>\$4,121,084</u>	<u>\$951,939</u>

The Government of Nicaragua had committed about \$13 million, or 87 percent, of its agreed \$15 million contribution; however, at least \$8 million had already been committed prior to the AID loan.

The slow rate of progress is further shown by the fact that, as of September 30, 1976, the improvement of existing homes and the construction of some new ones had been completed at only site 1 which contained about 1,200 units. Sites 2 and 3 were less than 5-percent complete, and no work under the AID loan had been started on sites 4 and 5.

During our incountry visit, we witnessed the formal bid opening on October 25, 1976, for the improvement of homes on site 4. There were five bidders, with the lowest bid being about \$3 million. The bid opening and recording was open to the public and the procedures seemed adequate to insure that the award would be made to the lowest qualified bidder. At the bid opening, a Nicaraguan Housing Bank official said he expected bids for homes to be constructed on site 5 to be opened in February or March 1977, with construction starting in May. At the time of our visit, design alternatives were being studied for about 1,800 completely new homes for Site 5 at a price range of about \$2,900 to \$3,600. Some alternatives provide for masonry construction instead of wood as used in the other homes.

Project conditions need to be improved

Initially, Las Americas appeared to us to be a planned slum resembling squatter or makeshift homes constructed by the poor of Latin America using any available material, except that the homes were laid out in rows as opposed to the random pattern

of a slum project. However, upon closer examination we noted that each home had a concrete floor and water and electrical connections, and some had sanitary facilities. In addition, all the homes have front and rear yards and most of them have side yards. The project also includes paved primary roads, street lights, schools, health clinics, and meeting and recreational facilities. Some residents had made their own improvements, including fences, block walls, additional living areas, and trees and shrubs.

Several conditions need to be improved if the people of Las Americas are to live in a healthy and safe environment and the project is to be prevented from developing into a slum. For example, we saw numerous drainage ditches clogged with mud, garbage, and chunks of cement and debris, and water had formed stagnant pools in some ditches. Some piles of garbage had not been removed for some time. The photographs on the following page illustrate these conditions.

A U.S. consultant to the Housing Bank said the drainage system is too large and the contour is improper, allowing the accumulation of silt and debris. Peace Corps personnel working in the project said they had undertaken a program to educate the residents in the proper disposal of garbage. However, after they organized the residents and established collection stations, the government has failed to make adequate collections.

The Mission stated it has been concerned about the problem of sanitation since the initiation of the project. It noted that, while the grade and contour design meet the standards in Managua, it is unable to wash away all the debris that is thrown in the drainage system. Part of the solution is to educate the community, and this has become an important part of the community improvement activities funded by the AID housing loan.

The Mission said that continued pressure from it and the Housing Bank on the National District, which is in charge of collecting garbage and cleaning drainage ditches and streets, has produced less than satisfactory results, probably because of limited resources of the National District. The project urbanization plans call for the construction of special areas for garbage pickup in each site, which should be more convenient for the National District and for the residents.

It is important that water drainage be taken care of promptly to prevent stagnant pools of water from becoming breeding places for malaria-carrying mosquitoes. Malaria is the 10th principal cause of death in Managua and a serious



DRAINAGE SYSTEM WITH SILT AND DEBRIS



DRAINAGE DITCH CLOGGED WITH DEBRIS

problem at Las Americas site number 2. We learned in discussions with a social worker and an official of the Pan American Health Organization that from 12 to 20 percent of the people at this site had malaria. The rate was as high as 50 percent, but a government program of spraying the nearby swamps and providing malaria pills to the residents has reduced the incidence of malaria. The official from the Pan American Health Organization stated that the incidence of malaria can be reduced by extending the drainage system to the lake, thus preventing the creation of malaria-breeding swamps where the drainage system currently ends and by installing screens on windows and doors of the homes.

Mission officials said that at the time Las Americas was constructed, the reported incidence of malaria did not indicate a potential health problem for any of the proposed sites. Since the earthquake, the large population shifts within the area and the change in waterflow and absorption resulting from new construction have added to the general increase in pesticide-resistant mosquitoes. This has caused the reported cases of malaria in Managua to go from zero in the first 5 months after the earthquake to 5,262 cases in 1975. Under the reconstruction loan (029), the drainage system from site 2 will be extended to the lake. The Mission had some reservations about how effective screens in the homes would be but stated there is probably merit in having the Nicaraguan Social Action team promote the idea of using screens among residents.

We also saw that, due to the existing windy conditions, a number of the residents have bent the overhanging portion of the tin roofs down toward the wooden walls, thereby allowing rainwater to run directly down the wall and thus increase deterioration. The Mission said that, under the loan's home improvement program, manuals have been prepared that will teach the residents how to replace the damaged tin roofs and redo deteriorated wooden walls or replace them with partial walls of concrete blocks.

In several homes we visited, the residents were using small cooking stoves (some kerosene operated) placed directly against the wooden walls. This fire hazard could be lessened by placing some fire resistant material between the stoves and the walls. The condition is particularly alarming because public fire protection is limited. For instance, at site 2 the fire station has two trucks and is responsible for protecting the approximately 1,400 homes on the site as well as other homes outside the project. Fire hydrants at the site are about 800 feet apart and no hydrants are located on the unpaved secondary roads which offer very limited access to fire-fighting equipment.

The Mission did not address the adequacy of the fire-fighting equipment but stated that, under the home improvement program, the U.S. advisor has designed a simple easy-to-make oven out of bricks which could be considerably safer than some of the cooking devices presently used by some residents. It also said that the idea of using protective asbestos sheets can be promoted under the program.

Although maintenance and sanitary, health, and safety conditions as noted above need attention, the residents we spoke with generally seemed to be satisfied with their homes.

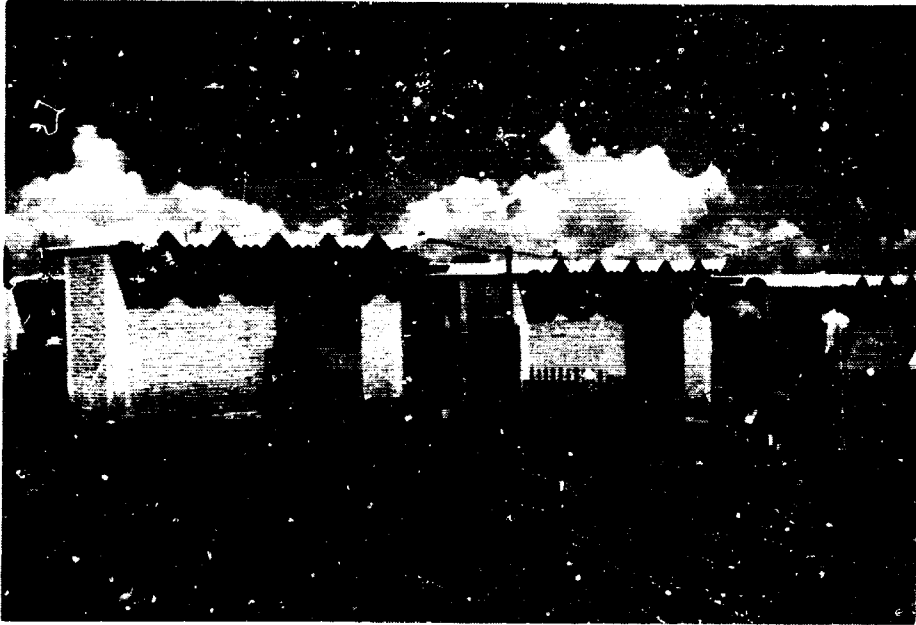
WORLD BANK LOW-INCOME HOUSING

The International Development Association, the World Bank's concessionary loan window, as part of its overall relief and assistance loan of June 1973 is providing \$8 million in financing for 4,453 low-income housing units, community facilities, and related technical and engineering assistance.

As of October 30, 1976, in the 7 projects underway, 3,965 housing units were completed and 488 were under construction, but none of the homes were sold or occupied. Construction delays have apparently resulted partly from administrative problems with the Nicaraguan Housing Bank. (See ch. 3.) Also, escalating prices reduced the planned number of units from 6,400 to 4,453.

Observations

We visited three sites in Managua and one in Masaya. The sites in Managua were still in various stages of construction. In Masaya we attended the project dedication and saw that the homes are constructed of concrete and block with asbestos roofs. While the lots are comparatively large, the living space is quite small. The homes contained one room, measuring approximately 15 feet by 15 feet. This is quite small for the average family of six, and most of them will have to add to the basic structure if they are to live in decent housing. The photograph on the following page illustrates World Bank housing units in Masaya.



WORLD BANK HOUSING, MASAYA

AID HOUSING INVESTMENT GUARANTEE
MIDDLE-INCOME HOUSING

In November 1973 AID entered into a \$15 million investment guarantee program to finance middle-income homes. The purpose of the program was to provide funds for long-term financing for about 2,000 middle-income housing units in order to facilitate the rebuilding of permanent housing in Managua and to strengthen the savings and loan system as the institution serving these needs.

The program has been moving very slowly and 3 years after the agreement was signed, only 482 homes had been constructed. The mortgages for these homes were still awaiting approval. The program is moving slowly apparently because the homes are beyond the reach of most middle-income families as a result of price escalations caused by inflation and the tightening of available credit.

Under the guarantee program, AID does not lend funds. U.S. investors lend money to the Nicaraguan Housing Bank, which lends it to the savings and loan associations who lend it to the homeowners. AID's costs of administering and operating the program are funded by fees charged the borrower, which for this program in Nicaragua is one-half percent of the outstanding loan balance. In the event of a default, the U.S. investor is reimbursed by the U.S. Government, which in turn is protected by the Government of Nicaragua's full guarantee for reimbursement.

Program status

The program is divided into two parts, the first for \$5 million and the second for \$10 million. Reimbursement for the second part was conditioned on an evaluation of the program's possible effect on the construction industry's capacity to implement the low-cost Las Americas project without causing undue inflation and AID's approval of eligible mortgages totaling \$5 million under the first part of the program. In June 1975 AID decided, as the result of a comprehensive study, that the guarantee program would not adversely affect the Las Americas project.

As of November 1976 the second condition had not been met. No eligible mortgages had been approved by AID, although mortgages valued at about \$1.3 million had been submitted and were awaiting approval. AID, however, approved the release of \$1.5 million for a construction advance, and \$3.5 million is being held in an escrow account in a New York bank awaiting AID's approval of mortgages.

At the time of our visit, 372 of a planned 990 homes had been constructed in two projects. Construction at these projects was being held up primarily because of price escalation and the government's tightening up of available credit. The homes were selling for an average price of \$11,600 at one project and \$9,200 at the other.

To expedite disbursements of the first \$5 million, AID, the Housing Bank, and the savings and loan associations decided to allow three other ongoing projects to be financed under the program with part of the funds originally intended for the first two projects. With respect to the \$10 million, the former Mission Director expressed the opinion in July 1976 that the homes financed under the program are too costly and the amount should be deauthorized. The chief of AID's Regional Housing Office in Honduras stated in November 1976 that a study was currently underway to determine whether to deauthorize the \$10 million. The study was not completed as of mid-February 1977.

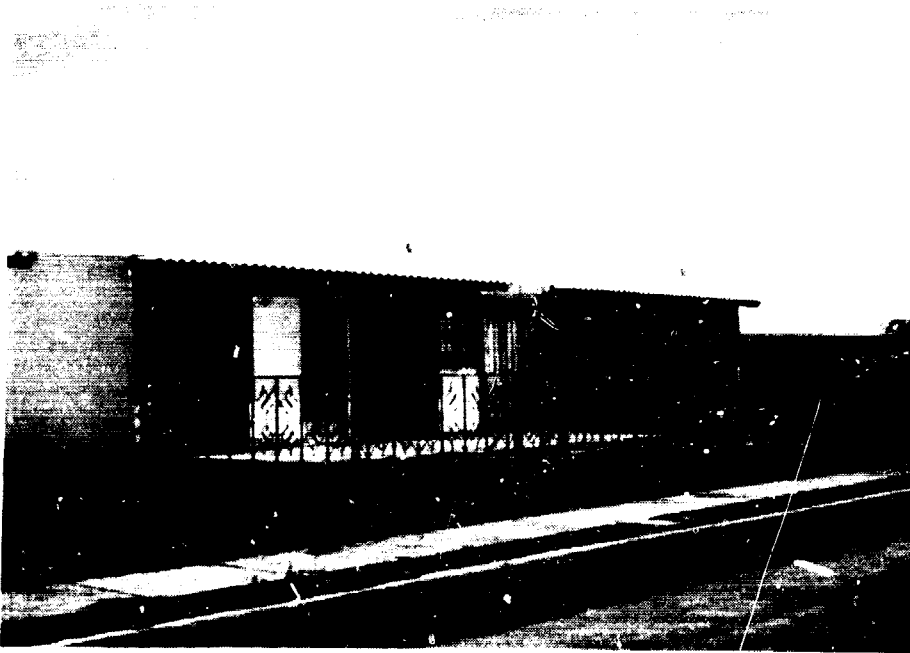
In visiting these projects, we noted that the homes were more aesthetically pleasing than those in other projects. Generally, the homes are constructed of concrete and have three bedrooms, a bathroom, kitchen, and combination living-dining room. The homes and lots were comparatively large and well maintained, and the projects have paved streets, sidewalks, and trees and shrubs. A number of residents have also made significant improvements to their property. On the following page is a photograph of a home constructed under the guarantee program.

INTER-AMERICAN DEVELOPMENT BANK MIDDLE-INCOME HOUSING

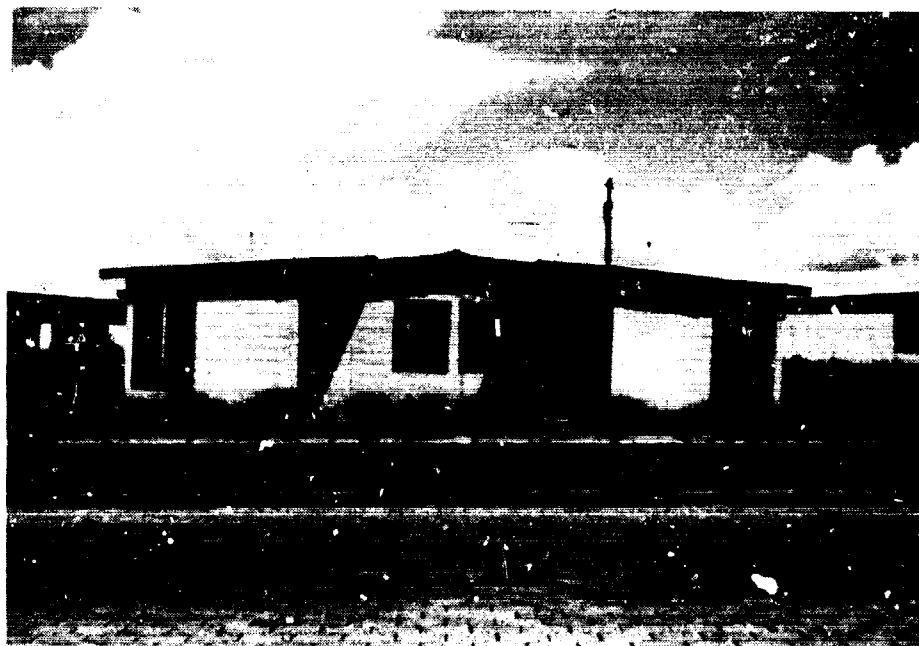
The Inter-American Development Bank redirected about \$4.3 million of a \$7 million loan, authorized in 1970, to provide 1,458 homes for lower middle income people. In November the last group of homes was completed, with 1,165 located in Managua and 293 in nearby cities.

Observations

We visited several projects in Managua and attended a dedication ceremony for a project in Masaya. The homes and lots are larger than those financed under AID and World Bank low-cost housing projects but smaller than those financed under AID's Housing Investment Guarantee Program. (See photograph on p. 46.)



TYPICAL DUPLEX HOME, XOLOTAN PROJECT



"5 DE DICIEMBRE" HOUSING PROJECT (DUPLEX)

In visiting one home and speaking to the owner, we noted that she was making additional improvements and seemed very pleased with her home. The only problem we noted was that the "5 de Diciembre" (project in Managua named in honor of the President's birthday) was not occupied, although it had been completed the month before. We were told that it was awaiting the completion of a main water connection that is tied into an adjacent, uncompleted World Bank housing project. AID officials said it was to be completed before the dedication on December 5, 1976.

CONCLUSIONS

Before the earthquake, housing for many of the poor people of Managua was crowded and lacked such basic utilities as individual water and sewage connections.

To provide immediate relief after the earthquake, AID provided a \$3 million grant, the Organization of American States \$300,000, and the Nicaraguan Housing Bank land valued at \$3.3 million to construct more than 5,500 duplex buildings, or 11,000 units to house about 50,000 people. The units are in a project called Las Americas and were constructed within 2 to 5 months after the earthquake, but they were not acceptable to most Nicaraguans. During the first 6 months of project operation, only 16,000 to 20,000 people moved into these shelters. In addition, the contribution of the Organization of American States for the most part was not used as intended.

To make the Las Americas units more acceptable to the Nicaraguan people, the Nicaraguan Housing Bank, shortly after completion of the last temporary unit, added cement floors and electricity, and paved the road. AID in July 1974 agreed to provide \$15 million in concessionary loan funds to improve and expand the basic housing structures and to add individual water and sewage connections. Funds were also made available for individual home improvements, community activities, and technical assistance. Under the program, some temporary shelters are being removed, the remaining ones improved, and about 3,000 new units built. Upon completion, the Las Americas project will have 8,000 permanent housing units.

Improvements to the existing homes had been proceeding very slowly, however, and new construction for the most part has not been started. As of October 1976, only 6 percent of the AID funds had been disbursed. We saw that the drainage system is ill maintained, garbage collection is poor, malaria is a significant problem at at least one site, and fire protection is barely adequate. As a result, many residents at the Las Americas project have been living in substandard conditions for about 3-1/2 years.

Shortly after the earthquake, the Inter-American Development Bank redirected about \$4.3 million outstanding from a prior loan to build 1,458 lower middle income homes; the World Bank as part of a larger loan made available \$8 million in June 1973 to build 6,400 low-income homes; and AID in November 1973 agreed through its Housing Investment Guarantee Program to support the building of up to 2,000 middle-income homes valued at \$15 million. Progress in completing some of these programs has been very slow; and, as a result of price increases, some of the planned units will not be built.

For instance, because of price increases, only 4,453 homes will now be built under the World Bank program. The first group of homes was completed in October 1976, over 3 years after the loan was signed. We are not certain why this housing has been taking so long to complete, but World Bank officials indicated it may be due in part to administrative problems with the Nicaraguan Housing Bank.

Only 482 homes have been completed under the AID guarantee program at the time of our visit. The slow movement of the program is apparently due to the fact that the homes are beyond the reach of most middle-income families because of price escalation due to inflation and the tightening of available credit. As a result of these problems, AID is evaluating whether to deauthorize \$10 million of the guarantee fund. Homes financed by the Inter-American Development Bank were completed during our incountry work, although all were not occupied.

These programs, particularly the low-income ones, when completed should fill an urgent need for housing and alleviate some of the hardships caused by the earthquake. The urgent need for decent housing is illustrated by the squatter and makeshift homes in and around Managua. We believe the Nicaraguan Government, AID, and the international financial institutions should make every effort to complete the housing programs efficiently and promptly. The action taken by the Mission in October 1976 to devote greater resources to the reconstruction program is a step in the right direction.

RECOMMENDATIONS

We recommend that the:

- Administrator of AID stress the importance of completing the Las Americas housing project in the shortest possible time consistent with efficiency and economy so that the benefits of the improved housing can be made available to its occupants.

- The Mission continue to stress the need for (1) adequate maintenance and sanitary, health, and safety conditions to prevent the project from becoming a slum and (2) screens on all windows and doors of the houses to reduce the incidence of malaria.
- Nicaraguan Government be informed by the Mission that any consideration of future assistance programs will take into account the manner in which the Las Americas project is maintained.
- Secretary of State inform the U.S. delegate to the Organization of American States that the Government of Nicaragua is requested to provide a full disclosure of the disposition of the grant funds provided for the Las Americas housing project.

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United States Senate

COMMITTEE ON FOREIGN RELATIONS
WASHINGTON, D.C. 20510

PAT M. HOLY, CHIEF OF STAFF
ARTHUR M. KUNL, CHIEF CLERK

June 4, 1976

B-169521(.02)

The Honorable Elmer B. Staats
Comptroller General of the
United States
General Accounting Office
Washington, D.C. 20548

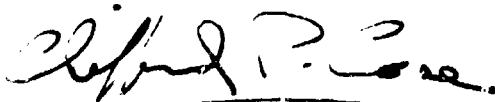
Dear Mr. Staats:

We request the General Accounting Office to undertake a comprehensive review of the disaster relief and reconstruction programs in the Republic of Nicaragua funded by the United States and international financial institutions with which the United States is affiliated.

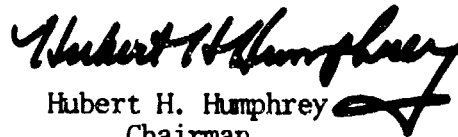
The review should focus on assistance provided since the 1972 earthquake to the present and should be completed and made available to the Senate Committee on Foreign Relations so that it can be considered in connection with next year's foreign aid authorization bill.

We want to thank you for your help in this matter and would appreciate having members of your staff contact Mr. Robert Dockery and Mr. Rudy Rousseau of the Committee staff.

Sincerely,



Clifford P. Case
Ranking Member



Hubert H. Humphrey
Chairman
Subcommittee on Foreign Assistance

RELIEF AND RECONSTRUCTION ASSISTANCE

Loan No.	Purpose	Amount (millions)	Date authorized	Date signed	Terminal disbursement date	Disbursements as of 10-31-76 (millions)	Loan term		Government of Nicaragua contribution (millions)
							Percent	Years	
<u>Agency for International Development:</u>									
<u>027 Education sector:</u>									
		\$ 5.3	8- 2-72 2-22-73	2-28-73	12-31-76	\$ 4.5	2	10	\$ 5.8
		15.0	2- 2-73	2- 9-73	6-30-74 12-31-74 6-30-75 12-31-75 3-31-76 12-31-77	15.0	3	30	-
028	Program assistance						2	10	
						1.8	3	30	41.0
029	Urban reconstruction	10.0	6-28-74 8-19-74	11-25-74	11-30-77	1.0	2	10	15.0
		10.0	8-25-75	10-14-75			3	30	
		4.0	8-25-75						
		6.0	7-25-74	7-31-74					
030	Low-cost housing	15.0							
003	Housing investment guarantee	5.0	8-15-73 8-15-73	11-30-73	2-28-77	5.0	2	10	
		10.0					3	30	
	Total	80.3					8.75		-
<u>International Organizations:</u>									
<u>Inter-American Development Bank</u>									
		4.3	8- 6-70	11-12-70	11-12-76	4.0	2.25	19	4.8
	Inter-American Development Bank (note b)	16.7	4-25-73	6- 1-73	6- 1-77	15.4	1	10	3.8
	World Bank, International Development Association	20.0	5- 8-73	6- 6-73	12-31-77	15.0	2	30	
	Central American Bank for Economic Integration	4.5	(a)	7-25-75	(a)	(a)	from 6.75 to 7.25	from 12 to 20	10.3
	Total	45.5					6.5	10	
							8.0	10	
									-(a)
									\$80.7

a/Information not available.

b/Program amount on this schedule totals \$20.5 million; details shown in chapter 3 total \$20.4 million because of rounding off.

PRINCIPAL NICARAGUAN PLANNING AND
RECONSTRUCTION ORGANIZATIONS

HIGH LEVEL RECONSTRUCTION COMMITTEE

Created in the early part of 1975, this Committee is an extension of the National Emergency Committee which was established shortly after the earthquake. It is headed by the President of Nicaragua and consists of key ministers and executives. The Committee's major function is to establish guidelines and policies for the reconstruction program and to give final approval to such plans.

INTER-AGENCY COORDINATING COMMITTEE

This Committee was created in 1975 and operates as the principal staff arm of the High Level Reconstruction Committee. It is composed of representatives of the Vice Ministry of Urban Planning, the Office of Coordination and Implementation, and other key officials needed to implement the reconstruction program. The Committee is responsible for preparing the budgets and approving final plans and acts as an expeditor to assure the prompt implementation of plans by executing agencies. Its executive technical team acts as intermediary between executing agencies and the Committee. The team helps to speed up the implementation process and consists of representatives from the same agencies that make up the Committee.

VICE MINISTRY OF URBAN PLANNING

This name was given to the former Urban Planning Office, which was elevated to Vice Ministry level after the earthquake. Its staffing increased from 50 before the earthquake to about 750 in 1975; but in 1976 the staff was reduced to about 450, including about 125 professionals. Its budget was about \$4.6 million in 1976.

This agency, according to AID, is the principal Nicaraguan entity responsible for the physical, social, and economic planning and programming necessary to assure that the reconstruction and development of Managua goes forward on a well-planned and rational basis. The Vice Ministry:

- Formulates policies governing land use, traffic, and street patterns.
- Reviews and updates the Immediate Action Reconstruction Program.

- Prepares the capital budget for reconstruction projects to be financed by the Nicaraguan Government.
- Develops and implements mechanisms for evaluating the reconstruction program and related activities.

OFFICE OF COORDINATION AND IMPLEMENTATION

The Office was created in February 1973, to coordinate implementation of the AID emergency program loan, and, subsequently, the AID reconstruction loan. Its authority was also extended to reconstruction loans made by other international agencies, but we were informed that it is not coordinating other donor assistance, except for monitoring financial data of the Inter-American Development Bank emergency loan made in June 1973. The Office is organizationally part of the Ministry of Finance and currently employs 13 professional staff members.

With the shift in emphasis from reconstruction planning to execution, the Office's importance should increase as the functions of the Vice Ministry of Urban Planning decrease.

EXECUTING AGENCIES

The two most important agencies for the implementation of construction are the Ministry of the National District and the Ministry of Public Works (National Construction Office). The Central Bank also plays an important role in administering externally funded technical assistance provided to Nicaraguan agencies (except for that provided to the Vice Ministry of Urban Planning) and the small enterprise reconstruction fund financed by AID and the government.

The National District has prime responsibility for coordinating the implementation of reconstruction projects in Managua. Specific projects under its scope include new streets and highways and drainage canals. Projects which require the construction of buildings are to be administered by the Ministry of Public Works.

In all, more than 10 Nicaraguan entities are required to work in close coordination with each other to plan, develop, design, contract for, and supervise the massive reconstruction program.

IMMEDIATE ACTION RECONSTRUCTION PROGRAM

	<u>Total</u>	<u>AID</u>	<u>Government of Nicaragua</u>
		(as of Oct. 1976)	(as of Sept. 1976)
RECONSTRUCTION FUND:			
Expansion of Managua/Masaya Highway	\$ 1,823,992	\$ 930,000	\$ 893,992
Remodeling of South Highway Intersec- tion	620,735	267,000	353,735
San Judas Bus Route	867,220	419,441	447,779
La Fuente/Shick Bus Route	800,000	500,000	300,000
Health Complex	2,214,286	2,000,000	214,286
Southwest Sub Center and Infrastructure	4,730,000	2,980,000	1,750,000
Southeast Sub Center and Infrastructure	6,907,143	4,350,000	2,557,143
San Judas District Center and Infra- structure	1,168,571	740,000	428,571
Las Americas District Center and Infrastructure	2,530,714	1,545,000	985,714
Infrastructure Wholesale Market	471,429	300,000	171,429
Traffic Improvement	343,853	144,457	199,396
Pista Suburabana	603,172	603,172	-
Largely Completed Counterpart Projects:	7,857,143	-	7,857,143
Provisional Civic Center	-	-	-
Segment of Pista Suburabana	-	-	-
Santa Domingo Radial Road	-	-	-
Extension Pista Larreyneya	577,000	-	577,000
North Highway Intersections	200,000	-	200,000
Unprogramed	<u>1,220,930</u>	<u>1,220,930</u>	<u>-</u>
	<u>32,936,188</u>	<u>16,000,000</u>	<u>16,936,188</u>
LAND PURCHASE FUND			
	<u>15,000,000</u>	<u>-</u>	<u>15,000,000</u>
PROGRAM IMPLEMENTATION FUND:			
Architect and Engineer Design	1,604,501	1,604,501	-
Secondary Cities Study	630,000	405,000	225,000
Office of Coordination and Imple- mentation Support	916,022	200,000	716,022
Consulting Services and Technical Assistance	1,000,000	500,000	500,000
System of Electric Distribution	120,470	75,000	45,470
Managua Transportation Study	100,000	100,000	-
Hydrogeologic Study	230,000	230,000	-
Solid Waste Disposal Study	150,000	150,000	-
Satellite Cities Geological Study	221,556	221,556	-
Completed Counterpart Projects:	2,117,500	-	2,117,500
VMPU Development Division (note a)	-	-	-
Metropolitan Census	-	-	-
Geologic Studies	-	-	-
COMINAG Operation Budget (note b)	28,541	28,541	-
Unprogramed	<u>1,285,401</u>	<u>1,285,401</u>	<u>-</u>
	<u>8,403,991</u>	<u>4,799,999</u>	<u>3,603,992</u>
SMALL ENTERPRISE CREDIT FUND			
	<u>6,400,000</u>	<u>3,200,000</u>	<u>3,200,000</u>
HEALTH SECTOR FUND:			
Water and Sewer Connections	1,714,286	857,143	857,143
Epidemiology Laboratory	991,543	500,000	491,543
Cauces I (Drainage Canals)	1,792,500	1,352,690	439,886
Cauces II (Drainage Canals)	2,607,902	2,107,902	500,000
Unprogramed	<u>1,107,265</u>	<u>1,187,265</u>	<u>-</u>
	<u>8,293,572</u>	<u>6,005,000</u>	<u>2,288,572</u>
Total	<u>\$71,033,751</u>	<u>\$30,004,999</u>	<u>\$41,028,752</u>

a/Vice Ministry of Urban Planning.

b/Inter-Agency Coordinating Committee.

HOUSING RECONSTRUCTION PROJECTS IN NICARAGUA
FUNDED BY AID AND INTERNATIONAL ORGANIZATIONS
AS OF OCTOBER 31, 1976

Organizations and projects (note a)	Costs			Houses					Sales price	Down payment	Monthly payment	Monthly salary required	Percent of interest	Years	Lot size		Enclosed area	
	Total	AID and other organizations	Government of Nicaragua	Planned	Constructed	Under construction	Occupied	Sold							Sq. m.	Sq. ft.	Sq. m.	Sq. ft.
AID Las Americas:	\$33,090,000	b/\$18,090,000	\$15,000,000	7,923	1,147	c/6,736	6,123											
Type 1				424	5	179	424	\$ 1,250	\$ 63	\$ 6	\$ 42	4	25	88	947	23	248	
2				3,063	563	2,500	3,063	2,749	137	14	75	4	25	176	1,895	43	463	
3				151	70	81	151	1,735	87	10	69	5	25	88	947	23	248	
4				583	105	478	583	2,851	143	16	93	5	25	176	1,895	43	463	
5				456	21	435	456	2,300	115	15	96	7	25	88	947	37	393	
6				230	34	196	230	3,418	171	23	136	7	25	176	1,895	57	614	
7				673	149	529	673	3,100	156	23	126	8	25	130	1,399	25	269	
8				538		538	538	3,968	198	29	126	8	25	130	1,399	25	592	
World Bank:	13,445,058	8,067,034	5,378,024	4,453	3,965	488												
Esperanza	2,373,717	1,424,230	949,487	431	631			3,286	171	23	100	5	22	105	1,130	24	258	
Progreso	1,887,858	1,132,715	755,143	676	338	338		3,500	143	22	100	5	22	105	1,130	23	248	
San Janinto	1,304,964	782,978	521,986	500	350	150		3,429	143	21	100	5	22	105	1,130	22	237	
Presidente Samozá (Granada)	3,189,327	1,913,596	1,275,731	870	870			3,429	143	22	100	5	22	105	1,130	21	226	
Hope de Samozá (Masaya)	2,653,879	1,592,327	1,061,552	850	850			2,989	132	19	86	5	22	105	1,130	20	215	
11 de Julio (Leon)	1,329,917	797,950	531,967	426	426			3,323	143	21	100	5	22	105	1,130	23	248	
27 de Mayo (Jinotepe)	705,396	423,238	282,158	200	200			3,286	143	23	100	5	22	105	1,130	23	248	
AID Housing Investment Guarantee:	15,000,000	15,000,000		d/1,369	482	118	332	363										
Jardines de Vera Cruz				690	250	18	188	202	11,603	1,160	127	508	13	28	127	1,365	57	614
Ciudad Industrial Xolotlan				300	122		102	103	9,196	920	112	448	13	28	159	1,708	62	667
Posada de Sal (Leon)				70	69		24	19	8,367	837	(e)	(e)	13	28	179	2,142	60	646
Reparto Guadalupe				109	38	22	18	27	8,946	895	(e)	(e)	13	28	207	2,228	58	624
Villa Flor				200	3	78		12	9,814	981	(e)	(e)	13	28	159	1,708	50	538
Inter-American Development Bank:	9,158,855	4,313,486	4,845,369	1,458	1,458		429	429										
Residencia 5 de Diciembre	2,403,100	1,131,243	1,271,857	449	449			5,786	571	54	214	10	20	162	1,744	40	431	
Don Basco	3,307,428	1,656,814	1,650,614	489	489		400	400	9,286	929	88	357	10	20	162	1,744	55	592
Rafaela Herrera	1,606,728	716,200	890,528	227	227			9,286	929	88	357	10	20	162	1,744	55	592	
San Jeronimo (Masaya)	600,185	272,500	327,685	100	100		25	25	5,786	571	54	214	10	20	116	1,249	40	431
Telepelate (Granada)	603,257	274,386	328,871	100	100		4	4	5,786	571	54	214	10	20	116	1,249	40	431
Salingalopa (Mataquilpa)	638,157	262,343	375,814	93	93			5,286	529	53	214	10	20	168	1,808	40	431	
Total	\$70,693,913	\$45,470,520	\$25,223,393	15,203	7,092	7,342	6,884	792										

a/Homes in the Las Americas project have wooden walls, doors, and shutters and tin roofs. Homes in the other project have cement/block walls, asbestos roofs, glass windows, and wooden doors.

b/Includes \$90,000 donated by the Organization of American States.

c/Homes in the Las Americas project are in varying stages of renovation and 1,800 homes are planned to site 5. At the time of our review it was not known what type of homes would be constructed, so they are not included in the detail above.

Types	Site	1	2	3	4	5	Total
1		245	131	7	4		424
2		563	231	701	1,566		3,063
3		70	66	6	9		151
4		105	100	135	243		583
5		21	430		5		456
6		34	123	29	44		230
7		149	321	72	136		678
8			42	90	406		538
Total		1,187	1,444	1,040	2,452	1,800	7,923

d/Houses constructed and under construction under the first \$5 million of the program do not total those planned because some of the planned homes will not be constructed due to adverse market conditions and legal problems.

e/Not available.

SITE ACQUISITION FOR
LAS AMERICAS HOUSING

The Las Americas housing units were constructed on four sites approximately 6 miles east of what was downtown Managua; a fifth site acquired for new construction is located next to site 4. AID participated in the site selection with Nicaraguan officials, but the land was provided by the Nicaraguan Housing Bank without cost to the United States. A letter dated December 1973 to AID from the President of the Housing Bank showed the cost of this land to be \$3,325,000.

Some controversy arose during 1976 as to whether the Housing Bank acquired the land before or after the earthquake and as to the price paid. We asked the Mission to clarify the purchase information, but it had only limited information on file, so retained a local attorney to examine the land deeds and the public registry. The attorney reported to the Mission in a letter of November 19, 1976, that for sites 1 to 4 the deeds were accurate, the land was acquired by the Housing Bank before the earthquake, and the deeds were properly reported in the public registry. He also said that site 5 was acquired by the Housing Bank on April 16, 1973, but had not been recorded in the public registry.

The price paid by the Housing Bank for each site, according to the attorney, totaled about \$3,325,000, the amount previously reported by the Bank. However, according to the official transfer records, the Bank paid many times the price paid by the former owners of the lands. For example, the land for site 1 was purchased by the Bank on December 3, 1971, for the equivalent of about \$900,000 from an individual who had paid the equivalent of about \$35,000 for the property on November 24, 1971.

The Mission, in summarizing the land transaction in a letter of November 30, 1976, to us, said that wide discrepancy in recorded prices could be to minimize the transfer tax. (See the following page.) While this could be the case, we have no way of verifying it. However, since the land, with the exception of site 5, was apparently acquired by the Housing Bank before the earthquake and was provided at no cost to the Las Americas project, its cost has little or no effect on the AID project. Without even the contribution of land, the Nicaraguan Government has more than satisfied the minimum counterpart requirements of paying at least 25 percent of the project costs.

OPTIONAL FORM NO. 10
 JULY 1973 EDITION
 GSA FPMR (41 CFR) 101-11.6

UNITED STATES GOVERNMENT

Memorandum

TO : Mr. Raymond Plunkett. GAO Representative.

DATE: November 30, 1976

FROM : Emerson J. *Spencer* USAID, Director of Reconstruction Programs.

SUBJECT: Las Américas' Land Purchase.

Attached is the final report from the lawyer whom we retained to examine the matter of the Las Americas land purchases. When the lawyer was retained, the Mission provided him with copies of the deeds and certifications that we had on file with regard to the five Las Americas Sites. He was instructed to verify these documents against the Public Register, and to trace any prior sales of these sites which may have occurred from 1969 onward. In addition, the lawyer was instructed to perform a similar investigation using the cadastral number that La Prensa representatives had cited as evidence of improper dealings in the purchase of Las Americas Land.

Parts 1-5 of the letter report are, in order, the summary information on each of the five Las Americas Sites. Parts 6 and 7 contain the information with regard to the cadastral citations given to you by La Prensa. The following is a Mission commentary on how we believe this information relates to the concerns orally expressed by the GAO team:

1) Validity of Deeds:

The lawyer's report confirms that the deeds and certifications presented by the BAVINIC to A.I.D. were valid and accurate in all respects. The report, however, noted that the Site 5 deed has apparently not been inscribed in the Public Registry. The Mission is instructing the BAVINIC to make this correction prior to any A.I. D approval of construction on the site.

2) Date of Transfer

The report confirmed that all four sites upon which the temporary shelters were built had been acquired before the earthquake of December 23, 1972, and that the presently vacant Site 5, was acquired by the BAVINIC in April 1973.

. . . . /



5010-110

Buy U.S. Savings Bonds Regularly on the Payroll Savings Plan

Memo to R. Plunkett.
November 30, 1976. P. -2-

3) La Prensa Cadastral Numbers

Upon examination it was revealed that the cadastral numbers (62260, 64153) referred to pieces of land located at a considerable distance from the actual Las Americas Land. However, with respect to 62260, it is possible that La Prensa erred in the citation of the number, and that the proper number should be 64260, the transaction which is described on page one of the attachment. In any event, 64153 has no relationship to Las Americas'

4) Price of Land

The following gives the prices paid per square vara for each site in order of acquisition:

<u>Site</u>	<u>Date</u>	<u>¢per Vrs²</u>
3	4/7/69	3.75
1	3/10/70	3.75
2	7/24/70	6.00
4	12/3/71	11.00
5	4/16/73	8.00

What is evident, is that the costs per square vara increased almost three fold between April 1969 and December 1971, and that the one site purchased after the earthquake actually cost less than the last of the pre-earthquake purchases. Both location and time of purchase were factors influencing the prices paid for each site. Site 2, for example had close access to the developed North Highway industrial belt, whereas the other sites were relatively isolated from the pre-earthquake city. Site 1, which was purchased a full year and a half after Site 2, most clearly demonstrates the relationship between the time of purchase and the price.

5) The wide discrepancy between the prices supposedly paid by the previous owners and the prices actually paid by the BAVINIC has, as we have mentioned before a simple explanation. When a private individual transfers a piece of land to another private individual, there is nothing to prevent them from placing an arbitrary figure mutually agreed upon by buyer and seller on the transfer documents that are recorded with the Public Registry. Of course, to minimize the transfer tax it is common practice to use a low figure. Government agencies or large companies with open books which record land as an asset for accounting purposes use the real amount paid.