

# A.I.D. History in Paraguay

A Report on the Development Assistance  
Program to Paraguay by the United States  
Agency for International Development  
(USAID) and its Predecessor Agencies

1942 - 1988



## U.S.A.I.D.

Asunción - Paraguay

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## PREFACE

I arrived to Paraguay in August 1984 to close out the remnants of the bilateral A.I.D. program and to formulate a new Advanced Developing Country (ADC) strategy for a continued, but reduced, A.I.D. presence. One of my administrative tasks was to move A.I.D. from its relatively spacious rented facilities to somewhat cramped quarters in the Chancery. In preparing for this move, I was confronted literally with rooms full of old A.I.D. project files, reports, documents, and other publications. I would open a closet and materials would come tumbling out like an old family skeleton. Other documents reflecting bits and pieces of A.I.D.'s history in more active times were stuffed in desk drawers.

While much of the staff reduction involved in the close out of the old bilateral program had been accomplished, no one had wanted to do away with the printed vestiges of A.I.D.'s trials, tribulations, and achievements. In retrospect, this was fortunate. The materials were so abundant and so full of history that they could not be ignored. It was clear that we had to: (1) find a permanent, accessible storage facility for the most useful of the reports, publications and documents; and (2) attempt to record in some usable form the scope and content of these past efforts.

The Centro Cultural Paraguayo-Americano (the U.S. Binational Center), under its then President Angel Aua, agreed to receive and catalog the A.I.D. materials as a special collection in its library, in the charge of Lic. Ana Maria Gaona de Villalba, librarian. The U.S. director of the Center, Julie Gianelloni, worked together with the librarian and two summer interns, Michelle and Mary Ann Wilson to prepare a detailed bibliography. The special collection was inaugurated in June, 1985.

To garner the story of past efforts of the bilateral program from the ream of accumulated documents, we were fortunate in being able to hire Ms. Terry Martin. Ms. Martin had prior development experience in Central America and was an ex PCV. She was contracted on a part-time basis in January 1985 and immediately waded into the reports, etc., putting structure and organization to the collected mass.

The bulk of her work concentrated on a painstaking review and summary of program and project reports. However, Ms. Martin added innovative personal touches by tracking down and interviewing actual and retired A.I.D. FSN's to verify and clarify her understanding of the program history. She also contacted several of the past A.I.D. Mission Directors to seek their views and inputs.

In this regard, this history is deeply indebted to Mr. John Wiley not only for his superb administration of the start up of the Alliance for Progress program in Paraguay (1962-1967), but also for his substantive inputs, guidance, and comments during the preparation and editing of the

various drafts. John Wiley has made Paraguay his home and, among other things, has become as astute observer of the local scene, providing insightful remarks and observations simply too numerous to be used fully in this document. My special thanks go out to him.

Ms. Martin finished her work in February 1986 after 14 months of part-time services. Her original draft was about a third again as long as the final version, reflecting the enormity of her task. In editing the final document I had to eliminate some interesting anecdotes and other observations on ancillary benefits (or difficulties), principally in the interest of space. My own efforts were interrupted when I was transferred to Montevideo in August 1986, maintaining responsibility to cover the Paraguay ADC program on a TDY basis.

This long period between Ms. Martin's draft and the final version did not go entirely unused. Copies were circulated to the FSN staff and FSN retirees for comment. The contributions of Johnny Redes, Heriberto Coronel, Julio Basualdo, Oscar Carvallo and Mauro Sanabria were especially useful. During the period John Wiley wrote several helpful background memos.

Corina Cazenave's tireless efforts to type the document were commendable. She not only lived through a good part of the A.I.D. history, she put up with all of us as we tried to document it. Her insights helped us tell it as it was.

The final editing was accomplished during July/August, 1988 when I returned to Paraguay (enroute to a new assignment) on TDY specifically for this purpose. Ms. Karen Robinson was contracted to assist with the editorial corrections and final proofs. However, any errors, omissions, or inconsistencies incorporated in the final version from the larger draft provided by Ms. Martin are my own.

If there is a major deficiency in this document, it is in the absence of highlighting the Paraguayan role. For each accomplishment there were dedicated, knowledgeable, and talented Paraguayans leading the way. Paraguayan counterparts and Foreign Service National staff shaped and sharpened the effectiveness of U.S. assistance efforts. They stayed and persevered long after the U.S. technicians and administrators departed. I am certain I speak for the vast bulk of my predecessors colleagues in exclaiming that the warmth and hospitality of the Paraguayans enhanced the professionally rewarding experience of working and living in Paraguay. All this, unfortunately, does not tend to be reflected in the internal reports, evaluations, project summaries and the other written documents on which the A.I.D. History was based. It is not surprising, therefore, the History reflects an imbalance that emphasizes A.I.D. and predecessor agency initiatives and actions, rather than the collaborative spirit behind most elements of the program - and undoubtedly all successful ones. This result is understandable; after all, the History was prepared principally for recording the A.I.D. experience and lessons

Finally, a very special thanks is extended to Ambassador Clyde D. Taylor. Ambassador Taylor was tremendously supportive of the A.I.D. ADC program in Paraguay and maintained a sincere personal interest in the impact of development activities on the Paraguayan people. His interest in seeing that the history of the U.S. bilateral assistance was documented was instrumental in arranging my final TDY that gave me the opportunity to complete this work.

August 10, 1988

  
Paul Fritz  
A.I.D. Representative

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## INTRODUCTION

This is a review of United States foreign assistance to Paraguay as it developed from the first U.S. bilateral development program, the Inter-american Servicios, to Point Four, to USAID with its Alliance for Progress, and to the Current Advanced Developing Country Program. Chapters are divided by areas of concentration and then sub-divided according to the major development themes. Where possible, each theme is discussed from the beginning of U.S. involvement through to the end of U.S. involvement. In many cases, comments and observations on the influence of long completed projects on today's Paraguay are provided to add perspective.

Little mention will be made of the Export-Import Bank, which was created in 1934 and began, in 1939, to assist Paraguay in road construction and agricultural and commercial development, except as it involves USAID or predecessor agencies. The Export-Import Bank's grant of \$3.5 million on June 13, 1939 was, actually, the first United States Government assistance to Paraguay for rural development.

American private development assistance to Paraguay dates back even further, at least to June 1923, when the Rockefeller Foundation signed a four year agreement with the Department of Hygiene and Public Assistance for a campaign to control intestinal parasites. In 1928, it extended the agreement for four years, and in 1932, signed an agreement to start a campaign against yellow fever. Studies were done and Paraguayans were sent to the United States to study public health and preventive medicine. The Foundation's country director controlled the hiring and firing of employees as well as the use of the funds. Bilateral U.S. developmental assistance, as we know it today, began in 1942, with the creation of the Servicios under the administration of Franklin D. Roosevelt and his Good Neighbor Policy.

The conclusions of a January 1942 meeting in Rio De Janeiro, attended by the ministers of foreign affairs of the American Republics, expressed concern about the economic disruptions being caused by World War II. The Latin American nations were finding themselves without access to manufactured goods and other supplies from the industrialized countries. A U.S. development response could help alleviate these disruptions as well as help assure the continued flow of natural resources needs for the war effort and the protection of the Western Hemisphere.

The Servicios, which functioned overseas, reported to the Institute of Inter-American Affairs (IIAA) in Washington. The IIAA was headed by Nelson Rockefeller. Not surprisingly, the Servicios were organized and managed in much the same way as the earlier Rockefeller Foundation efforts and also emphasized training of Paraguayans.

In Paraguay, three Servicios were created to assist in their respective sectors of development. SCISP (Servicio Cooperativo Interamericano de Salud Publica), the public health cooperative service, was created in the

Spring of 1942 and worked under the Ministry of Health. STICA (Servicio Técnico Interamericano de Cooperación Agrícola), the agricultural service, was formed in December 1942, within the Ministry of Agriculture, Commerce and Industry. The third Servicio was SCIDE (Servicio Cooperativo Interamericano de Educación), the education sector service. SCIDE was created in 1945 and worked under the Ministry of Education.

The Servicios survived and thrived into the Sixties, even though world politics, and in particular U.S. foreign policy, were in constant evolution. World War II ended in 1945, and the United Nations was born. In 1947 the Marshall Plan, which envisioned the reconstruction of Europe, began with sixteen non-communist European nations. Its success depended on the initiative coming from the European people themselves. In January 1949, Harry S. Truman made his famous speech from which the Point Four foreign economic assistance program was created. In his speech, he pointed out that there was little difference between U.S. and U.N. objectives for obtaining world peace. He said that world peace could only be achieved when we had created economic well-being and political stability in which the people of the world, helping through their own efforts, were able to benefit. With modern technology and by working together, he believed that ties and real friendships would be developed at the international level.

Point Four resulted in a slight administrative change in the Servicios, as well as introducing the first development assistance loans. Previously, all aid had been outright grants. From 1942 to 1952, and in accordance with the general agreements, each Servicio in Paraguay had its own American director. Each of the three reported directly to Washington. In February 1952, under the new Point Four program, the three American directors each became a chief of field party and began reporting to the first Overseas Mission (USOM) director, Mr. Albion Patterson. He synthesized and coordinated the information in-country and sent Washington the combined reports and requests. Adding this new administrative head allowed Point Four to expand beyond the three traditional areas of concentration into new areas such as infrastructure, institutional building and private sector development.

At the Technical Assistance Conference held in Asunción in June 1953 James O. Babcock, Director of Technical Cooperation, said: "The Servicio is a kind of cooperative entity which is our chief instrumentality for the carrying out of technical aid programs. I call it a cooperative entity, because it is the organization where we intermingle the financial contributions of our host government with the dollar resources which are allocated by the U.S. government." Carson O. Crocker, Chief of Field Party for STICA in Paraguay went on to say, "The Servicio is part of the ministry which exists for the sole purpose of carrying out a program of development and improvement within the limits of the selected field of operations as planned and agreed upon by representatives of the two governments, the minister and the chief of field party." It was also mentioned that the minister and the chief of field party were co-equals in developing the administrative technique to be followed by the Servicio. Crocker continued by saying, "The Servicio has a degree of

autonomy within the ministry which provides that in accordance with procedures concurred in by the minister, the director has authority to direct and administer its various activities. He can hire and dismiss personnel, determine personnel policies, purchase materials, expend funds under project agreements, establish procedures for disbursement of funds and accounting, control Servicio property and handle all administrative matters." As provided for in the agreements, the chief of party automatically became the director of the Servicio.

The administration which made the most radical change in U.S. foreign assistance was that of President John F. Kennedy with his Alliance For Progress program. In response to the Cold War, and possibly to the perceived threat from the Cuban revolution, President Kennedy reached out to all of Latin America and the world with a plea and a program for a decade of development. He emphasized the human aspects of development, "homes, work and land, health and schools", and the human rights aspect, where all people should have these basic elements in their lives. The President coined the phrase "self-help" and "A.I.D., the Agency for International Development", in a White House speech, in March 1961. The Agency is still referred to as A.I.D., with the overseas offices referred to as USAID. Self-help is also a term used today. It meant to President Kennedy that each nation was to give a strong, sustained effort to develop itself, with outside assistance providing vital catalysts.

The Alliance for Progress went beyond the Good Neighbor Policy, providing a more unified attack on the problems of each underdeveloped country. It not only changed U.S. bilateral assistance, but also gave a real impetus to multilateral assistance, through the United Nations, the Organization of American States, the Inter-American Development Bank, the International Monetary Fund and the World Bank. The idea of a unified attack on poverty was consistent with that of combining U.S. support with others in the international development arena. A.I.D. and Point Four assistance in health, agriculture, education, urban development, industry and other sectors strengthened Paraguayan institutions and provided the experience that led to even larger amounts of development assistance from World Bank and IDB.

The most radical impact of the change from Point Four to A.I.D., was the demise of the Servicios. The new policy called on each nation to develop itself from within, with financial and technical help being provided from without. During the almost two decades or more that the Servicios reigned, development in Paraguay was carried out by Americans or other third country contract personnel, assisted by the Paraguayans. Alliance for Progress envisioned a role reversal whereby the Paraguayans would develop and implement the programs, and the Americans would assist.

In the Forties and probably the Fifties, the Servicio was a good approach in Paraguay, as it tended to keep above local politics, which were often volatile. Between 1942 and 1952 there were six different Presidents of Paraguay and more than 20 changes in the Minister of Agriculture alone. The Servicios were trying to develop skilled technicians and administrators in their respective sectors. If the core personnel had

changed with each new government or minister, the Servicio would have spent its time on an educational treadmill, with the list of its accomplishments much reduced.

Clearly, the Servicios had a lot of autonomy. As John Wiley, the USAID Director from 1962 to 1967, said in an interview, "The Servicios had taken on a life of their own". Part of his responsibility when he was sent here as director was to terminate the Servicios. He noted that "The successful transfer of the Servicio organizations into the GOP (Government of Paraguay) was important to A.I.D., which already had 20 years invested in the building of these organizations and in the training of their personnel." When he arrived in October 1962, the status was different for each of the three Servicios. The termination agreements for SCISP and SCIDE had already been signed. SCISP was by far the easiest to transfer because it had constructed the Ministry of Health, and built a place for itself within the Ministry buildings. Even before Wiley's arrival, the operational branches of SCISP had become part of the Ministry. All that remained was to phase out the administrative section. SCIDE disappeared in name in 1962, but carried on in form until June 1967. It had become its own institution and was not, apparently, ready to be merged into the Ministry of Education. STICA, however, was by far the most difficult Servicio to terminate. Wiley explained that he spent a lot of his time during his four and one half years as director trying to negotiate a termination agreement for STICA. Eventually, various projects and sub-projects were transferred from STICA's control during a gradual liquidation period from March 30, 1965 through December 31, 1968. Most of the projects and sub-projects have been carried on by the Ministry of Agriculture.

In the transition to A.I.D., the agency was reorganized into four geographical bureaus with much of the authority and responsibility delegated to the regional Assistant Administrators. The first Assistant Administrator for the Latin American Bureau was Teodoro Moscoso, who also carried the title of U.S. Coordinator of the Alliance for Progress. (Moscoso had distinguished himself as head of Puerto Rico's successful operation "Bootstrap" and had been Kennedy's first Ambassador to Venezuela). Also in the new administration's enthusiasm for promotion of the Alliance for Progress, the State Department's Bureau for Latin America and Moscoso's A.I.D. regional bureau were merged both physically as well as organizationally.

During the decade of the Sixties USAID began 22 projects with a U.S. input of over \$54.5 million. Midway through the decade (1966), USAID had 33 U.S. and 88 Paraguayan direct-hire employees as well as 22 contract personnel to administer the program. The project portfolio encompassed a multitude of areas, including water, roads, electrification, agricultural production, livestock development, malaria eradication, and rural education. As described in the following chapters, the projects begun under the Alliance for Progress generally were successful. Nevertheless, the decade of development passed without the marked success hoped for and envisioned by the Alliance for Progress program. Paraguay remained poor,

despite the funds given to the country in the form of soft term loans and grants and the technical assistance furnished.

In the Seventies, A.I.D. was given a new "Congressional Mandate" in the Foreign Assistance legislation that called for projects which assisted the poor more directly. The by-word for this era was, "the poorest--of-the-poor". To reach the poorest-of-the-poor, USAID worked in such areas as rural cooperative development, small farmer technology, education, community development, and family planning.

The new emphasis did not diminish the fact that many of the earlier projects had helped prepare Paraguay to take advantage of special circumstance in the Seventies, which launched the country into a period of unparalleled growth. In the agriculture sector, a sharp sustained increase in the world market price of cotton was experienced as a result of the oil crisis of 1973 and the rising cost of synthetics. Suddenly, Paraguay became competitive in the export market, and there was a rapid transition from subsistence farming to more lucrative cash crops.

The pioneering work USAID had been doing in institution building and agricultural credit provided a good foundation for the leap. Also, the farm to market roads, built by USAID between 1955 and 1971, opened up many sectors of the country, and afforded the small farmers the opportunity to take advantage of the new world situation. By 1981, there were between 80,000 and 100,000 small farmers in cotton production. The research, extension, credit and marketing infrastructure, all necessary components to the successful marketing of this high-earning export crop, had been developed with assistance from USAID and others. Soybeans, introduced in the 1960's, also did well in the 1970's, and the volume of production of this cash crop was expanding at a dramatic 30 percent rate in the second half of that decade. Soybeans were being planted as the alternative crop to wheat on commercial farms, many of which had received USAID assistance in the 1960's.

The construction of Itaipú with Brazil, the world's largest hydroelectric project, began early in the 1970's. Later in the 1970's, preparatory work began for a second dam downstream, Yacyreta, with Argentina. These projects were a prime factor in the gross domestic product achieving an average annual rate of increase of 11.4 percent in real terms from 1977 through 1980, with an average of over nine percent if calculated from 1973. Between 1973 and 1980, the gross national product increased by nearly 600 percent, and the per capita income jumped from \$316 to \$1,404.

This impressive growth during the decade of the Seventies was an important reason for the decision in 1980 to withdraw bilateral U.S. development aid from Paraguay. This, coupled with the prospects for growth during the Eighties and beyond, due, in great part, to four major hydroelectric projects being planned back to back, made it impossible to argue for a concessional assistance program on the basis of economic need. The per capita income was over the commonly used benchmark of \$1,000 for poor countries. Therefore, A.I.D. Administrator, Douglas Bennet, decided, in May 1980, that no new bilateral funds would be programmed for Paraguay after fiscal year 1981.

In 1982, Ambassador Arthur Davis requested that A.I.D. reconsider its decision in light of more recent developments. The work at Itaipú was winding down, and the next project was not coming on stream as quickly as had been planned. The economy was in a recession and beginning to deteriorate. There was also evidence that the rural poor had not shared in the country's boom. After sending a team from Washington to study the situation, it was decided that USAID would be phased out, as planned, by September 30, 1984, but then be included in A.I.D.'s new program for Advanced Developing Countries (ADC).

In August, 1984, the first A.I.D. Development Affairs Attaché arrived to Paraguay to develop and implement an ADC strategy for Paraguay. The ADC strategy, which emphasizes working with private sector organizations and private voluntary organizations (PVO's), includes human resource development as the number one priority. A USAID project to develop the country's first graduate-level management training program was initiated with the Catholic University of Asunción. USAID also assisted the Salesian Agricultural Institute's agricultural vocational high school in the town of Coronel Oviedo in central Paraguay. Post-graduate academic and short-term technical training of Paraguayans in the U.S. was expanded.

The ADC strategy also involves transfer of technology to the private sector, particularly in agriculture and small business. Toward this end, grants have been given to Accion International/AITEC and International Executive Service Corps (IESC), both U.S. PVO's. Accion International is assisting the newly created Paraguayan Foundation for Cooperation and Development to develop a micro-enterprise credit and technical assistance program. IESC provides short-term technical assistance to Paraguayan firms and entrepreneurs, drawing on retired U.S. executives.

In addition, assistance is being furnished to promote activities of special interest to A.I.D. such as child survival, family planning, and environment. Strengthening of the Paraguay-Kansas relationship under the Partners of the Americas program is also part of the ADC strategy.

Adding the above mentioned projects to the ones listed in Annex 1, USAID and its predecessor agencies, between 1942 and 1986, have developed over 100 different projects and signed 10 PL 480 Title I agreements. The amount of money invested totals over \$164 million, and projects encompass all areas of development. Most of the projects are discussed in the following chapters.

Although this document concentrates entirely on U.S. assistance to Paraguay through A.I.D., mention should be made here that the U.S. has also channelled substantial assistance to Paraguay through several international agencies to which the U.S. contributes as follows: 20 percent of all loans made by the World Bank, 50 percent of all soft loans made by the Interamerican Development Bank (IDB), 70 percent to finance the activities of the Organization of American States (OAS), and 40 percent to the United Nations Development Programs (UNDP). With respect to the Peace Corps presence in Paraguay, the total cost of maintaining 1,200 volunteers from 1967 to the present is approximately \$15 million.

CHAPTER ONE - HEALTH, NUTRITION AND POPULATION  
(\$29,209,000)

Overview

The health sector was the first area for a U.S.-Paraguayan bilateral development assistance program beginning in May 1942. U.S. involvement in the health field is long, its accomplishments many, and its overall performance excellent. SCISP (Servicio Cooperativo Interamericano de Salud Pública), the joint health service, helped to organize the Ministry of Health and Social Welfare (MOH), as well as erect the buildings which house the Ministry today. USAID and its predecessors constructed health clinics and developed health services for the poor rural population. There were successful projects for the eradication of malaria, the training of public health personnel, the development of a plan for potable water in Asunción, and a contribution to a sewer system for the capital city.

Quantification of the numbers of health projects carried out since 1942 is complicated because concepts for programming evolved and many endeavors which began as individual projects under SCISP were reclassified as sub-projects. To understand the magnitude of these changes, consider that in the pamphlet, "Paraguay, Cooperación Económica y Social de los Estados Unidos de América, 1968", SCISP is credited with having carried out 53 projects during its 22 year history. In the project list (See Annex 1), which is based on the "A.I.D. Project History List", there are only 17 different health projects listed as completed by USAID and its predecessor agencies between 1942 and 1985. Of these, 10 began during the era of SCISP. Over the years, with administrative changes from SCISP to Point Four to USAID, there were changes in project names and numbers. Many projects were either reclassified as sub-projects or carried on under a new number. Cumulatively, health projects had a total U.S. input of \$28.648 million, of which \$15 million was provided through the PL 480 Agricultural Commodities Sales program. Of the remaining \$13.849 million, according to the pamphlet and to Dr. Rubén Ramirez Pane's book, \$3.8 million were used for SCISP projects.

The projects and sub-projects carried out by SCISP included construction, maintenance and technical assistance activities. SCISP projects included: training and education for nurses, public health workers and sanitation engineers through in-service programs, curriculum reform, and scholarships for studying abroad. A.I.D. activities in the health sector included malaria eradication, family planning, and nutrition. A list of the major construction and other projects includes:

Ministry of Health Buildings  
Ten Rural Health Centers and renovation of twenty others  
Barrio Obrero Hospital  
Remodeling the Hospital de Clinicas

A portion of the Asunción sewage system  
Pharmaceutical Production Laboratory  
"Juan Max Boettner" Tuberculosis Sanatorium  
Basic Sciences Building of Medical School  
Leper Colony "Santa Isabel"  
Education abroad for more than 200 persons  
Paraguari Hospital  
Malaria Eradication/Control

#### Water (1942-1966)

In 1942 SCISP surveyed the potable water and sewage disposal needs in the capital city of Asunción. The study, completed in 1944, was known as project number one. It was updated in 1955 by a U.S. engineering firm and used by the Ministry of Public Works to request financial aid from the Export-Import Bank for construction of a public water system in the capital city. The system went into service in late 1958, after receiving: a total of \$8 million in U.S. financial assistance from the Export-Import Bank in 1955, 1958 and 1959; a \$1 million loan from the Development Loan Fund loan (USAID's predecessor) in 1958; and approximately \$667,000 equivalent in local currency from the 1956 PL 480 sales agreement.

The Asunción sewage system was started in 1943, with the main collector being installed by SCISP. The Servicio's basic plan for potable water and sewage laid the foundation for the development and expansion of a modern system in the capital city. SCISP also developed a potable well-water system program for the rural areas which was administered through the health clinic program. Evidence of the demonstration effect of these wells remains readily apparent in driving through rural areas near Asunción.

In the early 1960's a regional sanitary engineer in collaboration with advisors from the Pan American Health Organization (PAHO) and personnel from the Government of Paraguay (GOP) developed a proposal for a rural water supply program. USAID and the GOP entered into an agreement in 1963 which created the National Autonomous Service for Sanitary Works (SANOS). USAID provided in-service and participant training for SANOS staff and the project received small amount of grant funds from both USAID and Inter-American Development Bank (IDB). However, the project was crippled by the lack of GOP financial and material support.

During this period USAID also provided technical assistance to the Sanitary Works Corporation (CORPOSANA) to help the entity become financially viable and to extend the water service in Asunción. USAID also contributed to CORPOSANA's formation by sending some of its staff for participant training in the U.S. and elsewhere. In 1966 CORPOSANA was given the responsibility for developing water systems in the cities and towns of the interior.

### Health Centers (1942-1961)

At least ten new health centers were constructed, furnished, and operated by SCISP. Two of the centers were in Asunción, one located at the Ministry of Health (MOH) and the other at the Barrio Obrero Hospital. The others were constructed in the major rural towns of Concepción, Villarrica, Encarnación, San Juan Bautista, San Ignacio, Carmen del Parana, Pilar and Sapucaí. The first five health centers were constructed by SCISP in 1945. In the "Annual Report of SCISP, 1959-1960" the then Minister of Health, and present Rector of the National University, said that the concept of public health in Paraguay was introduced through these centers. "The influence of this 'demonstration', whose favorable results were seen in a short time, transformed the whole health organization of the country." SCISP also renovated 20 other major health centers in Paraguay.

The health center project focused on preventive health, while also providing a curative health program for the rural areas. There was a continual drive toward improving the preventive side of the program by expanding the clinics and increasing the visiting nurse, health education and sanitary inspector services. Preventive health was an unknown concept in Paraguay prior to SCISP.

A maintenance division at the Encarnación health center, responsible for all the health centers of the region, was set up by SCISP. Today, the health centers constructed by SCISP are administered and financed by the Ministry of Health with some assistance from Germany, Japan, and other international sources. New construction is also financed through grants and loans from the exterior including IDB loans totalling almost \$20 million made in 1978 and 1983. Many of the preventive programs initiated under SCISP are still being carried out at the clinics, including mother-child health, immunization, and latrinification. Under the ADC program, A.I.D. financed technical assistance and related support is promoting the use of Oral Rehydration Therapy (ORT) to help reduce diarrhea related deaths in infants. UNICEF, PAHO, the private sector and the Ministry of Health are all involved in this effort.

### Hospitals (1945-1961)

SCISP constructed two hospitals in Paraguay. The first was the 45 bed Barrio Obrero hospital in Asunción, which was mainly for maternity and pediatric cases, but also offered general emergency services. It was turned over to the MOH in 1956. This hospital was expanded in 1973 through community participation and community donations. In 1983 the MOH constructed a new emergency room and an additional wing for this hospital. It is now a 100 bed general service institution. The hospital records indicate that, through the health center and hospital activities, some 58,000 families have received health care since it was constructed by SCISP.

Dr. Almada, the current director, and his staff, recalled a SCISP sponsored powdered milk distribution program that was carried out during the early Fifties by the social service department of the hospital. The milk was sent home with low income families to be given to their children. Although some of the milk was sold rather than taken home, more than 80 percent was used in the manner intended. More importantly, they felt that the program stimulated community interest and led to community participation in the hospital. They believed that the benefits of the distribution in terms of community spirit long outlasted the short term nutritional gains, as evidenced in the community interest in the hospital after the milk distribution program ended.

Some of the equipment donated to the hospital by SCISP is still in use. This old, but usable, equipment is found in the operating rooms, the pediatrics ward, the x-ray department, the laundry, the dentistry section, the kitchen, the laboratory, and the health clinic. There is also equipment, some donated by SCISP, which is in need of a well trained technician to make them serviceable. It seems that nothing is thrown out.

A second hospital, the 110 bed Bella Vista Tuberculosis Sanatorium, was finished and completely equiped in 1945, at a cost of over \$200,000. The kitchen, laboratories, etc., were constructed to service up to four hundred patients. A new wing with a capacity of one hundred additional beds for the tuberculosis Sanatorium was under construction in 1953. It was funded locally, with SCISP providing supervision and technical aid and was operated by SCISP until 1961.

This Sanatorium and the tuberculosis clinics of the SCISP health centers were integrated into the new Department of Tuberculosis in the Ministry of Health in cooperation with a subsequent WHO-UNICEF Tuberculosis program. SCISP also cooperated with the WHO-UNICEFF BCG Vaccination program for tuberculosis control by developing this work in its health centers. Today the tuberculosis Sanatorium has 310 beds which are constantly full. In 1985, 253 patients were cured of tuberculosis, while during the same year 258 new cases were admitted to the hospital. Since the time of SCISP, new patients coming into the hospital have been charged an admittance fee to help defray the high cost of treatment and confinement which can be from four to eight months.

Dr. Vera Martinez, who is in charge of the Ministry's Department of Tuberculosis, explained the GOP first produced a National plan to confront the serious tuberculosis problem in Paraguay in 1979. At that time the four most populous regions of the country were provided sufficient direction, information and medicine to cure tuberculosis in the locality. The personnel in place at the regional health centers were enlisted to carry out the program. He estimated that for every patient cured in the sanitorium, four or five are now able to be cured in the four regional health centers working under the national plan. Due to the excessive costs of the treatment, the government has been unable to expand the program to the other, less populated, regions of the country.

### Leprosy (1944-1950)

Leprosy, although eradicated in many countries, is a disease still prevalent in Paraguay today. It is an area in which SCISP worked and where two Servicios joined together to work.

SCISP made improvements at the leprosy colony Santa Isabel in Sapucaí in 1945 by constructing a hospital unit including two wards, a utility building, a general service building, kitchen, church and staff quarters/administration building. With the exception of the residence, rebuilt by the MOH, all the buildings are intact and in use at Santa Isabel. SCISP also built the Santa Teresita Preventorium for children of leprosy parents in 1944, and finished an addition to the dormitory in 1950. The last two children of leper parents were placed there in 1967. Today it is run by the Social Welfare Department and provides room, board and education for children from all poor families, not just those stricken by disease.

Somewhere near the end of 1944, Dr. Richard J. Plunkett, the first director of SCISP, invited Mr. Santiago Apodaca, a technician working for STICA, to visit the Santa Isabel colony in order to determine if an agricultural project could be started there. After touring the extensive grounds, Apodaca met with the internees under a mango tree. He wanted to start a small agriculture project with them, starting by determining who among them had an agriculture background, so those individuals could assist in the training of the non-agriculturists. Apodaca indicated he would try to find the seeds, fruit trees and other materials necessary for the work, and the internees could then produce all the fruits and vegetables for the colony, which would be a very productive input for the colony. He added that he would try to get them some magazines and other reading materials. When he finished talking, instead of hearing the usual clapping, he looked and saw tears streaming down their faces. The project became a reality, lasted approximately ten years and gave a sense of dignity and accomplishment for many of the patients at Santa Isabel.

Although no new patients are now admitted, there are 123 patients still at the colony, some having lived there 35 years. They are there because they have nowhere else to go. Today, thanks to the right mixture of medicines developed by German specialists and a better understanding of the treatment of the disease, leprosy can be curtailed, if caught in time and treated correctly. Most lepers in Paraguay are now treated in their homes or at health centers with medicines donated by the German Leprosy Service and the Pan American Health Organization. The incidence of leprosy in Paraguay is, however, currently on the rise.

### Training (1945-Present)

Modern education, which provides up-to-date ideas and technology, is necessary if a country is going to keep abreast of the times in an ever

changing world. This is true in all sectors of a society, and possibly most true in the field of medicine, where daily there is new information and updated techniques for improving the health of the populace. Education and training for health service personnel was, therefore, a very important part of SCISP's program and accomplishments, and an area in which USAID continues to make inroads. SCISP developed a health education program for the MOH in 1945, and administered the program until the Ministry took over the programming responsibilities in 1955. SCISP continued throughout its existence, to provide training for all levels of personnel working in the rural health centers.

The first formal course for Public Health Auxiliaries was developed by SCISP and began with 30 students in September, 1951. After taking 24 courses in theory and practice, and passing a final examination, 23 of the students received their certificates. SCISP also organized health courses for the teachers of the country, and talked to student groups.

By 1951, SCISP also had sent 27 trainees to the United States for higher education. By 1952, two leadership grants had been given to a doctor studying tuberculosis in the United States and a nurse studying public health in Chile. In 1953, six more health workers were awarded grants: two doctors in public health, a dentist in public health dentistry, a statistician, a social worker, and a public health administrator. During the existence of SCISP, the organization is credited with sending more than 77 people to the United States and more than 124 to other countries for higher education in health sciences. These levels do not reflect the help SCISP gave to many other candidates to secure fellowships with other national and international groups. SCISP was also very much involved in on-the-job training programs for doctors and nurses in Paraguay, always working to upgrade the quality of the graduates.

Between 1952 and 1973, USAID was responsible for sending 361 people to the United States and other countries for advanced studies and short courses in the various fields of medicine, sanitation, and social welfare. The participant training program has continued and in 1982 a doctor was sent for two and a half years to study infectious diseases at the State University of New York in Buffalo, an interesting renewal of linkages initiated in 1956 (See School of Medicine sub-section below). Four Paraguayan professionals benefitted from short or long-term training grants for medical studies in 1983/84. Under the ADC strategy, training in this sector is being focussed on short-term preparation of primary health care workers and on preventive health measures. In 1987, USAID sent 15 rural health workers for short-term training in the U.S.

#### Nursing (1942-1967)

SCISP's umbrella organization, the Institute of Inter-American Affairs (IIAA), was already involved in the Dr. Andres Barbero School of Teaching as early as 1942. This school originated in 1939 as a place to provide three years of training for health "visitors". In 1939, the title nurse

was socially looked down upon and therefore not used. The impulse for the school came from Dr. Andres Barbero, who donated the land and built and furnished the dormitories. The budget was provided by the Ministry of Health, with no significant change during the first twelve years of administration. Classroom space was provided by the Red Cross.

By 1940 the need for trained nurses in the hospitals had become very apparent. Therefore, a two year School of Hospital Nurses was created, and by 1943, separate three year schools for midwifery and for dieticians were added. The dieticians' school faded from existence within a few years. The entrance requirements to the School of Nursing were: an elementary education; good physical and mental health; and good moral character. Young ladies not accepted by the School of Health Visitors, were often referred to the Nursing School. The two year nursing program followed very closely the curriculum used by the School of Health Visitors.

In 1942 IIAA, gave a grant to the Hospital de Clinicas in an effort to establish a practice field for medical and nursing students. This was used, with SCISP assistance, to remodel and equip the surgical section of the Hospital de Clinicas. IIAA also sent a nursing consultant, Mrs. Wynn, to assist in improving the nursing education in Paraguay.

Between 1941 and 1952, the School for Hospital Nurses graduated 66 nurses. By 1955 only 37 of these were practicing their profession, with 12 working outside of the country, and most of the others working for international agencies rather than in national hospitals.

Barbara Henningan, a nurse consultant for SCISP, in her final report on the School of Nursing, dated August, 1956, wrote, "General medicine and surgery were taught to the students as well as microbiology, ethics, etc. and it is interesting to note that only 2-3 hours a week were spent in nursing arts classes (taught by a physician). Theory was predominant in the training, but clinical practice and supervision were extremely limited. Although the students could recite by memory a page from a text book, on questioning, they could explain very little of what they had said and in actual practice for the most part were completely lost. The majority of the instructors at the school were physicians." Mrs. Henningan went on to say, "As early as 1948, plans were initiated to prepare for better nursing education in Paraguay. One Paraguayan Visitadora de Higiene (Social Worker) was granted a Kellogg scholarship to study basic nursing at Western Reserve University in the United States through the effort of the Nurse Consultant with IIAA. Two graduates of the School of Visitadoras, two graduates of the School of Nursing and one school teacher were sent to the University of Sao Paulo School of Nursing for basic nurse training. Thus a nucleus of teaching staff for a professional school of nursing was prepared."

In 1952 IIAA provided a \$25,000 grant to facilitate the reorganization of the school for nursing and the school for social workers (the original

school for health visitors). This grant was administered by SCISP. In 1953 the first class of students was admitted to the reorganized School of Nursing. The new entrance requirements included a high school diploma, the course work had been expanded to three years, including three months of nursing administration in either Montevideo or Sao Paulo, and the course study was different than that for the social workers. Three students were graduated from the first three year program. The hardest part of the new curriculum to implement was that of supervised practice, because there was a shortage of trained nurses in Paraguay, and, therefore, few people available in the various institutions to provide adequate supervision.

In 1955, the Dr. Andres Barbero School of Teaching was officially renamed the Dr. Andres Barbero Institute of Teaching. In the same year, the institute was accepted as a formal project by SCISP (project number 28).

In 1957, SCISP contracted the State University of New York at Buffalo (SUNYAB) to work with the medical school at the National University and the Nursing School. This project was carried on by USAID during the era of the Alliance for Progress, being fully funded through June 1967. It included many improvements in both the physical plant of the school, as well as curriculum content and the approach to teaching/learning such as the introduction of a field practice component.

Nursing as a profession was upgraded in 1963 when the Dr. Andres Barbero Institute of Teaching was transferred from the Ministry of Public Health to the National University of Asunción. The Institute became a School of the University directly responsible to the Rector. The quality of training was significantly improved in 1964 when the three-year program of the School of Nursing was terminated and all future students were enrolled in the new four-year program.

Also, by 1964 a program of requiring graduate nurses to complete a one-year assignment in the rural areas had been successfully implemented through a three year Health Manpower Project agreement signed by USAID, MOH, and the University. The project was designed to demonstrate the value of professional nurses in the health centers. As a result of working with the Ministry, nurse and nurse-midwives graduates began to receive permanent positions from the Ministry of Health. In fact, sufficient numbers remained after their internship to fill all available positions budgeted by the Ministry of Health in rural areas. Thereafter, a program was instituted at the school to provide for twelve weeks of rural experience as part of the course work.

By the early 1960's, the classrooms had been fully refurbished and equipped by USAID. The laboratory facilities, equipped by USAID, were the best in the country according to Mrs. Nohemi K. de Sarubbi, a graduate from the three year program for nurses in the Fifties and a teacher at the school until she retired in 1984. Between 1959 and 1963 she gained public health experience while working as head nurse at the

health center in Caacupe. When she returned to the school from Caacupé, the improvements were so extensive that she hardly recognized the place. Besides improvements in the classrooms and laboratories, there was hot running water and a recreation center for the students. Among the students, there was real pride in being part of the profession of nursing.

The quality of nurses was further enhanced by limiting the number of entering students in nursing to the maximum number which could be handled at the facilities. In the Sixties, entrance was limited to 35 students. These were selected on the basis of objective criteria which USAID helped to develop, such as credentials, examinations and estimated fitness for nursing service.

Miss Yelsi, Director of the School of Nursing from 1954 to 1977 recalled the early days when she and some of her students and teaching staff went knocking door to door at the high schools, looking for opportunities to explain to potential students the value and pride one could take in being a professional nurse. Miss Yelsi, a dedicated professional, received years of education through SCISP and the Kellogg Foundation. She helped develop, and then improve, the three year program for nurses and was instrumental, along with the USAID contract personnel from Buffalo, in getting the Dr. Andres Barbero Institute recognized by, and incorporated as a School of the National University. What remained to be accomplished when SUNYAB finished its contract in 1967 and when Miss Yelsi retired in 1976, was to get the school raised to the status of a separate faculty of the National University.

#### Faculty of Medicine (1956-1967)

The U.S. became involved with the School of Medicine in the early 1940's, when it first provided money for improvements in the surgical wards at the medical school's teaching hospital and, later, when it installed a centralized water system and a central laboratory at the hospital. By 1956, when Dr. Stockton Kimball from the State University of New York at Buffalo (SUNYAB) completed a visit funded by ICA, a predecessor of A.I.D., and wrote his "Report Survey Visit to University of Asunción School of Medicine", the water system was in need of major repairs. He observed that the budget for the Medical School was not adequate for running the teaching hospital and the mental hospital, as well as educating the medical students and maintaining the buildings.

Dr. Kimball also observed that the teaching facilities were overcrowded, and applauded an initiative to limit the number of entering students by initiating the use of an entrance examination and a statement by the student of his reason for seeking entrance. He recommended that emphasis in the early years of study be placed on basic science, with the later years dedicated to the application of science, with relatively little attention given to the techniques of medical and surgical practices. These he felt should be reserved for a year of internship. He saw a need

for developing the facilities of the medical school, including its library, laboratories and hospital. He felt specialties should require extra years of residency and fellowship study either within, or outside of Paraguay. Dr. Kimball was not only concerned about the preparation of the students entering the School of Medicine, he was disturbed by the system which permitted these students to continue in the school indefinitely until they had passed all required examinations and received their degree.

SUNYAB consultants were contracted by SCISP in 1956 to begin working with the School of Medicine. It was conceptualized that the project would be continued for a ten year period in order to implement the desired changes and to produce lasting results. Actual program expenditures continued at least through March, 1968 and totalled approximately \$1.2 million for the combined medical and nursing programs.

By 1966, the number of entering students was limited to 40 per year, selected on the basis of ability. It was repeatedly stated in the USAID reports that this was commensurate with the needs of the country and within the limits that the facilities could rationally handle. However, the number of freshmen entering the School of Medicine has been increasing since the termination of the USAID assistance, to the point where in 1986 there were student strikes to try to convince the university to accept nearly 160 students into the School. The university officials would not double the previous year's enrollment, and eventually only accepted about 80 first year students. Dr. Ruben Ramirez Pane stated in 1974 in his book "La República del Paraguay y los Estados Unidos, Relaciones e Intereses", that the teaching facilities and faculty could handle a maximum of 80 freshmen. Obviously, a consensus of opinion along the line of the SUNYAB contractors, which maintained that 40 students were the maximum, was never firmly established, despite their very strong academic arguments. In his paper, "Atención y Educación Médica en el Paraguay, 1980", Dr. Ramirez Boettner focused on the problems of student overcrowding at the Faculty of Medicine and the resulting consequences to the country, turning out undertrained doctors. In 1986, he estimated that there were nearly 1,000 students attending the School of Medicine.

One of the most significant accomplishments of U.S. technical assistance to the medical school was the introduction of a compulsory one-year internship with a three month rural component at the completion of the six-year curriculum and prior to conferring the degree of Doctor of Medicine. From 1964 through 1967, the salaries and other costs of the intern program were paid for by USAID. Originally, this had been conceived as an eighteen month internship, with nine months in urban hospitals and nine months in rural health centers. Although it was reduced to just one year, it was considered revolutionary in 1964, with only a few other schools having similar programs, but voluntary, in all of Latin America. The three month rural component of the internship was so successful, and the impact so far reaching, that there was much

pressure put on the Ministry of Health to extend the rural experience to one full year. Given budget and other considerations, the program has never expanded beyond the one year internship with three months rural training. According to Dr. Boettner, this program is now carried out on the basis of choice, rather than being a requirement for receiving a degree in medicine.

Also of importance was the improvement of the medical school library, which by 1966 had increased from 3,000 to 9,000 volumes, and from 40 to 70 journals, through a combination of assistance from the State University of New York at Buffalo, USAID, and a \$10,000 grant from the Kellogg Foundation. A new wing was built for the library, and all books, journals, etc. were classified and catalogued. Library hours were extended to eight hours a day, and there were three full-time librarians. A system was introduced whereby a Paraguayan doctor interested in a specific scientific article could, for the cost of the postage, write to a distribution center for a photocopy of the article.

The basic science building, completed in 1963 at a total cost of \$65,000, was constructed and equipped with A.I.D. funds, plus a \$20,000 grant for laboratory equipment from the Kellogg Foundation. It was named after Dr. Kimball, the chief of party for SUNYAB. This building brought together various departments of the School of Medicine and was a cornerstone to establishing a modern medical school in Asunción. In his evaluation written in 1956, Dr. Kimball observed, "The students learn their future approach to the scientific and humane care of patients from the atmosphere of the wards or out-patient departments in which they carry on their clinical studies. It is in this regard that the facilities, approach and atmosphere of the Hospital de Clinicas now provide serious deterrents to education of minimal, let alone maximal, quality." By 1968, a complete evaluation of the University Teaching Hospital was done, a recommendation was made for constructing a new hospital, and the project proposal written by USAID consultants. The project was shelved because it was not of sufficient priority in comparison with other projects under consideration, particularly the agricultural and infrastructure projects. In 1988, the school is still making do with the hospital facilities of the 1950's and 60's, with some of the original structures dating back to 1884.

One area of success and importance, agreed upon by various doctors, including Dr. Ramirez Boettner and Dr. Olmedo (a former Dean), was that of training doctors abroad. The experience of working and learning in a well run, well organized hospital with up-to-the-date equipment is something which remains with the doctor all his life. Abroad is currently, as it was previously, the only place to get in-depth post graduate training. During the SUNYAB project USAID sent doctors, in such fields as surgery, pharmacy, and pathology, obstetrics and pediatrics, to the U.S. and other countries for their post-graduate work. The Kellogg Foundation also assisted with post-graduate training in the U.S. for medical students. This is the area where these doctors feel the U.S. and

Paraguay received the most benefit from their financial investment. It is the area that has had the most lasting effect, and the one area which can be instrumental in effecting permanent changes at the School of Medicine. Human resource development is an area which USAID has always considered important, and one in which USAID is still involved.

The Government of Paraguay showed its interest in the SUNYAB-Faculty of Medicine project by increasing the Faculty's budget from an equivalent of \$200,000 in 1957 to almost \$500,000 in 1964. Today, the government's contribution is approximately one million dollars. Unfortunately, most of this goes to cover salaries, leaving very little for needed improvements in the facilities and the program content.

#### Central Laundry (1962)

Under SCISP a project was developed for the construction of a central laundry to be used by all the hospitals in Asunción. The idea was to cut costs and to improve hospital hygiene through providing bed sheets and patient gowns laundered in a sanitary environment. The central laundry was inaugurated in 1962, but did not develop exactly as planned. The hospital administrators, apparently feeling uncomfortable with sending out their soiled laundry to be misplaced, or replaced by items of inferior quality, went right on having their laundry cleaned by hand, in somewhat less than hygienic conditions.

In a study entitled "National University, Medical School and Hospital de Clinicas, Evaluation and Recommendations for Existing and Proposed Facilities" December, 1964, the author says, "This laundry facility is totally inadequate for the number of beds serviced, and cannot maintain production for even the minimum essential items required for the hospital in-patient care program. Rather than being an asset to the health program, it hinders its operations and contributes to the spread of infection throughout the entire hospital." The boiler that furnished hot water and steam for sterilization had long been out of order and was beyond repair. Boiling and sterilization were accomplished by passing clothes out a window to a laundress who boiled them in 55 gallon drums. When sufficiently boiled they were lifted out, with the aid of a stick, and thrown onto the concrete to cool. When cooled, the laundry was handed back through the window for final processing, and then hung on barbwire lines to dry. It was recommended that the hospital buy a vehicle and take the clothes to the new central laundry.

The central laundry today is no longer new, nor could it be considered a showcase. It shows a general lack of maintenance; could use a new boiler; and has two driers and a presser out of service. As with the Barrio Obrero Hospital, it could use a good technician to put the equipment in functioning order and then maintain it. Even so, it is processing some of the laundry from all the hospitals and clinics dependent on the Ministry of Health in Asunción. However, various hospital and clinic administrators admitted that they still process most

of their laundry in-house, rather than risking loss and damage at the central laundry.

### Malaria Eradication (1958-1973)

Malaria eradication was initiated by SCISP and successfully followed through by USAID. It had a positive impact on the health of Paraguayans through a drastic reduction in the incidence of malaria. Actually, there were two projects. The first was begun by SCISP in 1958 and carried on by USAID until 1967. This project had a total U.S. input of \$272,000 but did little to eradicate malaria from Paraguay. The lack of marked success was based, in part, on the ineffectiveness of the chemicals in use at that time, the manner in which they were applied, and an insufficient understanding of the magnitude of the problem. The project did accomplish the organization and strengthening of the National Service for the Eradication of Malaria (SENEPA).

SENEPA was created in September, 1957, as a semi-autonomous agency of the Ministry of Health (MOH). It derived its funding from a one percent social security fee increase, which was levied in December, 1958, for preventive health programs. The program began with a limited spraying campaign, which lasted three years and left the malaria situation unchanged. In 1961, the spraying campaign was suspended, and in 1964 SENEPA was reorganized, and a more complete census carried out. The country was divided into three zones, and 2,600 information and observation centers were established with the help of some 6,000 volunteers, who worked in their communities dispensing medicine and making home visits. With this infrastructure, a national program for the eradication of malaria was truly possible.

In January 1968, USAID signed a loan agreement with the GOP for \$ 1.8 million, which marked the beginning of the second malaria eradication project. The project was designed to eradicate malaria from Paraguay, or at least reduce it to an insignificant public health problem, over an eight year period. USAID loan support was for the first five years of the program. USAID also provided two technical advisors for the project through a \$200,000 grant for technical assistance. The project was supported by UNICEFF, who provided funding for commodities, and PAHO/WHO, providing consultants, fellowships for SENEPA personnel, and a limited amount of anti-malaria drugs and entomological equipment. This project, was also well supported by the government with an estimated input of \$2,688,000, which covered most of the local costs. These funds came from the original one percent social security fee, as well as an increase of one half of one percent made directly to SENEPA by the Social Security Institute.

In 1967 nearly 27 percent of the population suffered from malaria. By 1973, when USAID's participation ended, incidence of malaria was down to .02 percent, considered an insignificant level. From 1973 to 1975, when

a final evaluation was written, the incidence of malaria was again creeping upward, although still at the low level of .08 percent. In part, the explanation was the colonization program which opened up new areas of the country heretofore unpopulated, or underpopulated. It was also due to the Itaipú dam project, the reservoir it created, and the infected workers from Brazil who came to construct the dam. The final report suggested that the MOH and SENEPA coordinate their efforts with the colonization process and continue the attack phase in the areas which had greater incidence of malaria. While consolidation for the whole country was impossible, the outcome of the project was impressive, and it has had its impact on the health and well-being of the Paraguayan people.

By 1986, the incidence of malaria continued to edge up to 1.6 percent, double that of 1975. The cases are all located along the border with Brazil, the same areas which were to remain in the attack phase at the end of the project. When USAID finished its project obligations and withdrew its technical support, SENEPA was left to deal with the bureaucracy and scramble for its funding. It was guaranteed one half of one percent from social security, but because of the wording in the original law has lost most of the earmarked funding to other preventive health programs. According to one of the technicians who has worked with the program for 32 years, the incidence of malaria will continue to rise if sufficient funding is not provided to resume an attack phase in the affected areas.

#### Family Planning (1967-present)

The first endeavor in the area of family planning was a modest component in the PL 480 financed nutrition program to sponsor five participants at the eighth International Planned Parenthood Federation conference in Santiago, Chile in April, 1967. It also opened the door to dialogue between USAID and the Ministry of Health.

In 1967 the Ministry expressed an interest in sponsoring a population office for the purpose of disseminating family planning information to those seeking such advice. From this developed the two-phased Population and Nutrition project, initiated in 1968. The preparatory phase, from 1969 to 1972, consisted of a series of research, training and operational activities in the demographic and family protection fields. These activities were carried out by private and public institutions, under an agreement with the Ministry of Health, the National University and the Technical Planning Secretariat. A program evaluation, written in August 1972, states that the overall impact of the first phase was very good. It concluded that there was a greater understanding of the effects of high rates of population growth, and that the issue was less sensitive than only three years previous.

With USAID backing, a family protection section was established on an experimental basis by the Ministry of Health (MOH) in October 1970, as a part of the Department of Maternal and Child Health (MCH). Its first

clinic was opened in December, 1970. Within two years it was running 12 family planning clinics. In a Review of Population Program Activities written in 1974, the U.S. advisor said, "In view of the dilution of family planning activities and the low rank which it held in the MCH list of priorities, the MOH decided to segregate it from MCH and established the Department of Family Protection (DEPROFA) on June 14, 1972 to carry out the second, service delivery, phase of the program." DEPROFA, supported by USAID, took over the operation of the 12 family planning clinics three months later after having established its guidelines and a manual of norms and procedures. DEPROFA expanded the number of clinics from 12 in 1972 to 43 in 1976, and from 5,000 acceptors to 32,000. In 1977, the program expanded, in an effort to reach more families in the very rural areas, through distribution at the smaller health posts as well as an increase in the number of clinics involved.

Dr. Victor Romero, current director of DEPROFA, stated in an interview that he thought the program ended at the end of 1978, or early 1978, which is concurrent with USAID's phase-over of responsibility for supplies to the Ministry of Health, and phase-in of an emphasis on education about family planning, population, and the need for a national policy. By the end of 1978, Dr. Romero estimated that DEPROFA was working in nearly 230 health centers and health posts, reaching some 600,000 acceptors. Despite the success of DEPROFA and the apparent acceptance of family planning at the grass roots level, its continuation was tentative, at best, because of its heavy reliance on USAID funds and the lack of a national policy on population growth.

The MOH family planning program was abruptly curtailed in the 1980's in the absence of high level policy support. By 1984 DEPROFA's service delivery efforts were limited to promotion of the Billings method.

Between 1975 and 1981, A.I.D. gave two grants to the Mission of Friendship (Mision de Amistad) for outreach programs to extend health education and in preventive health care programs, including family planning. Thirty thousand urban and rural poor were assisted in Yaguarón, San Antonio, Piribebuy, Itá, and Market Place Number Four in Asunción. The project helped to form community groups, build health posts, recruit and train volunteers, organize family gardens, give medical consultation, give vaccinations and build latrines. An effort was made to teach nutrition and apply the principles through planting of family gardens and consumption of the produce. Family planning materials were available to all the beneficiaries.

The ADC program has helped bring about a change in MOH service delivery policy and program. In 1985 A.I.D., together with the United Nations Fund for Population Assistance (UNFPA) and the GOP's Technical Planning Secretariat (STP) sponsored a workshop on Population and Development that helped highlight the problems of Paraguay's high population growth rate. A.I.D. also carried out in-country family planning training programs with the MOH and the Paraguayan League for Women's Rights. The Paraguayan

Center for Social Studies, CPES, was given two small grants to develop its capacity to provide training in microcomputer use for analysis of population and health issues. By 1988, CPES had provided training to 50 professionals in this field.

The ADC program also provided assistance to the Paraguayan Center for Population Studies (CEPEP), an affiliate of the International Planned Parenthood Federation (IPPF), and an important provider of family planning services, demographic analysis and population studies. The A.I.D. funds were used for institutional strengthening and a survey of contraceptive prevalence. A.I.D. assistance to CEPEP directly and indirectly through intermediaries such as IPPF and Population Council dates back to its formation in 1967.

Recognizing the growing problems of illegal abortions and related health complications, the MOH decided to resume family planning service delivery through its health facilities in 1988 with assistance from UNFPA.

#### PL 480 Title II - Food for Peace (1942-1973)

From the very beginning of U.S. bilateral aid to Paraguay, USAID and its predecessor agencies addressed the nutritional problems of the people of Paraguay. Nutritional education was incorporated into various projects, including the "Rural Health Development", the "Agricultural Extension and Information", and the "Training of Public Health Personnel" projects. One of the first efforts of the Agricultural Servicio, STICA, was to carry out a survey of Paraguayan dietary habits and nutritional status in order to help design program objectives.

In 1965, USAID financed a second, and the most in-depth nutritional survey ever completed in Paraguay, followed by another survey completed in 1972. The results of both studies were similar. They found that there was a general lack of sufficient calcium, vitamin A and riboflavin in the diets of the Paraguayan people. They also found that location, as much as economic viability, was a major factor in the nutritional health of the populace. The severest incidence of dietary deficiencies were located in the arid sparsely populated sector of Paraguay known as the Chaco, and the more rural sectors of the Eastern region of Paraguay.

The 1972 study on nutrition showed a significant improvement was made in the incidence of goiter found in the country. In 1972 it was about one half that found in 1965. According to the "P.L. 480 II Activities in Paraguay, A Program Evaluation", written in May 1972, "This would indicate that the iodization of salt has recently played a significant role in the control of this deficiency disease." (It is interesting to note that a study on goiter done by SCISP in 1943, reported high incidence throughout Paraguay and even then recommended the introduction of iodized table salt for use in the country).

The PL 480 project, commonly known as "Food for Peace", donated U.S. agricultural products through intergovernmental agencies and U.S. voluntary agencies for social/charitable development projects. It was introduced in Paraguay by UNICEF in 1955. The UNICEF nutrition supplement project, through the Ministry of Health, distributed powdered milk to infants, preschool children, school children and expectant and nursing mothers in the three most central zones of the country. In 1958, Caritas Paraguaya, the in-country counterpart organization of the Catholic Relief Services (CRS), began to address the nutritional problems of the country through providing a supplemental PL 480 feeding program. Even before the agreement was signed by the U.S., Caritas and the Government of Paraguay, there was a mutual agreement between CRS and UNICEF to the effect that UNICEF would terminate its program in order to eliminate any possible duplication of efforts if Caritas obtained the agreement. However, rather than terminating, in January, 1969, the UNICEF program became a part of a joint educational and nutrition project known as "Programa de Alimentacion y Educacion Nutricional" (PAEN), a cooperative effort of the Ministries of Public Health, Education and Agriculture, in cooperation with WHO, FAO, UNESCO and UNICEF. In 1963, UNICEF discontinued its PL 480 programming in Paraguay and, consequently, requested that Caritas continue the milk distribution in the schools it has formerly attended.

The Caritas distribution involved a much wider variety of commodities than that of UNICEF, and was made through regional and local Caritas committees throughout most of the country. In these early stages of Point Four involvement with PL 480 commodities, there were also distributions through the Mennonite Central Committee, when agricultural failures dictated necessity. Beginning in 1962, the Mennonite involvement with the program was on a more regular, if rather limited, basis. Between 1955 and 1962, \$3,680,000 worth of food had been donated for distribution in Paraguay under the PL 480 programs. About 95 percent of the commodities were distributed by Caritas, which by 1963 was feeding 110,000 persons in needy families, 40,000 school children and 10,000 colonists.

Due to difficulties in securing reimbursement for internal storage and distribution costs from the Government of Paraguay, the program was completely shut down in the summer of 1963. When it was reopened, Caritas decided to curtail the family-feeding in order to reduce administrative difficulties and project costs, while building up the school lunch program and colonist food distribution of a "grub-stake". The project was beginning to be reoriented from charitable distribution to an emphasis on economic development, while the school feeding program was being more closely related to other USAID endeavors in rural education.

By 1965, 66 percent of the commodities were used for nutritional support in school lunch, maternal-child welfare, and pre-school feeding programs and 16 percent of the recipients were involved in self-help community

development activities. Another four percent were for persons residing in institutions such as the leper colony, tuberculosis hospital, orphanages and old peoples homes. The remaining 12 percent of the program was directed to needy families who had yet not been drawn into the self-help activities. Also in 1965, a small amount of grant funds were provided to support the food-for-work and school feeding projects by helping equip school kitchens and providing tools for small road construction and building projects.

In July, 1969 the Government of Paraguay (GOP), without public explanation, sent a letter to Caritas cancelling the existing PL 480 agreement then in effect. By then the distribution of clothes, food and medicine provided by Caritas, amounted to some \$1.9 million annually. The GOP's letter allowed for the required six month notice and indicated a willingness to negotiate a new agreement. (It was generally known that the GOP believed that Caritas was using its distribution projects for political objectives).

A new agreement was reached whereby CRS took over all responsibility from Caritas for management of the PL 480 activities, beginning in 1970. After CRS took over, the GOP financial contribution increased to a promised \$82,875 for each of the calendar years 1971 and 1972. In 1971, CRS actually received \$85,576. By August of 1972, they had only received \$7,738. The GOP level of support was not enough to meet the costs of the program, so the difference was made up through the sale of empty containers to recipient organizations, valued at \$35,000 annually. In addition, internal transportation was provided by the recipient institutions, with an approximate value of \$42,000 per year.

In May of 1972, a U.S. consulting firm wrote a program evaluation entitled "P.L. 480 Activities in Paraguay". Although the firm noted no significant improvement in the nutritional status of the people over 1965, it did find that the CRS project had competent field staff, effective managerial control at the central location and adequate storage and warehousing facilities. It also noted that it was adequately tied to nutritional education in the health centers, with an increasingly important role to be played in the schools as new curriculum programs, developed through USAID assistance, began to be implemented. The report suggested that CRS look for other alternatives to financing the administration and inland transportation costs since charging the recipient organizations limited the effects of the project. Although the report concluded that "the GOP evidences a positive awareness of, and a positive attitude toward, the broad problems of nutrition"; it went on to say, "On balance, GOP efforts are seen as fragmented and disjointed. An awareness of the problem exists, but the priority assigned to its solution is not very high, and is certainly not high enough to be regarded as any kind of a national commitment."

The findings in the evaluation basically supported the continuation of the CRS-run PL 480 program. However, on April 28, 1972, CRS officially

informed the GOP that it planned to terminate its participation in the program at the end of FY 1973. The principal reason given was that CRS was suffering from world-wide budget problems. There were also the local problems with budgeting. Additionally, the Episcopal Conference of the Paraguayan Catholic Church felt that the program did not adequately service the social pastoral ends of the church. By September 30, 1973, CRS was no longer managing a PL 480 II program in Paraguay. As USAID had not identified nutrition as a priority development problem, the PL 480 Title II was discontinued. USAID did encourage the World Food Program (WFP) to expand their activities to include most or all of the activities previously covered by CRS. In 1988 the U.S. Government is supporting a new five year WFP level at a total cost of over \$12 million for supplementary feeding of primary schoolchildren and vulnerable groups in rural areas in Paraguay.

#### Disaster Relief (1982-1988)

Paraguay has a long history of periodic flooding affecting the population living along the Paraguay river banks from Bahia Negra in the North to the city of Pilar in the South. U.S. emergency assistance from A.I.D.'s Office of Foreign Disaster Assistance (OFDA) has been provided in an effort to diminish the human suffering of the population displaced by the most recent major flooding recorded in 1982, 1983, and 1988.

In 1982, following a determination of the U.S. Ambassador that the disaster warranted USG emergency assistance, a grant was made to the National Council of Voluntary Agencies (CONEB), a Paraguayan Private Voluntary Organization (PVO) which acts as a broker for the humanitarian organizations in Paraguay. The grant provided for assistance in emergency housing, food, and blankets for the affected population.

Between February and July of 1983, prolonged heavy rainfall caused the worst flooding recorded in recent Paraguay's history. In addition to the big losses in livestock and crops, important areas of croplands, buildings, roads, etc. were destroyed, and about 10,000 persons had to be evacuated from the city of Pilar alone. U.S. assistance, channeled through various Paraguayan PVO's, amounted to approximately \$79,000 and included two tents, 1,000 wool blankets, and 180 rolls of plastic sheeting from OFDA stockpiles. Also, in response to a request from the GOP Ministry of Foreign Affairs, OFDA sent an Evaluation Team to assess the situation and recommended short and long term mitigation measures. The recommendations for minimizing the effects of floodings.

During the 1988 flood, following a request from the GOP and local humanitarian organizations, and an assessment made by OFDA's Regional Disaster Advisor, the Ambassador declared an emergency situation in the country. A \$25,000 grant made to the Paraguayan Red Cross was used mainly for the purchase and distribution of approximately 3,500 blankets, as well as emergency housing for flood victims. In addition, a total of 180 rolls of plastic sheeting from OFDA stockpile were donated to the Red

Cross for delivery to the victims. The total cost of this material plus freight amounted to approximately \$82,000.

Drug Abuse Prevention (1973-1977; 1987-present)

This activity, out of the ordinary for USAID, supported other U.S. Government efforts to curb a growing drug trafficking problem in Paraguay with its consequent health problems. It provided short-term training in the U.S., equipment, and selected operating costs for a Paraguayan police narcotics control enforcement unit. Equipment included vehicles for the unit, radios, laboratory instruments, and training aids for educating the public. Limited efforts to help in this area were extended from 1973 to 1977 at a total project cost of \$64,000. U.S. narcotics assistance, except for narcotics police training, lapsed after the Drug Enforcement Agency (DEA) closed its Asunción office in 1981. However, in 1988 DEA reopened its office in the face of Paraguay's resurgence as a major cocaine transit and marijuana producing country. In 1987 and 1988, the Department of State provided a total of over \$500,000 of assistance to the Paraguayan narcotic police including computers, communications gear, vehicles, and training. In addition, both USIS and the Department of State provided funds for a Paraguayan drug awareness conference.

CHAPTER TWO - AGRICULTURE  
(\$43,992,000)

Overview

Agriculture, the second sector which received U.S. bilateral cooperation, is extremely important to Paraguay since a majority of its population is actively engaged in agricultural production, processing, or supplying support materials for the agricultural sector. The agricultural sector is characterized by a multitude of small farm operators (36 percent with less than five hectares and another 43 percent with 5-20 hectares). Traditionally, the agricultural sector has received the largest share of USAID grant and soft loan assistance, totalling more than \$43 million as of 1988 <sup>1/</sup>. The agriculture sector has also received the greatest benefit from the PL 480 Commodity Sales program, with over \$8.5 million used for farm-to-market roads and in support of other agriculture projects.

Ample technical support for this sector was also provided. From the Forties into the Seventies, the U.S. Government maintained from twelve to fifteen resident agricultural sector advisors in Paraguay, augmented by short-term consultants and Peace Corps Volunteers. In increasing proportions, work in agriculture was undertaken on a contract basis: Montana State College (1959-62); New Mexico State University (1963-74); an intra-governmental contract with the U.S. Department of Agriculture (1965-1978); and a training and technical assistance program for the Agricultural Extension Service (SEAG) with Texas A&M University and the University of Florida (1981-1984).

During the period of U.S. bilateral assistance to the Agricultural Sector, many institutions were created or improved, including:

- Ministry of Agriculture
- Barrerito Ranch
- Agriculture and Livestock Extension Service (SEAG)
- National Agricultural Research Institution (IAN)
- Artificial Insemination Center
- Faculty of Agriculture and Veterinary Science
- Supervised Farm Credit (CAH)
- CREDICOOP

The STICA agreement, dated December 1942, placed emphasis on the training of Paraguayan technicians and operational personnel necessary to carry out agricultural programs. Projects important to the development of the

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<sup>1/</sup> This total probably does not include most of the STICA funding from 1942 to 1952, because the USAID program document for 1964 says, "Servicio began in 1942. Cumulative totals reflect USAID records from FY 52 only and include Ag. Instn. Dev. 526-048 now consolidated herein."

MAG and agriculture in general were carried out by STICA through training programs and application in the areas of research and extension techniques. Research focused on ways to increase production of foods for internal consumption, increase harvests for export, promote reforestation and soil conservation, increase cattle production, and investigate basic agrarian problems including land distribution.

Under STICA and Point Four, projects in agriculture and livestock were directed at the development of commercially viable farms needed for supplying the country with foodstuffs and to generate foreign exchange needed by the sector. They contained a large element of technical assistance and relied on the demonstration effect to promote replication. USAID assistance in the 1960's focused more (but not exclusively) on overcoming financial constraints so that more farms could participate in the modernization process. In the 1970's USAID began developing projects specifically for the small farmer with emphasis on cooperatives and on improved extension services. The ADC program has provided some limited resources to help promote technology transfer ties between local organizations, particularly in the private sector, and outside centers of agricultural expertise, and is helping with agricultural vocational education.

#### Sector Planning (1944-1985)

In 1942, little was known about the number of farms, their size or production. It was essential, therefore, to include data collection in the projects designed by STICA. One of the initial major accomplishments was an agricultural census begun in 1944. It was the first major study of the existing resources and condition in the country. It was followed by another census completed in 1956. These, and other studies carried out by STICA, were the basis for much work accomplished during the Forties, Fifties and later. They helped develop a clearer understanding of the natural resources available, the manner in which they were being used, and the major problems facing the agricultural sector in Paraguay. A partial list of STICA studies can be found in "Report on Agricultural Technical Assistance in Paraguay, 1942-52".

With the experience and some new basic research information, USAID was able to move in the direction of more formalized program planning, with the Ministry of Agriculture helping to set and focus priorities within the sector. USAID proposed a five year agriculture development plan in 1962, and this formed the basis for much of the assistance during the early 1960's. Some of the recommendations adopted by the GOP included elimination of import taxes on fertilizers, seeds and insecticides, and agreement to a number of capital transfer projects; PL 480 local currency to the National Development Bank; and an extensive farm-to-market road building program, financed largely through PL 480 Title I proceeds. These measures helped set the stage for subsequent capital injections from World Bank and IDB.

In February of 1964, a five-man U.S. Department of Agriculture/Land Grant College/AID team completed a study of agricultural development in Paraguay. This led to the arrival of a USAID-funded team from the U.S. Department of Agriculture (USDA), which worked with the MAG in various capacities from 1965-1978. In 1966, one of the USDA advisors was assigned almost full time to work on planning in the Ministry. Throughout the Sixties and later USAID continued to assist in the improvement of the organization and administrative functioning of the MAG.

Between 1969 and 1971, USAID funded a contract with a management consultant firm to assist MAG in the final planning of a personnel system based on position, classification and salary. At the same time USAID funded a contract under which accounting systems were developed and installed in various GOP ministries, including the MAG. Through these efforts, by 1973 a central accounting office and system were installed, a property inventory completed, an equipment maintenance system initiated, and a central purchasing facility activated.

Requisite to good policy formulation and planning was an adequate data base and data collection system. STICA had already done the pioneering work, and in 1968, USAID continued in this area by assigning a USDA advisor to the MAG to assist in developing a basis for a continuous statistics gathering and reporting system. Information on some 185,000 farms and ranches in Paraguay was collected, processed and then updated yearly. PL 480 local currency was made available to carry out studies and assessments. In August 1971, the first national sample survey for agriculture was published. A complete census of the Department of Itapua was completed in early 1972 and used in planning for the development of the region. In recognition of the importance of planning and statistics to the MAG policy formulation, planning and evaluation, the Ministry created a Technical Planning Unit in 1975.

Under a contract with A.I.D., the Paraguayan Center for Social Studies (CPES) conducted three sample surveys of small farmers. These surveys later served as the basis for outlining a profile of the small farmer in Paraguay. This profile was an important part of a major A.I.D./Ministry of Agriculture report on "Small Farmer Subsector Assessment & Constraints Analysis" published in 1976. CPES was responsible for the design of the questionnaires, selection of the sampling procedures, and data processing. The first survey focused on the economic and social characteristics of the small farmer. The second survey concentrated on farmers being served by cooperatives, and the third one concentrated on production costs.

The farming systems work completed by the University of Florida 1983-1985 (described in the section on extension) also generated useful information for sector planning.

## Livestock and Dairy

Beef has always been an important export earner for the Government of Paraguay (GOP), and USAID and its predecessor agencies did a lot to help Paraguay understand, develop and modernize its livestock business. Specific programs for a demonstration ranch (Barrerito), commercial livestock development (PRONIEGA), small farmer needs (poultry and small ruminants), dairy, and artificial insemination are described below. These programs in many cases led to follow-up assistance from other donors.

Barrerito Ranch (1943-1968) - SPICA can claim the Barrerito Ranch in Caapucu, a ranch that was 9,822 hectares, as a project it nurtured into an important cattle breeding institution. The ranch originated under the Ministry of Agriculture (MAG), but really prospered under SPICA management. SPICA received Barrerito Ranch through an August 1943 agreement. At that time the ranch was valued at \$100,000 for the land with improvements, and \$50,000 for its 4,148 head of native animals. By 1952, the then 6,712 head of cattle (468 purebreds) had an estimated value of \$240,000, and the land and improvements were valued at \$213,400. According to the SPICA termination agreement, there were a total of 4,741 head of cattle, of which 1,537 were purebreds, when the ranch was turned back to the MAG in December 1968.

In the early Forties, there had been an effort to improve Paraguay's cattle stock by crossing the native cattle with English breeds such as Herefords and some Aberdeen Angus. Problems with adaptation of the English breeds led to importation of Indian breeds such as Nelore, American Brahma, and Santa Gertrudis for the 1946 breeding season. Up-grading with those breeds continued until 1951, when it was decided to use the stock available to improve the herd while still maintaining the blood lines. In 1956 Brahman and Santa Gertrudis bulls were introduced for a trial period. Notwithstanding earlier experience, the European breeds were again introduced in 1954, with results very similar to those obtained earlier. Thereafter, the ranch concentrated on the Santa Gertrudis and the Zebu types of cattle (Brahman and Nelore). As a result, by 1968 there were enough purebred Zebu at the ranch to maintain the purity of that line (1,241 females of more than one year). The number of Santa Gertrudis animals was also increasing and 1,586 females were classified from half-breed to pure, with the majority being three quarters purebred. By 1982 the ranch had 4,620 head of cattle registered as half-breed to pure, with 1,829 being Santa Gertrudis, 2,645 being Zebu, and other breeds making up the rest. In April 1986, 6,170 head were at the ranch, with over half of these being classified as Zebu.

Livestock from the ranch, according to Ing. Mericio Biedma, former Barrerito Ranch manager, continues to assist in improving the quality of the local herds. The ranch holds an annual auction which is well attended by Paraguayan ranchers. The ranch normally sells from 400 to 450 animals at this annual event. Originally, the ranch only sold bulls,

but now the herd is big enough to include a small number of heifers at its annual auction.

Barrerito Ranch, originally planned as a demonstration ranch for the improvement of livestock production, increased its ability to meet that goal by introducing artificial insemination at the ranch in 1954. Breeding herds throughout Paraguay were further improved by STICA through a training program for cattlemen in which ten to twenty inseminators were trained yearly. Training has continued at Barrerito ranch. Between 1982 and 1985 an average of 81 persons were trained annually in the artificial insemination program at Barrerito Ranch, with the peak year being 1983, when 133 ranch hand inseminators, extension agents and students from the Faculty of Veterinary Science attended.

The process of ranch development was greatly assisted during the 1960's and 1970's when the World Bank gave three loans, totaling \$19.7 million to the Central Bank for relending for livestock development. IDB also contributed to this process by lending the GOP \$6.1 million in 1967. The loans were used for livestock improvement through developing and expanding better handling facilities, feeding practices, and animal care.

PRONIEGA (1967-1975) - USAID did not lose interest in the Paraguayan livestock industry once Barrerito Ranch was transferred to MAG administration. To show its continued support and concern, USAID developed the "Livestock Development" project. The goal of the project was to increase livestock production in Paraguay for domestic production and for foreign exchange/export purposes. The stated purpose was: (1) develop the institutional capacity of the MAG, in the form of a National Program of Livestock Research and Extension (PRONIEGA), and (2) enhance the ability of the National University Faculties of Agronomy and Veterinary Science to provide trained manpower for the livestock/agricultural sectors.

PRONIEGA, begun by MAG with USAID contract advisory assistance in 1967, was to perform applied livestock research, give demonstrations and, on private ranches, carry out educational programs in the areas of management and animal nutrition. Six New Mexico State University (NMSU) technical advisors were assigned to work with the PRONIEGA project. The NMSU advisors coordinated the work at PRONIEGA with investigative research at the Faculty of Agriculture and Veterinary Science (FAV). FAV provided the use of its soils and animal nutrition laboratories, and students from the faculty, under the USAID-sponsored work scholarships program, assisted in the research activities. Demonstrations were carried out at the National Livestock Development Center at San Lorenzo, Barrerito Ranch and the new experimental ranch (Chaco Ranch), which was developed with assistance from the NMSU team. The Artificial Insemination Center also provided support for the project.

A final evaluation on the USAID Livestock Development Project was written in November 1974. The evaluation team found that in terms of the inputs

provided, outputs expected, and project purpose, the results were generally satisfactory. The on-going research projects were generally well-received in terms of their project purposes, and many treated priority areas of improved nutrition and pasture management. The team suggested that the project be continued, but with significant adjustments in its purpose and course of action, in order to meet current A.I.D. priorities for reaching the poorer sector of society more directly.

Small Farm Livestock (1943-1979) - The 1973 Congressional Mandate incorporated in the Foreign Assistance Act directed A.I.D. to reach the low income groups and led USAID to initiate the Small Farmer Livestock Development project. This new project was started in 1975 back-to-back with the termination of the original PRONIEGA agreement. It was developed with the same institutions and contract advisors. The purpose was to expand the research and extension aspects of the livestock program to non-beef animals: swine, sheep, and poultry. The goal was to improve production, net income and nutrition for the small farm family. To accomplish this, USAID realized that the emphasis of existing livestock development groups would need to be shifted away from beef cattle, and the personnel involved retrained. A team from New Mexico State University was to provide the training.

This was not the first project which worked on the development of small farm animals in Paraguay. In 1943, through its "Model Dairy" project, STICA introduced a subproject to improve the quality and quantity of swine and poultry. At that time, improved quality of swine meant more fat which could be turned into lard to serve domestic consumption needs. In 1948, the swine and poultry operations were moved to the IAN experiment station in Caacupé. Even though the poultry and swine operations did not survive at the agriculture experimental station, STICA was able to introduce balanced feed for poultry. In 1962, USAID brought in chickens from Argentina and introduced a small experimental poultry project at the Artificial Insemination Center. This project demonstrated how to raise poultry without electricity. Although short lived, this project attracted a lot of interest, particularly among the rural female population.

A 1979 project evaluation summary for the Small Farmer Livestock Development project concluded that despite the numerous subprojects developed, USAID's considerable financial support, and research studies on small farmer production practices, for the most part the project was unsuccessful. The most critical external factor was the GOP's lack of financial support to the three principal counterpart organizations: SEAG, PRONIEGA, and NMSU. There were shortcomings and problems in delivery of technical assistance by all parties concerned. NMSU and PRONIEGA, not having previous experience in working with projects for subsistence farmers, found it difficult to adapt to the new objectives. In fact, PRONIEGA never did really make the adjustment and is still concentrating its efforts on beef, perhaps because follow-on external funding emphasized this area. NMSU made marginal impact, and had

difficulty organizing a lasting and effective training program. It seems that the University Faculty of Agricultural and Veterinary Science was the only participating organization that was able to adjust and participate fully with the new project direction.

The difficulties encountered by PRONIEGA and NMSU delayed the project implementation by more than one year and reduced the amount of technical assistance. A NMSU animal production specialist's resignation forced the USAID agricultural economist to assume dual responsibilities. Inadequate office staff prevented implementation of recommendations from the small farm survey. There was inadequate communication between the NMSU and USAID staff, and poor planning delayed the training. PRONIEGA's financial weakness caused training participants to leave the project before completing research studies, while other completed studies were never published. Of the eleven planned project research activities, only four were completed and published. Of the 44 beef trials 18 were completed without reporting the compiled information. USAID undertook the first baseline survey, but did not complete the research because of computer processing and analysis problems. Also there was the erroneous assumption that men, not women, were the chief livestock raisers, and this required project changes.

The recommendations made in the 1979 evaluation were: 1) socio-economic studies and proper planning should be done before project implementation, since it is too costly and time consuming to redirect technical assistance programs once underway; 2) recipients and level of training should be determined in advance; and 3) salary supplements should not be granted unless the GOP will continue them after the project terminates. In retrospect, perhaps USAID should have developed a new institution for research and extension work in the area of livestock production on small farms and ranchers, rather than attempt to redirect PRONIEGA.

Dairy 1943-1954 - In May 1943, a model dairy was established by STICA on 98 hectares of property belonging to the now defunct school "Escuela Nacional de Agronomía Mariscal Estigarribia" (ENAME, later known as CONAME) in San Lorenzo. The original objectives of this project were: 1) to install, organize and operate a dairy farm to supply ENAME Agricultural School with milk and dairy products, the excess production to be sold in Asunción; 2) to raise good quality dairy cattle, hogs and poultry in sufficient numbers to permit their sale, as breeding stock, to small scale farm projects at the regional agricultural schools, as well as to private individuals; 3) to operate the farm as a demonstration model, available to ENAME for practical classwork and the public for observation and instruction. The emphasis on working with ENAME and the other regional agricultural schools, while developing a dairy project on its own terms, was to help improve the education of agriculture in the country.

In 1946, the objectives of the dairy project were amplified to include the establishment and operation of a bull ring breeding service, the

improvement of pastures, the establishment of a livestock health service, a livestock feed service, a milk production control service, and a service for the importation of dairy cattle and swine. The bull ring provided free servicing of any milk cows brought to the bull ring. It was a small beginning for the upgrading of the Paraguayan dairy herds.

The Model Dairy project stimulated interest and understanding in the dairy industry, and improved the local dairy herds. By 1953, the Rural Association of Paraguay estimated that there were 3,600 head of dairy cattle in the country, including a Holstein/Criolla mix, when only ten years earlier there had been no Holsteins. In 1986, there were an estimated 220,000 head of dairy cattle in Paraguay.

The project also introduced the first pasteurized milk in the country. This produced a demand for a higher, more sanitary quality of milk, which in turn, stimulated the private sector to invest resources to improve the quality of its product and established the milk industry. The private sector also became educated and interested in the production of balanced feed for dairy cattle, and by 1953 there were eight companies producing such feed. The idea and use of such feed was introduced by STICA through this dairy project. STICA also introduced balanced feed for cattle, horses and poultry.

The Dairy project was terminated in June 1954, but elements were continued by existing or created institutions. In 1954 the Artificial Insemination Project had begun, utilizing the corrals, pastures and some buildings vacated by the termination of the dairy project. It was tasked, among other things, with continuing to improve the dairy herds in Paraguay, and, therefore, it received the best Holstein bull the dairy project had to offer. The responsibility for administration of the milk barn, with its pasteurizing facilities, was turned over to ENAME, along with the milk cows and the stock of dairy calves. This school was closed in about 1956, and its facilities and land were used to develop the School of Agriculture and Veterinary Science of the National University. The pasteurizing plant was then turned over to the Dairymen's Association. The Association ran into financial and management difficulties, and was never able to develop the plant into a functioning business. The remaining cows and bulls were sold at auction to the Mennonites and other groups and individuals who were in the best position to utilize and expand these resources.

After the Dairymen's Association failed to provide a functioning milk pasteurizing plant, a local cooperative association tried to develop a milk pasteurizing facility, but discontinued after a short time, due to financial problems. The Mennonite cooperatives have probably been the most successful in producing milk and milk products in Paraguay. Their product can compete with imported milk products from Argentina, and, to a smaller extent, Brazil.

According to Ing. Mericio Biedma, the most significant accomplishment of the dairy project was the opening of the consumers mind to the importance

of getting a supply of good fresh milk. This was accomplished through the sale of pasteurized milk to consumers in Asunción, as well as through field days at the farm. Field days were available for both farmers and dairymen, and primary and secondary students. However, even in Asunción many local dairymen still peddle their milk from house to house, unpasteurized, from a stainless steel can. Despite a lot of advancement, reportedly, Paraguay produces no more than 50-60 percent of the total demand for milk, with the remaining demand covered by importation of powdered milk.

Artificial Insemination Center (1954-1968) - The Artificial Insemination Center, located on 30 hectares of land in San Lorenzo, was established by STICA in 1954. It began with one Holstein, one Zebu, 11 Short Horn and four Santa Gertrudis bulls. The Center provided artificial insemination services and carried out an information, education, and extension outreach program. Artificial insemination grew in acceptance among Paraguayan dairy and cattle ranchers, with the number of livestock artificially inseminated rising steadily from 3,500 during the 1953-54 breeding season, to almost 10,000 in 1961-62. Due in part to a USAID initiated breakthrough which extended the lifespan of the semen, known as the "coconut milk extender", about 70,000 inseminations were accomplished in 1966-67. Also, by then, 24 ranches were doing their own insemination work as a result of training received at Barrerito Ranch. They applied semen which was supplied by the Center.

The Center has continued to promote new techniques as they become available. The GOP's Agricultural Extension Service, SEAG, provides artificial insemination services to small and medium scale farmers. The private sector also furnishes services using the latest technology. Today in Paraguay a multi-million dollar private facility for embryo transplants is operating to further the quality of Paraguayan livestock.

#### Agricultural Research (1943-1967)

An agricultural demonstration and experimental station, now known as the National Institute of Agronomy (IAN), was originally established as five separate projects: Seed Improvement, Fruit Development and Multiplication, Model Demonstration Farm, Agricultural Experimentation, and "Administrative Facilities". The agreements for these were signed in May 1943. In 1944, as a result of an administrative instruction, these projects were consolidated under the title "Crop Development". The objectives established were to: (1) demonstrate that agriculture production could be increased through the use of modern methods of farming; (2) aid Paraguayan farmers in crop development by supplying them better seed; and (3) teach improved methods of cultivation. The long range goals were to increase the food supply in the country and improve the income of the producer. STICA was so successful in the implementation of this project, and so identified with the experimental station, that even today, many Paraguayans refer to the National Institute of Agronomy as STICA.

During an interview, Mr. Santiago Apodaca, the first STICA technician in charge at the station in Caacupé, shared some of his views and memories of life and work in Paraguay during the early Forties. In 1943, demonstration meant to show that land could produce, or an idea could work. STICA was given 295 hectares and Apodaca was sent off to make it a demonstration, "workable", farm. To do so he had to clear the land of trees and rocks and unusable structures. One building was left for administration, and that first year, 50 to 60 hectares were cultivated. Apodaca recalled that the first big rain came and went, and with it went the crop. He and his people just dug in and started over. With the second planting they employed contour plowing. The crop was harvested and their reputation was made as people who couldn't plow straight. By the second year the farm was in full production and revenue from the harvest was given to the Ministry of Agriculture to defray expenses. Construction of living facilities of the IAN personnel and administrative offices for the institute were also underway.

The experimental station employed and trained recently graduated agronomists from the agriculture school in San Lorenzo, which provided four years of secondary technical education. In one of the early groups was 19 year old Hernando Bertoni who later became the Director of the Experimental Station under STICA, and since 1968 the Minister of Agriculture. As the Minister recalls, the truck from IAN arrived at ENAME, the agricultural school in San Lorenzo, and loaded up his whole graduating class, transporting them to their new home in Caacupé. (In 1957, Hernando Bertoni was sent to Texas A&M University for further training in agronomy).

Agricultural research in the Forties, although important, was carried out on a small scale. Two and three hectare plots were used for experimental work on cotton, peanuts, corn, vegetables, cow peas, and other legumes. Over the years, IAN has been responsible for practically all major crop research and demonstration activities in Paraguay. IAN reestablished many degenerated Paraguayan crops, including tobacco. In 1952, STICA, through its work at the Institute, produced the first large-scale wheat crop since the days of the Jesuit reducciones, more than 200 years ago. IAN also undertook studies for improved production of such crops as soybeans, sugar cane, corn, yucca, rice, citrus and selected varieties of other fruits and vegetables. It introduced, adapted, or developed most of the cultivated grass species, such as Pangola, Ramirez and Buffel, now used in Paraguay for improved pastures. It conducted research on the use of fertilizers, which were practically unknown in Paraguay prior to 1958. Today, IAN can recommend fertilizer formulas based on its research in soil and plant nutrition.

The other important initiative begun at the IAN was the production and treatment of quality seeds, which were distributed to local farmers through the National Seed Service (SENASE). In cooperation with Credito Agricola de Habilitacion (CAH) and the National Development Bank. SENASE was managed by STICA in connection with its work at IAN. From 1947 to

1952 a total of 4,739,364 pounds of improved seeds were sold. Money, from the sale of seeds, was used to offset expenses at the STICA experimental station. SENASE also provided both wood and fruit tree seedlings, vegetable seeds and plant cuttings for pasture development. The breeder seeds, cuttings and seedlings were originally all obtained from the IAN nursery. The program was moderately expanded by developing seed production through contracts with selected farmers. In 1967, the SENASE produced and sold 200 tons of improved vegetable, cereal, cotton, and pasture seeds.

In 1968, SENASE was reorganized by the MAG in order to produce a significantly greater quantity of quality seeds, which were needed to meet the national demand, particularly wheat. Under the reorganization, SENASE was given greater responsibility in the supervision of seed production to insure that the stock of breeder seeds remained contamination free. Demand for improved wheat seed was being stimulated with the establishment of the National Wheat Council in 1967 and through expanded credits to farms for wheat production from an AID loan to the National Development Bank (see Credit, below). PL 480 local currency support was provided to SENASE to help respond to this demand.

In 1979 SENASE was allocated a \$450,000 component of a larger loan to the extension service (see page 40) for expanding seed multiplication/certification for small farmer crops. Emphasis was directed at non-traditional fruits and vegetables, beans and improved varieties of corn. A revolving fund was established to work with selected private farms who would carry out the multiplication work. Except for corn, this activity fell short of its targets due principally to delays in the work of the extension service to develop and disseminate the small farm technology packages necessary to create increased demand. The corn seed multiplication activities were instrumental in helping the extension service bring about an almost nationwide adoption of a new variety (SOWAN 8027 from the international agricultural research center, CIMMYT, in Mexico) by the mid 1980's. The experience with this activity, however, was instrumental in bringing about a MAG policy decision to limit SENASE involvement to seed certification and encourage multiplication and distribution to be carried out by the private sector. Today in Paraguay, private seed companies are actively involved in producing improved seed for wheat, corn, and soybeans.

The ADC program has furthered linkages between source of seed technology and private Paraguayan entities. In 1985, a small grant was provided to enable a distinguished sorghum seed expert from Texas A&M University to carry out field demonstrations, trials, and training for a number of farmer cooperatives and other organizations, including a private seed producer. In 1986 funding was provided to initiate similar linkages with the International Potato Center in Lima.

School of Agronomy and Veterinary Science, UNA (1956 - 1976)

While the in-service training and the assistance to agricultural high schools were helping to meet some of the needs for mid-level agriculturalists, much more needed to be done. The School of Agronomy and Veterinary Sciences (FAV) was established at the National University in 1954, and became operational in 1956. This was the first advanced agricultural education institution in Paraguay.

USAID and its predecessors did much to establish, improve and expand the institution and quality of education provided at FAV. From 1956, technical assistance to the new faculty was provided by a USAID agricultural education advisor who acted as a consultant, as well as filling in as professor of botanical sciences when needed. In September 1960, SFICA signed a contract with Montana State College (MSC) which provided three advisors, one each in the areas of livestock production, agricultural economics and agricultural engineering, during the 1961-1963 period. Participant training was provided at MSC for four students who became full-time FAV members upon their return. This full-time status was made possible by USAID financial support.

Under the MSC contract, audiovisual equipment was provided to enhance the classroom experience. Modern farm equipment, including two diesel tractors with plowing and cultivation attachments, a grain drill, a four-row planter, a self-propelled harvester and an extensive line of machine shop tools were provided to develop the field experience of the students. Much was accomplished during the three years that assistance was provided by MSC, including the installation and operation of a carpentry workshop, which provided furniture for the school. This shop is no longer functional. It was generally agreed that even more could have been accomplished had the technicians had a better working knowledge of the Spanish language.

During the interim period, when MSC finished its contractual obligations in 1963, and June 1964, when USAID signed a contract with New Mexico State University (NMSU), continuity was provided by the USAID agricultural education advisor, who again acted as a consultant. The NMSU contract was to provide technical assistance to the FAV for improving its organization and administration; upgrading the quality of its staff and facilities for research and instruction, initiating research projects and helping to orient the teaching and research projects toward the development needs of the country.

Under the auspices of the NMSU contract much was done to develop the physical aspects of the faculty. In the mid-1960's, USAID helped fund the construction of a new FAV building and participated in the renovation of most of the older faculty buildings, through the use of PL 480 local currency. By 1973, the veterinary hospital had been renovated, a green house complex developed, a photography laboratory and grain drying and fumigation room built, a 20-box swine feeding facility constructed and,

in conjunction with a FAV tomato production project, a 100,000 liter irrigation storage tank installed.

Throughout the 1960's USAID assisted in the development of the FAV library. Forming its core was the STICA library which was transferred to FAV in 1963. It contained approximately 4,500 volumes plus assorted professional journals and technical bulletins, the majority of which were in English. USAID provided an annual grant to finance subscriptions to technical journals and, in 1965, provided for an additional 400 volumes of Spanish language reference texts. Other requisitions and journals were provided under the NMSU contract. Beginning in 1970, the Regional Technical Aids Center (RTAC), an A.I.D. institution which provided textbooks and other educational materials at just slightly above cost throughout Latin America, began assisting the library with books and bulletins.

In September 1965, STICA transferred to FAV the soils laboratory, which began as the Soils Classification Project in 1943. The laboratory was upgraded with new equipment and furniture, supplied under the USAID funded NMSU contract. This laboratory is still in use today. NMSU also helped initiate a study of the ecto and endoparasites of Paraguayan cattle and assembled the basic elements of a parasitology laboratory.

Beginning in 1967, increased emphasis was placed on livestock research at the FAV with the signing of a tri-partite agreement involving the FAV, MAG and a U.S. research group, the International Research Institute. With the creation of PRONIEGA in 1967, much of the livestock research undertaken at FAV was coordinated with this national program. The agricultural Economics Research Center, a principle research institution of the FAV, was developed with USAID assistance and founded within the new Department of Agricultural Economics in 1970. FAV students and graduates undertook research projects: (1) in agricultural marketing, (2) in farm accounting records needed by ranchers for making economic decisions, (3) in farm machinery, and (4) in other areas of importance and interest to the Paraguayan ranchers and farmers. Most of the research was funded by USAID or the OAS. Due to lack of further funding, these research activities were not continued after USAID terminated its assistance to FAV.

In-service training for professors was provided under the NMSU contract, and the FAV staff participated in numerous workshops, conferences, and meetings sponsored by other agencies and organizations. In turn, the Faculty sponsored similar events, either on its own, or in cooperation with other public and private sector organizations. The training, and experience gained, enhanced the teaching ability of the staff, which in turn enhanced the prestige of the School and resulted in progressively greater cooperation between the FAV and other entities involved in agriculture.

In operating the FAV farm, the Agronomy Department collaborated with the National Institute of Agronomy at Caacupé to ensure that projects were

complementary. FAV provided assistance to the national wheat program and the program for livestock research and extension. Courses were provided for the benefit of private ranchers and agriculturalists. This kind of mutual cooperation and assistance, with both the private and public sectors, has diminished since the end of USAID's involvement. However, some signs of cooperation with the public still exist, as indicated by the use of the soils laboratory by Paraguayan farmers. The School also annually provides a six month course in beekeeping, which is open to the general public.

#### Agricultural and Livestock Extension (1951-1985)

The Agricultural and Livestock Extension Service in Paraguay (SEAG), which was established in 1951 as a result of recommendations made by the Institute of Interamerican Affairs, was under the direct supervision of the MAG. Its primary function was the dissemination of information to all Paraguayan farmers from all agricultural departments within the MAG. It was to make sure that not only was the information received by the farmer, but that the advantages of changing to newer methods and techniques were understood and employed. By agreement, in 1952, the MAG gave STICA the responsibility for organizing the extension service, training its personnel and opening demonstration offices. As a result, within two years, SEAG was, for all intents and purposes, an independent STICA entity organized along the lines of a state agricultural extension service in the United States.

Throughout most of the first decade of SEAG operations, two or more U.S. advisors in agricultural extension worked closely with the newly organized service. In the early days of the SEAG, major effort was placed on training qualified personnel to assume the role of extension agent and 4-C club organizer. The 4-C Clubs, begun in about 1953, were organized and developed along the lines of the 4-H Clubs in the United States. Also trained were home demonstrators and information personnel. Most of the original trainees were graduates of the now defunct Mariscal Estigarribia National Agronomic School (ENAME). These trainees, including the current Director of SEAG, Ing. Agr. Juan Molinas, were given a six month introductory course in extension work at the IAN. The course consisted primarily in teaching the trainee new agricultural techniques, after which the new agents were sent out to the countryside to start their work.

Agricultural extension work evolved very slowly, as the idea was new, even to the extension agents, and foreign to the farmers. Much of the progress made in the first decade of extension work was done through sheer persistence on the part of the agents, who went from farm to farm educating and informing the individual farmers and their families, gaining experience as they went. Initially, time was spent befriending the farmers and giving whatever assistance possible for current problems, rather than really developing new methods of agriculture. As the agents

gained the trust of the farmers, they were able to develop youth clubs, farmer committees and housewife clubs.

Coupled with the in-country training programs for potential and actual extension agents, 4-C club organizers, home demonstrators and information personnel, was the participant training program which sent employees of SEAG to the United States and other countries for further training. Between 1952 and 1967, USAID sent extension agents to 22 courses of varying durations. Home demonstrators also participated in six different courses, 4-C club organizers in 11, and agricultural information specialists in seven. USAID became involved in developing cooperatives in 1968, and there was renewed interest in providing education opportunities abroad for the SEAG personnel, who were to provide agricultural extension services to the new cooperatives. Consequently, between 1971 and 1973, another 31 courses were financed for extension agents, home demonstrators and 4-C club organizers in the U.S. and elsewhere. In 1978, USAID developed a new project with SEAG and, through it, sent seven SEAG employees to the U.S. for masters degrees and 30 for shorter training periods.

Returning participants, and personnel trained in-country, used their skills and knowledge to assist the rural population in improving their farming techniques. STICA provided a wide variety of materials to assist the agents in their field work. IAN provided information to the extension agents on the results of crop experiments carried out in Caacupé and Capitan Miranda, and seeds to be used by the extension agents on local demonstration plots.

Extension activities included training farmers, sometimes including 14 to 25 year old 4-C Club members, in the use of insecticides and fertilizers, soil conservation and animal sanitation and care, swine, poultry and dairy production, crop cultivation, food preparation, home improvement, and home garden production. In the early 1960's, STICA extension agents provided technical assistance to small farmers in the management of credit provided under an Interamerican Development Bank (IDB) loan directed specifically to small farmers. One of SEAG'S most important function was to serve as a link between the farmer and such institutions as IAN, Barrerito Ranch, CAH, BNF and the Agricultural Information Service.

The Information Service established by STICA was organized to operate as an integral part of the MAG, preparing agricultural information for distribution through the press, radio, posters, leaflets and bulletins. It produced a monthly eight-page publication of farm news, and broadcast over Radio Nacional a daily radio program on topics of interest to the agriculturalist. Special bulletins of agricultural news were broadcast daily over two local stations, while weekly half hour broadcasts were transmitted over stations at Pilar, Encarnación and Concepción. In addition, the Information Service produced flip charts, flannelgraph materials, and did graphic arts and photography work in order to assist

the local extension agents in providing a meaningful service to the farmers in their areas. Through the extension activities and information provided by the Information Service, new improved methods and materials were relayed to farmers throughout Paraguay. The radio broadcasts were terminated when STICA was transferred to the MAG, as they were considered too expensive to continue.

By 1960, SEAG had in operation a central office in Asunción and 10 extension offices in the interior. The latter were staffed with 30 trained extension and assistant extension agents, two female home demonstration agents and often a 4-C Club agent. STICA also developed homemaker clubs, with the most important aspect being the improvement in nutrition through the introduction of home vegetable gardens, virtually unknown in Paraguay previously.

In 1967, SEAG was officially transferred from STICA to the MAG. A new central office building was built in San Lorenzo, funded by the GOP and PL 480 local currency. San Lorenzo was selected as the site in order to provide proximity to the Agriculture and Veterinary Science School (FAV) across the street. It was expected that this physical contact would promote greater interchange between these two institutions - akin to the linkages in the U.S. between land grant universities and the country farm extension service. At that time, A.I.D. expected that FAV, as well as the experiment station in Caacupé would be doing experimental work whose results should be disseminated to the field. The SEAG worked in 22 different districts in the country considered the most important ones in terms of population and agricultural activities. STICA, through SEAG, developed small--five-to-eight-person-- committees composed of farmers, now known as pre-cooperative committees. Through these farmers committees, through homemaker clubs and through the growth of 4-C Clubs, the work of the Extension Service agents was extended far beyond its formal organizational perimeters.

By 1968, SEAG had organized 450 4-C Clubs, with over 11,000 members. The director of SEAG recently estimated that in 1985 there were 326 4-C Clubs with 11,274 members and 603 pre-cooperative committees with 24,106 members. As the pre-cooperative committees grow in size and experience they are encouraged to join local cooperatives. In 1985, there were 126 satellite extension offices staffed by 410 SEAG personnel. Usually a satellite office is staffed with one extension agent, a 4-C club agent, a home demonstration agent and an administrator.

In 1977, the USAID began designing a project with the Ministry of Agriculture to strengthen SEAG in order to improve the delivery of technical assistance to small farmers according to the USAID "Country Development Strategy Statement, FY 82". Project designers encountered numerous obstacles to setting up an effective delivery system, but the primary problem was a centralized extension system managed by an overly centralized agricultural ministry. Morale of MAG employees was low, as were their salaries and their backstopping support for field activities.

The able extension agents frequently left government service for higher salaries in the booming private sector, leaving many rural extension offices virtually abandoned. Acting upon the recommendations of an FAO report, the USAID undertook negotiations with the GOP for a larger project to strengthen the ailing National Extension Service (SEAG). In these negotiations, the MAG agreed to upgrade SEAG's organization, expand its geographical coverage, and build within its system the capability to identify the technology needs of small scale farmers. SEAG would respond to those needs by developing an effective delivery system of appropriate technology in order to increase the farmers' net income and well-being. Major decentralization of administrative and operating structure and establishment of rural regional centers comprised the heart of the new program. Also, as a result of these negotiations the GOP agreed to make significant and permanent increases in the MAG's budget, primarily for personnel. The Small Farm Technology Project (SFTP) signed on May 22, 1979, consisted of a \$5 million loan together with a coordinated grant of \$1 million, and constituted one of the most ambitious institutional development undertakings of the bilateral program.

The loan, which was to establish seven fully equipped Regional Rural Development Centers and 42 satellite agencies, had actually established eight centers and 57 satellites by September, 1985. Headquarter buildings were either constructed or remodelled for seven of the eight centers. The centers were established in the towns of: Ybycui, San Juan de las Misiones, Pilar, Concepción, Caazapá, Caacupé, Itá and Coronel Bogado. These centers were equipped with vehicles, audiovisual equipment and supplies, agriculture and veterinary supplies and equipment for demonstration and limited assistance to farmers, and office equipment and supplies. A total of 86 vehicles were purchased under the project consisting of 73 jeeps, 11 jeep pick-ups, a passenger van, and a middle size truck.

Staffed by a team of five to six multidisciplinary trained specialists in agronomy, animal production and/or veterinary, agronomy, ag. economics/farm management, and home economics, these centers were to survey the local agricultural practices in the area to identify the constraints, solve the problems encountered and support educational activities at the satellite stations.

The project also provided funds for SEAG to contract the experiment stations such as IAN (Caacupé) and CRIA (Capitan Miranda) to carry out research on a variety of specific local market crops planted on the small farms around the country. This was necessary because most of the experiment station's budget is assigned only for research on import substitution crops, such as wheat, and hard currency producing crops, such as cotton and soybeans. SEAG contracted for research on new corn varieties, yucca, and vegetables. Under the appropriate technology delivery system proposed for the project, positive results at experiment stations were to be replicated by extension agents working with a farmer on a small parcel of land to see what the results would be under local

conditions with local farming techniques. This scheme was later improved and expanded with the inception of the Farming System approach into the project.

The project also provided financing to enable the Escuela Agromecánica de Caacupe (EAMC) to develop the capability to provide mechanical innovations for small farmers in support of project activities. The project financed the construction of a workshop and the purchase of tools and equipment for developing, manufacturing, and testing prototype machines that are adapted to the needs of the small farmer and are able to be manufactured in small country shops using locally available supplies. Prototypes manufactured included, among other things, a man-powered forage chopper, manual balanced feed mixer, a vegetable seeder, a small grain silo, a chain link fence making device, water pumps, etc.

Seven SEAG professionals received Master degrees at Texas A&M University in such fields as horticulture, dairy production, farm management, agricultural engineering, and extension. Texas A&M also provided in-country technical assistance funded by the grant component. The Chief of Party of a three-person team arrived in February, 1981. The last Texas A&M advisor, a training specialist, departed Paraguay in December, 1984.

The project also strengthened SEAG's data analysis and production of information. Selected SEAG personnel were given training in computer utilization for computerizing data collection and analysis of management records centrally. An important off-shoot of this activity was the establishment within SEAG of a permanent system for keeping individual farm records for approximately 700 collaborating farmers. Even today, these farm records are regularly up-dated by a cadre of farm management paratechnicians who help farmers fill out the forms on a monthly basis. Production costs and other relevant information are still being analyzed and results and recommendations fed back to farmers at the end of each crop season. The information obtained serves not only as a useful management decision tool for the farmer but also provides an important indicator to evaluate the effectiveness of the extension work and as a guide for agricultural policy formulation.

A key project input was the establishment of a central Communications Division within SEAG with a capacity for large-scale production of printed material, visual aids, and T.V. and radio extension material for broadcasting through the national media networks. This Division has received substantial technical assistance both through a full-time Communications/Diffusion Advisor from Texas A&M (3 yrs.) and other short-term advisors contracted by SEAG. The Division's personnel was increased and trained and facilities to accommodate the new equipment was constructed. Equipment purchased included professional TV cameras and editing equipment for generating video programs, and off-set printing presses and related equipment for the production of agriculture pamphlets, brochures, and booklets. In addition, each regional center

was provided with an audio-visual specialist and a limited capability to produce audiovisual materials such as mimeographed leaflets, flipcharts, brochures, posters, etc. for specific use in the area. Agricultural programs were once again developed for radio, with 798 programs broadcasted by September 1985.

The Farming Systems approach was a late-comer in the life of the PTPA, which was already implementing a system for developing and delivering the project-generated technology packages through the work of the multidisciplinary specialists assigned to the recently created eight regional centers. However, it was later questioned that the original system, although conceived with a farming systems approach, did not lend itself to a definition and selection of research opportunities based on the farmer's priorities. Also, the limited number of trials conducted lacked a closer farmer's participation or were only established at experiment stations.

Following recommendations from a review team from the centrally funded A.I.D. Farming Systems Support Project (FSSP) with the University of Florida conducted in June, 1983, farming systems activities were initiated with a workshop aimed at enlightening MAG's higher echelon and the directors of the newly created regional centers on the philosophy of farming systems. This workshop, held in December 1983, was followed by a three-week course on applied farming systems for regional centers specialists and extension agents held in January of 1984. These workshops were conducted by an FSSP contractor. One of the farming systems instructors, Ing. Mario Ozaeta, became a full-time consultant to the project under a PSC with SEAG. Beginning in February 1984 the program started the first surveys or sondeos which were conducted by the newly trained technical staff of the centers under the supervision of the farming systems advisor. The sondeo provided an assessment of, and identified the constraints of the agricultural sector in the area of influence of the center. They also provided the basic framework for proposed solutions to the problems identified. Proposed solutions were generated with considerable inputs from the participating farmers, an innovative feature introduced by the project.

Following the sondeos, the project concentrated in developing work plans for the eight regions, adapting the research budget to the new guidelines, and training of participating technicians in methodologies of trial installation, field and experimental design, and statistical analysis and interpretation. All of these activities were carried out in selected areas of each region as pilot programs that were to be expanded as more resources and local talent became available.

In its short time, the project conducted a total of 175 research trials on such crops as beans, soybeans, tomatoes, rice, castor beans, garlic, alfalfa, cotton, onions, banana, strawberry, etc., and animal production, including dairy cows, hogs, and rabbits.

The first results under the new approach put SEAG on a stronger ground to continue developing on-farm research activities, demonstrating new crops, planting and harvesting systems, and livestock care procedures. This method differed from the STICA days in that the farmer working the experimental plot was given no information as to what the expected results could be. If the technology or seed or fertilizer or any other technical input produced a better yield for the farmer, the agent would then have the same farmer, or a different farmer in the same locale, repeat the activity and invite the rest of the community to the demonstration. Mass media was used to diffuse the new technologies, and a feedback system was established, using information from the on-farm research activities.

The eight regional centers are equipped and are using the multidisciplinary approach and on-farm-research trials. Although funding is not available anymore from SEAG to finance contract research, limited funding is available at the experimental stations to continue work on some crop varieties vital to the extension agent and his work on the small rural farms of Paraguay. SEAG pushes forward with plans to introduce and expand within the market, among other things, new varieties of corn, beans, and strawberries, and new technologies field tested under the project. SENASE is selecting and supervising the production of and conducting quality control and certification of seeds produced by private producers. A revolving fund has been established and is still operational to insure that financing is available for the production and/or purchase of quality seed.

The Small Farm Technology project has greatly improved agricultural extension in Paraguay. Ing. Agr. Juan Molinas, SEAG's Director, is hopeful that SEAG will obtain funding to establish five more Regional Centers with corresponding satellite stations under bilateral assistance from the Government of Japan which is currently being negotiated.

Ing. Agr. Juan Molinas, who began at SEAG with STICA in 1951, feels that the institution has developed into a vital Paraguayan service. The greatest contribution made by STICA was the introduction of the concept of extension work and the years of training that STICA afforded the personnel of SEAG and the Paraguayan farmers. At the termination of STICA in the late 1960's, there was a movement to disband the organizations created under the Servicio. Probably loyalty to an ideal and a sense of real accomplishment kept the various institutions from folding during the Seventies. However, budget support for SEAG was very limited until the USAID Small Farm Technology project, which provided sufficient funds to once again make significant headway in the area of agricultural extension. Ing. Agr. Molinas feels that USAID'S financial support allowed SEAG to develop into a respectable Paraguayan service.

#### Credit (1943 - 1958)

The effort to provide credit assistance to small farmers in Paraguay dates to June 22, 1943, when the GOP and STICA signed an agreement giving

STICA the responsibility for training supervisors for a supervised credit program. This program was known as "Credito Agricola de Habilitación" and, according to Dr. Pane's book, was the first supervised credit institution in Latin America. Its organization was assisted by STICA personnel which helped write the basic law for CAH. However, it never became a dependency of STICA, as was the case with many other organizations which STICA helped form.

In 1951, CAH became an autonomous agency of the government under MAG rather than continuing as part of the National Agricultural Bank. By 1953, this first attempt at reaching small farmers with a credit program had provided some 15,184 loans in the total amount of almost \$320,000. By the end of the decade of the Fifties, the program had slowed from reaching over 7,000 farmers a year to the point of reaching no more than 3,000 farmers. The last STICA disbursement for this program was made in October, 1959, and activities authorized under the original and subsequent STICA agreements ceased at that time.

In the early 1960's loan collection practices deteriorated and, without new GOP or external funding, activities at CAH ground to a near halt. In September 1979, the GOP received \$40,000 from the IDB and technical assistance from the Government of Israel. Together with renewed GOP support, this was a beginning of the revitalization of CAH, which, by 1985, had eighteen offices to assist small farm groups, and generated some interest in assisting CAH among development organizations. Among other things, since 1982 CAH has received technical assistance from the Interamerican Institute for Cooperation in Agriculture (IICA) to implement a strengthening program for its Associations of Agricultural Credit Users (AUCA), groups of farmers informally organized for receiving credit and technical assistance in production and marketing. IICA has also assisted CAH in designing a \$2.3 million loan proposal negotiated with the Fondo Financiero para el Desarrollo de la Cuenca del Plata (FONPLATA), to provide credit and technical assistance to small farmers in the Department of Caaguazú, including training of its staff and institutional strengthening of its regional office in Coronel Oviedo. Unfortunately, for fiscal reasons the Ministry of Finance refused to send the signed loan agreement to the Paraguayan Congress for ratification.

#### BNF (1964-1975)

USAID, during the Sixties, identified farm credit as a key factor necessary for increasing agricultural production. In 1964, rather than provide further assistance to CAH, USAID turned to the National Development Bank (BNF) as the counterpart agency through which loan funds were provided to help the government meet increasing credit demands generated by the national wheat and rice programs, and later, soybeans. The first A.I.D. loan to BNF was made in September, 1964, for \$3.0 million. Through this project, credit was also extended, but to a lesser extent, for peanuts, fruits, vegetables, cotton, tung, swine, dairy and aviculture. This USAID project consisted of three separate loans to BNF,

totalling \$9 million, which were sub-lent to medium and large scale farmers, grower's associations, cooperatives and colonies involved in the commercial production of agricultural products. The project also received over \$4 million equivalent from PL 480 local currency.

The project was marked by success in the increased production of wheat, despite adverse climate conditions in Paraguay for such a crop. By 1968, there were approximately thirty-five thousand hectares of wheat under cultivation, which was almost a seven-fold increase over that in production in 1965. By 1971, wheat production had risen to 45,000 metric tons, an increase of almost 500 percent since 1967. The positive side effects of this project were: (1) the introduction of hundreds of tractors and accompanying equipment, leading toward the mechanization of farming in general; (2) the mechanization and stimulation of other crops planted in rotation with wheat, especially soybeans, which commercially insignificant in 1967, became one of the leading export crops in the seventies; (3) savings of foreign exchange generated by increasing the domestic production of wheat; and (4) the general skills and experience gained by Paraguay's commercial farmers in the art of modern farming. In addition, some 30,000 tons of grain storage and drying capacity was financed under the USAID loans. In fact, by 1974, USAID had financed about 43 percent of Paraguay's total storage capacity. By the mid 1980's Paraguay had reached close to self-sufficiency in wheat.

All was not well with this project, however, and, in October 1971, USAID suspended further disbursements to BNF, pending improvement of its capitalization, as well as implementation of administration changes. BNF had accepted the responsibility of managing large sums of money without the manpower and organization to handle the distribution, supervision and collection of such funds. Consequently, funds were lent to a number of recipients who lacked the experience, land and knowledge to partially, or fully utilize the resources. This resulted in growing delinquent accounts at the bank. For some commercial farmers the sub-loans did have positive results. They increased their production and cash flow by planting such cash crops as soybeans in rotation with their wheat, and were thus able to meet their obligations at the bank. By April 1975, BNF had met USAID requirements and final disbursements were approved.

Paraguay eventually reached self-sufficiency in wheat and, for the first time in 1986 produced a small surplus. It appears, however, that the driving force came from the private sectors rapid increase in soybean production for export particularly with the opening of new areas in Alto Parana and Itapua. Wheat became a worthwhile second crop to help recover the investment essentially made for soybeans. The work of the International Center for Maize and Wheat (CIMMYT) in Mexico on dwarf wheat that led to varieties better adapted to Paraguay's adverse conditions also has been instrumental.

### Cooperatives (1965 - 1985)

With almost 80 percent of the farms in Paraguay under 21 hectares in size, in the 1960's USAID also turned its attention to the needs of the country's small farmers in terms of production and marketing credit. USAID and the MAG signed an agreement for the Development of Agriculture Cooperatives project. This project was to develop the legal and institutional framework and trained leadership necessary to establish a permanent agriculture cooperative movement in Paraguay. USAID, with assistance from United States Department of Agriculture (USDA) personnel, worked with MAG's Department of Cooperatives personnel.

The first USDA advisor arrived in Paraguay in July, 1965. His greatest accomplishment was that of stimulating interest in cooperatives and their formation. Through his efforts, and those of the advisors who followed him, the laws governing cooperatives were strengthened. (The process of strengthening the laws was somewhat impeded, however, by the first USDA legal advisor who provided short-term assistance, between October 1966 and January 1967. He drafted a new set of cooperative laws based on the U.S. legal system, rather than using the Napoleonic code which is used in Paraguay. Consequently, the law had to be revised to meet local standards).

USDA assistance provided the ground work for the USAID Rural Electrification loan project, a cooperative in Pedro Juan Caballero. USDA advisors also directly helped the Korean Sawmill Cooperative in Caaguazu, the Colonias Unidas Tung Cooperatives at Hohenau, the Tomato Federation in San Lorenzo, and the establishment of a National Confederation of Cooperatives. It helped develop short courses and seminars on cooperatives, which were well attended by representatives from IBR and SEAG, among others. Direct assistance was provided to BNF by the technical advisor, which resulted in BNF loan funds being made available to individual cooperatives. Participants were selected and sent abroad for training. All of this provided the foundation necessary for the initiation of the USAID funded CREDICOOP project in 1969. USAID funded USDA personnel provided assistance for institutional building and improving the environment for cooperative development was continued through fiscal year 1973.

USAID in 1968-69, financed advisors from CUNA International, to design a multi-staged project which would respond to the needs of the small producers and could compete successfully with the long standing informal market system of credit from shopkeepers, intermediaries, and others. The pilot stage was designed to encourage and develop the cooperative movement in Paraguay. The basic thrust of the project at this stage was the organization of new cooperatives in the country. Between 1970 and 1973, sixteen cooperatives were begun under this project, with the first one starting in Caraguatay. This cooperative, and selected others, were assisted by Peace Corps Volunteers. During this stage, and throughout the period in which USAID provided financial and technical assistance to

the cooperative movement, the individual coops were first formed, and then the process of educating the members to the services and use of the cooperative was undertaken. Today, emphasis is on first introducing the services through working with individuals and then forming a cooperative to meet the group needs in an area.

Stage two of the project was implemented in 1973, with the help of USAID-funded advisors from CUNA International, when representatives of the 16 recently formed credit unions organized Paraguay's first credit union association, CREDICOOP. The purpose of the central association was to promote the growth and prosperity of credit unions nationwide, giving special emphasis to small farmers. This occurred despite the fact that nine of the founding member cooperatives were purely urban in their make up. USAID nurtured CREDICOOP from its inception to August 1985, investing some \$4.4 million in grant funds and \$3 million in loans. Of the grant funds, \$247,000 was given to CREDICOOP in 1978 as the credit union stabilization fund. This small grant pulled the cooperative organization through a difficult crisis caused partially from a particularly bad crop season and partially from a generally poor collection on loans.

Starting out largely as classic credit unions, over the years CREDICOOP and its member institutions have expanded their scope of activities to include a broad portfolio of farmer services, including both productive and personal credit, cooperative stores for input, supply, and technical assistance from the farm plan stage through harvesting and group marketing, or in the case of cotton, actually purchasing member's crops. Originally USAID envisioned two credit institutions: CREDICOOP which was to develop an agriculture-oriented credit union system and UNIPACO which was to organize and develop marketing services cooperatives. Due to organizational difficulties, UNIPACO never became functional, and USAID assistance to that entity was deobligated with CREDICOOP being looked to as the counterpart for all areas of credit union development. CREDICOOP was thus transformed from a centralized savings and loan organization to a multipurpose cooperative. This step in the development of CREDICOOP was formalized by a change in its bylaws in 1978.

The track record of CREDICOOP and its member unions has been mixed. At the outset, flush with money, it achieved rapid growth by offering high-ratio loans, often with inadequate study and little or no collateral. Given the uncertainty of Paraguayan weather and markets, this policy inevitably resulted in high loan delinquency rates. In 1979, USAID added to the strains on the system by encouraging new and broader services to meet the needs of the members, just at the time when CREDICOOP was trying to live on its own earnings. By 1982, some 15 percent of the system overall was delinquent, with some credit unions being a full 80 percent delinquent in their accounts. The problem was magnified by two bad crop years in 1981 and 1982, and compounded in 1983, when the cooperatives brought forth a bumper tomato crop, only to find a glutted market at home and no opportunity for exporting to Argentina.

In 1979, USAID granted money to CREDICOOP for the development of the Minifundia Crop Intensification project. This project included crop research, training seminars, demonstrations, and production and marketing of vegetables and fruits. The project objective was to increase the production of food crops as well as the traditional labor intensive crops, and to reduce marketing constraints through promotion and exporting. This project grew out of the observations and experience gained, by both the USAID technicians and CREDICOOP personnel, during its previous years of working with the rural small farm members, who usually planted an annual cash crop of cotton during the September to March planting season.

To insure adequate technical assistance to the producers, who were going to shift from their traditional crops (cotton, tobacco, etc.) to more sophisticated types of crops, i.e., fruits and vegetables, the project provided for a substantial input of advisory service in such areas as irrigation, frost control, horticulture production, packaging, and marketing. Under the supervision of the horticulture advisor financed under the grant, and a research agreement between CREDICOOP and the Instituto Agronómico Nacional (IAN) at Caacupé, research were conducted on the five crops selected for production under the project: tomatoes, banana, pineapple, strawberries, and Ka'a He'e (sweet herb).

The project also included a sizeable training program for both cooperative paratechnicians, known as Ayudantes de Campo, and individual farmers. An innovative feature of the training program was the utilization of mass communication techniques for the difusion of project developed technology packages and recommended practices for the intensive production of project crops. CREDICOOP's Education Department developed a series of video tapes in both the Spanish and the Guarani languages which were utilized to create awareness of the new cultural practices and technology required to grow the new crops and illustrate specific points such as seed bed preparation, plant spacing, weed control, fruit classification and packaging, etc.

This project encouraged the farm members to take out production loans for planting during the winter season, between April and August. The bumper tomato crop was one of the results of this program. The year following the bumper tomato crop, only one farm member was willing to take the risk and plant tomatoes during the winter season. He earned enough that season to pay his debts and buy a truck. Another result was the relaxing of efforts by CREDICOOP to collect delinquent accounts and the diversion of its scarce human resources. Yet another result, due to experience, was the change in emphasis from cash export crops to crops destined for the local market, while seeking alternative channels for processing the fruits and vegetables which were not absorbed locally.

Despite the adversities and the setbacks, CREDICOOP has learned many hard lessons and had grown from 16 credit unions with 11,969 members in 1973, to 70 (17 urban and 53 rural, including rural/urban mix) with 23,967

members in 1982. At the end of 1985 there were 53 credit unions with 26,366 members, of which 5,435 are agriculturalists. According to Lic. Juan Peralta, who has been with CREDICOOP for 15 years, the small farm members receive 90 percent of the lending volume.

Lic. Peralta went on to say that he felt that USAID was instrumental in developing within the GOP an understanding that cooperatives can be a useful tool for development. Cooperatives not only assist in the economic development of their members, but also their political development, through the process of democratically electing the director for each cooperative. The directors are learning that they must inform the associates and provide accurate records and accounts. If USAID had not been involved in the credit union movement in Paraguay, he felt the movement would still be very weak and the existence of CREDICOOP questionable.

#### Colonization (1960 - 1983)

Colonization programs in Paraguay date back to at least 1926 with the establishment of the Department of Land and Colonies which became the Agrarian Reform Institute in 1951. The present day institution responsible for colonization, called the Instituto de Bienestar Rural (IBR), was created by Law 852 on March 22, 1963. USAID and predecessor agency involvement in the national colonization movement in Paraguay was marginal. Support included some technical assistance for improving the IBR's organizational ability and the production of relevant studies. One such study, Land Tenure Problems in Paraguay, was written in 1960, by a U.S. Department of Agriculture technician who was working with the IBR.

In 1964, USAID contracted Walter L. Crawford to study Paraguay's colonization institution, IBR, and its programs and give recommendations as to any further assistance the institution might require. Mr. Crawford noted in his study that the IBR had 293 employees with 28 located in twelve departmental offices, six in colonies, and the remaining 258 working in the central office. Most of these worked in the accounting and titles departments. He pointed out that most colony administrators received 10 percent of the land payments rather than any salary, and they were not included on the personnel lists. He suggested that assistance should be given to IBR to help in expanding and developing IBR's technical staff, the functioning of which would be to make soil surveys and subdivision plans for new colonies. Studies done earlier by SPICA, particularly a preliminary classification of the soils and lands of Paraguay completed in 1954, were potentially of immense help to IBR in its mandate to develop agricultural colonies in Paraguay.

His ideas and suggestions included the implementation, in at least one colony, of a pilot project to include building roads and houses and helping to clear land for farming. He also felt that the USAID Food for Peace commodities, which were being supplied to the colonists, could be used in the pilot project scheme. He noted that, prior to 1961, there

was little repayment by the colonists for the lands they acquired through IBR. With the implementation of the "provisional title" program, whereby the colonist had to pay for his land before he could receive clear title and officially register it, timely payments for the land improved.

The penetration roads opened with USAID assistance during the 1960's, also contributed to the development of IBR's colonization program. Most of the outside assistance to IBR, however, was provided by IDB and other international donors. USAID continued to recognize the importance of the national colonization program for the small farmer through monitoring its progress in various reports on the agriculture sector and encouraging assistance from other national organizations, such as SEAG and IAN, with which it was working.

The USAID's "Annual Budget Submission, FY 79" states, "The land registration system in Paraguay is at the root of one of the basic problems affecting the social and economic well-being of a large portion of the country's rural population. That problem is one of a widespread lack of clear land titles, resulting in precarious land ownership situations and the existence of a large class of secondary tenancies. The situation in recent years has worsened rather than improved as a consequence of programs undertaken by Paraguay's agrarian reform agency (IBR). In establishing colonies, IBR has neglected to set up an adequate system of record keeping. As the 1974 AID-funded cadastral survey (see Chapter 7) has discovered, the majority of recipients of 'provisional titles' from IBR have failed to register these titles in the real Property registry, as required by law, often with unfortunate consequences.

In the late 70's and early 80's, USAID's projects Legal Rights for Rural Women and Legal Aid to the Poor, helped educate the rural population in terms of legal rights and helped to solve some of their legal problems. Many of the problems addressed by these projects were land tenure related. The Legal Aid project was carried out by the School of Law of the National University of Asunción under the direction of a special unit headed by agrarian law specialist, Dr. Carlos Fernandez Gadea. The unit is still functioning with the equipment, furniture, and two field vehicles provided by A.I.D. Every year law students continue to receive practical field experience in assisting rural and urban poor solve their legal problems, including land tenure concerns.

USAID's other involvement with colonization in Paraguay was through its financial assistance of almost \$1.0 million to the Mennonite Colonies in the Chaco from 1957 through 1962, and its later program, in 1978, for assistance to the Indian settlements. The Mennonite Colonies are now thriving enterprises, due in large part to the dedication and hard work of the colonists. The Indian project was developed in conjunction with the Mennonite/Indian Développement Organization and improved community services to 10,300 Indians living in the central Chaco.

### Forestry (1943-1963)

For many years forestry ranked second, after beef and meat products, as a foreign exchange earner, and, therefore, was of importance to the GOP and STICA. STICA's involvement in forestry started as early as 1943, when STICA began numerous studies, which dealt principally with the utilization of the country's vast forest resources, and a survey of the existing forest industries. STICA also provided the industry with assistance in locating new markets and possible new species, and in introducing modern practices and equipment.

In 1958, STICA established a tree nursery at the Caacupe Experiment Station for the production and sale of seedlings. Parana pine and black wattle seeds were introduced during its first year of operation. By the end of 1960, eight coniferous and two hardwood species had been introduced, and thirty additional species were in the process of being introduced. Eucalyptus seedlings were sold annually for planting on farms. STICA's contribution included the provision of forestry advisors, participant training, funding of forestry studies and the introduction of new forest species. USAID continued to provide some assistance to the forestry industry throughout the Sixties, providing technical advisors who worked with the forest tree nurseries, first in their establishment, and then in the utilization of the product. USAID assistance in forestry gradually tapered off in the mid 1960's as the United Nation's forestry program got underway.

The GOP, in 1952, founded a branch nursery and experimental station at Capitan Miranda to serve the Encarnación area. This station was to provide nursery and forestry seedlings adaptable to Paraguay as well as extend the experimental work done at the IAN in Caacupé. Although the Capitan Miranda nursery predated the STICA nursery, it was not until 1969 or 1970 when, with the help of PL 480 local currency, that the station at Capitan Miranda became fully functional.

### Environment

With a \$180,000 A.I.D. grant signed in August, 1984, the International Institute for the Environment and Development (IIED) and the Secretaría Técnica de Planificación (STP) produced the first country environmental profile for Paraguay. The profile was published in its Spanish version in June, 1985. The English version was published in December of 1985. This document and a two day workshop to present its results stimulated greater awareness of the threats to Paraguay's environment and prompted action on several fronts. Japanese bilateral technical assistance is being furnished to help overcome the pollution problems of Paraguay's most famous lake, Ypacarai, an important tourist center. A private foundation to promote conservation of Paraguay's forestry resources has been formed and has received assistance from the World Wildlife Federation. Another foundation, to work on a wide array of environment issues and public awareness is in the process of being formed. The U.S.

PVO, The Nature Conservancy is working closely with this new foundation assisted with a small grant from A.I.D.'s new Advanced Developing Country (ADC) program.

### Training (1943 - present)

In 1943, Paraguay had a severe shortage of persons with mid-level and advanced training in agriculture. In-service training, therefore, was one of STICA's major objectives, and in fact, was STICA's project "number one". There was a real need to fill the gaps in all areas of agriculture. Training was provided in the areas of seed improvement, soils and soil analysis, agriculture extension, supervised farm credit, veterinary medicine, livestock management, milk production, range cattle development, artificial insemination, pasture improvement, biometrics, plant breeding and seed multiplication, crop production, economics, and forestry. Additionally, field days, tours and short courses were held for trainee and producer groups, most often at the National Institute of Agronomy and Barrerito Ranch, as these represented the most complete examples of improved farm management and livestock management practices in Paraguay.

Over 1,000 Paraguayans completed courses conducted by STICA under its training project. Graduates went on to staff the many STICA projects in operation, practiced private farming and ranching, or were employed by government agencies. The "Master Program Book Submission, FY 58-60" states that "with the exception of the Minister of Agriculture, who was a political appointee, all other top jobs in the Ministry were held by STICA-trained personnel". When STICA was terminated in the late 1960's many of its well-trained personnel were incorporated into the Ministry of Agriculture (MAG). The A.I.D. participant training program initiated in the Sixties also gave high priority to training in this sector. U.S. bilateral assistance funded the training of over 300 Paraguayans in the agriculture and livestock. (See Chapter Eight)

USAID and its predecessor agencies were also helping to develop the mid-level agricultural trainees through projects involving secondary agricultural schools. These projects included the materials and technical support made available to ENAME, the MAG's regional agricultural school in San Lorenzo, in the early 1940's. During the 1960's USAID provided technical and financial assistance for the development and implementation of vocational agricultural education programs carried out at the Ministry of Education's regional education centers in Encarnación, San Lorenzo, Concepción and Villarrica, and the high school in Pilar. A.I.D.'s ADC program continues to demonstrate its interest in providing training to young Paraguayan agriculturalist by providing financial support to the Salesian Agricultural Institute at Coronel Oviedo. The project is assisting the school in expanding and improving the use of its 3,000 hectares of land; improve the quality of education through improving the curriculum and teaching staff; and improve the school's financial planning and management. Peace Corps is participating actively in this effort.

CHAPTER THREE - EDUCATION AND TRAINING  
(\$18,259,000)

Overview

Education is the third area in which the United States and Paraguay developed bilateral development programming. Educational projects were developed under the auspices of the jointly funded Servicio, known as the Interamerican Cooperative Education Service, in English, and referred to as SCIDE. SCIDE was established in 1945 for the purpose of providing assistance and guidance to the Ministry of Education and Worship (MOE), which was established by law on August 13, 1943. The specific mandate for SCIDE was established in the basic agreement and subsequent agreements signed by the Government of Paraguay (GOP) and U.S. Government (USG). Its goals were to: a) develop vocational education within Paraguay; b) improve the teacher-education program for teachers of rural Paraguay through development of a model rural normal school, through a program of in-service teacher education and through the writing, production and distribution of textbooks, manuals, reference books, professional articles and other teaching aids; and c) strengthen the MOE in organization and personnel. According to Dr. Ruben Ramirez Pane's study of U.S.-Paraguayan development cooperation, SCIDE "was the office of technical and financial assistance from the exterior which collaborated for the greatest length of time with the Government of Paraguay during all its national history and that which most penetrated the Paraguayan village" in the area of education. "Its work constituted a model of assistance between a developed country and a developing country."

SCIDE was officially terminated in 1962 and a new project, Rural Education Development (REDP), was begun by joint agreement between USAID and the GOP. REDP, using SCIDE personnel, took up where SCIDE left off. It had as its objectives to: a) further upgrade the qualifications of elementary, secondary, and vocational teachers; b) provide additional classrooms in rural areas; c) provide additional educational materials; and c) effect administrative improvements in the Ministry of Education. Interspersed with SCIDE and REDP activities in primary, secondary and vocational education, were projects carried out at the National University, the Catholic University and the American School in Asunción. REDP was followed by the first external loan project developed with the MOE, known as the Education Development Program. This A.I.D. project was carried out along the lines of the preceding REDP and SCIDE projects, only with emphasis on the MOE implementing the project work and USAID assisting in an advisory capacity. In 1978 the Bilingual Education project was initiated to address the high dropout rate of the Guarani speaking children.

Major constructions and accomplishments under these projects were:

Technical Vocational School  
San Lorenzo Rural Normal School (now the Regional Education Center)  
In-Service Education Center, San Lorenzo  
Curriculum and Materials Center, Asunción  
Regional Education Centers: San Lorenzo, Villarrica, Concepción, Encarnación, Puerto Presidente Stroessner, Pedro Juan Caballero  
Nineteen elementary schools refurbished  
Forty-two new elementary schools  
Pre-service education program  
Bilingual Education Project  
American School of Asunción

SCIDE began its work by establishing the project of General Administration as project number one in October of 1945. This project was continued through the termination of SCIDE in 1962 and was responsible for handling the financial and administrative business of the Servicio. REDP likewise had an administration department as part of its project program. This department had 20 employees and was responsible for custody of all assets received. The funds received from the two Governments and other income generated from the operation of the projects were deposited in a special account at the Central Bank of Paraguay for use in the education projects. REDP, in effect was a disguised way of continuing elements of the Servicio concept. This new hybrid approach did not work smoothly and there was a high turnover rate in U.S. staff, with resulting mutual frustrations.

#### Vocational Education (1945-1979)

Technical Vocational School (1945-1968) - After developing its administrative department, SCIDE undertook in 1945, as its second of eleven projects, the development of a Technical Vocational Education project. The immediate objective of the project was the establishment of a Technical Vocational School in Asunción which would supply the shops, tools and manpower necessary for the training of skilled and semi-skilled workers for: (1) the industrial development and growth taking place in Paraguay, and (2) the maintenance and repair of modern industrial and domestic machinery and equipment. The Vocational School, built and equipped by SCIDE, began operation in March, 1948 with seven shops and 257 students enrolled. The purpose of the school was threefold: (1) demonstrate methods of operation and training based on U.S. trade and industrial education; (2) train instructors from among competent tradesmen in the crafts; and (3) develop Paraguayan administrative personnel. IIAA technicians instructed in each department, while SCIDE selected and trained the Paraguayan personnel. The director of SCIDE became the director of the school.

The first class was graduated from the "Pte. Carlos Antonio Lopez" Technical Vocational School in 1950, when 39 students completed the three year course. The USAID Master Program submission, FY 59/60, states, "All graduates of this school are working either within existing businesses or have started small businesses of their own in the field in which they were trained. The physical plant of this school meets all the standards of the same type of school in the U.S. Its teachers are all Paraguayans having outstanding ability in their fields." In his end-of-tour report in 1963, the Industrial Arts Education Advisor for USAID wrote, that he had "arranged for the transfer of the Escuela Tecnica Vocacional to the Ministry of Education for complete control and operation". After a period of 13 years the supporting contributions of the U.S. Government ceased.

A special event during the development of the school was the building of the machine and welding shop by the Industrial Union of Paraguay. This organization of industrial and business leaders was united in support of the Vocational School and looking into ways to support and help the school. SCIDE assisted the Union's initiative by supplying the equipment for the machine shop, and providing trained staff. Graduates from the school were a human resource asset to the Union, as this school produced the best trained young tradesmen in the country.

The school gave special assistance to developing short courses for training tradesmen for specific tasks when the need arose and time permitted. One example of this was the training of 19 CORPOSANA (the government water supply entity) employees in pipefitting. The city water system was being installed, and CORPOSANA needed specially trained people to make the house connections. The school plumbing shop very quickly organized two special two-week courses in pipefitting to provide the necessary training. Another example was the help the Technical School's Graphic Arts Department provided to the Curriculum and Materials Center when the Center was trying to locate and organize the materials it needed to produce its first publications.

On December 14, 1964 an agreement was signed between the Technical Vocational School in Asunción and the Rural Education Development project (REDP) being carried out by USAID and the MOE. The agreement contracted the Vocational School to manufacture furniture for the Regional Education Centers being developed by REDP. The designs for the different types of furniture required of the various educational levels were prepared by the USAID's Agriculture and Industrial Arts Education Advisor. The agreement called for the students at the Vocational School to build the furniture, while REDP was to buy the lumber. The students attended classes half a day, and then some worked on the contract the other half a day. This was a mutually beneficial agreement for all parties involved. The students received pay for their work, as well as practical experience and training in the building of furniture on a large scale. REDP was able to have this large quantity of furniture made at a cost far below what it would have cost on the open market.

Under this project the Vocational School manufactured chairs of various sizes and types, double benches, drawing tables, shelves, wardrobes, desks, library tables, bulletin boards, magazine shelves and home economics tables. The pieces of furniture, as they were manufactured, were kept unassembled at the school and packed in bundles to be shipped to and assembled at the various centers. This reduced volume and shipping costs. As each Regional Education Center was finished and ready for the furniture, it was assembled at the center by the instructors of the Vocational-Agriculture courses. Furniture constructed and assembled under this project was distributed as follows: 2000 units each at the centers in Encarnación, Villarrica, and Concepción, and 1500 units at Pilar.

By 1962, the original teaching staff of eight had grown to 20, of which 17 had received specialized training in the U.S. or Puerto Rico. By the same time, 38 scholarships for specialized training in vocational education in other countries had been granted to various tradesmen and students. Today, the school has a staff of 67, of which 27 are instructors. Between 1978 and 1984, at least 34 members of the staff went to Japan for additional training or to attend seminars in administration and vocational education. Japanese assistance also improved the school's physical facilities substantially. In 1985 187 students graduated from the current 11 month, full-time program consisting of 1,700 hours of instruction with classes being taught from 7 a.m. to 3:30 p.m.

Concepción (1958) - By 1958, vocational and pre-vocational courses were being offered as electives at in the National High School in Concepción. These same courses were offered in the evening to adults of the community. Funds for building the necessary shops were provided by the residents of the town and Phillips Electric Company. Equipment was provided by ICA, the predecessor agency to A.I.D. The industrial arts teacher for the school was trained at the Asunción Vocational School. In 1959 the school enrolled 170 students in these courses, including adult night classes. The process of developing pre-vocational courses for the high school, middle school and upper primary grades was continued by USAID throughout the sixties and into the early 1970's. Of special note were the agro-industrial programs developed in connection with the Regional Education Centers and the school in Pilar.

Salesian Vocational Institute (1977-1979) - USAID continued to show its support and interest in vocational education, not only through developing pre-vocational courses for the high schools and primary schools at the Regional Education Centers, but also through a one and a half year project begun in 1977 with the Salesian Vocational Institute in Asunción. The \$96,000 USAID grant was combined with other donor funds which totalled over \$294,000. These funds were used to construct new facilities at the Vocational Institute, train instructors, provide for

maintenance costs of three volunteer instructors from Italy, and provide new machinery and equipment to the Institute. The Peace Corps provided two qualified volunteers to assist in developing new shop courses and curricula at the Institute.

The final evaluation in 1980 showed that the Institute exceeded the expectations of the project design, and permitted savings that were used to expand existing facilities not originally contemplated. The vocational school's new facilities allowed for increased enrollment to a maximum of 320 students. In practice, enrollment increased from 156 students in 1977 to 296 students in 1980. Correspondingly, the number of graduates increased, and, because of the improved quality of instruction, the demand by the private sector for these graduates increased also. A follow-up study by the Institute showed that about 90 percent of its graduates were employed in the field for which they were trained. Moreover, in some specialties such as electricity and carpentry, some students were approached by local businessmen before they graduated. The student body, which had increased dramatically over these three short years, was comprised of some 50 percent who had not finished their primary schooling.

In 1986 the Institute enrolled 360 students. Currently all students enrolled have at least a primary education, with most of the students having completed through the ninth grade and some already holding high school diplomas. These students are studying for careers in electricity, general mechanics, printing or refrigeration, and receive either a technical degree or a high school diploma which states their area of expertise. The latter degree is a recent improvement in the recognition of the education being given to students at the Institute. The Institute has a tuition policy for those desiring to earn the high school diploma, in addition to the technical degree, paying 20 percent more than those taking evening classes to receive a technical degree. By U.S. standards, the tuition is nominal and actually only covers about 40 percent of the Institute's expenses. In Paraguay, where tuition is a rarity, the acceptance of the idea and the demand for schooling at the Institute is quite unique. There is a scholarship program for those who can pass the entrance exams, but are too poor to pay the tuition.

#### Adult Education (1975-1978)

The U. S. Government was marginally involved with adult education as early as 1958 when ICA provided assistance, which included evening classes for adults, to the National High School in Concepción. However, education for illiterate and semi-literate Paraguayan adults was not formally addressed by USAID until 1975, when a project called "Rural Non-Formal Education" was undertaken with the Servicio Nacional de Promoción Profesional (SNPP), a semi-autonomous organization under the Ministry of Justice and Labor (MJL). The project was the first phase of

what was planned to be a two-phase grant activity. Due to the non-availability of funds, the second phase, which was to extend the pilot stage to nationwide levels, was never implemented.

The purpose of the project was to establish within the SNPP a capability to conduct vocational and semi-vocational training programs oriented to rural illiterate and semi-literate adults who had limited access to training opportunities. To successfully accomplish this the project was to: (1) train technical staff--eight instructors and four materials production specialists; (2) produce training packages in six selected content areas; (3) prepare training materials such as manuals, flip charts, tapes, etc. and (4) develop an institutional implementation guide including budget and organization recommendations.

According to the final project evaluation, written by USAID, in June 1980, SNPP, which received its last funding in 1979, had successfully carried out the project and achieved most of the planned outputs and targets. Project efforts were concentrated on home management, basic agriculture, livestock and poultry, and small farm development. The instructors worked in two groups. In all, 29 specialized courses were developed in these four subjects during the life of the project with four more added later. The evaluating officer was impressed with the SNPP staff's ability to identify specific needs in the communities and produce teaching materials relevant to the groups being addressed. He was also satisfied with SNPP's ability to train other trainers. Training sessions were held and evaluated for personnel from the "Dirección de Promoción Social de la Mujer Trabajadora" of the MJL, extension agents of the SEAG and trainers of the Peace Corps Volunteers. These training sessions have been discontinued since the termination of USAID participation.

After USAID ended its participation with the project, SNPP encountered some slowdown in its progress because of financial and bureaucratic changes in the structure of the program. The four materials production specialists were transferred to SNPP's art productions department, where they have continued to produce materials for adult education as well as materials relevant to other SNPP programs. In 1985 SNPP received a \$5 million loan from IBRD to continue its work in areas outside of Asunción.

USAID continued to provide assistance to improving the vocational skills of Paraguayans by signing a two year grant agreement with the private voluntary agency, Consejo Nacional de Entidades de Beneficencia (CONEB), in 1977. CONEB, a charitable organization, worked with the physically handicapped, and with their mothers or other female relatives, and with others from impoverished backgrounds who had no other means of improving the quality of their life or that of their families. USAID provided the funding and guidance which gave CONEB the increased capability to carry out a more development oriented program. The proposal was to systematically plan, supervise and evaluate income-generating activities among its affiliates. The affiliates, in turn, were to successfully implement all subprojects planned under the grant.

CONEB, with its staff of six full time professionals, was able to implement the 20 planned subprojects with 22 workshops in the fields of dressmaking, carpentry, handicrafts, gardening, etc. At the end of the project, USAID concluded the staff had sufficient background and experience to continue carrying out development activities of a similar nature. Also, by the end of the project in 1979, about 70 percent of the subprojects had reached a self-financing level and were capable of continuing operations on their own. The remaining 30 percent still required technical and financial inputs from CONEB in amounts that were within the capability of CONEB to provide.

#### Materials and Curriculum Development (1954-1984)

SCIDE personnel found that outside of Asunción normal schools with their adjacent elementary schools were inadequately staffed, often by teachers of sub-standard qualifications. They also found that books and other instructional materials were almost non-existent in both the demonstration schools and the normal schools. Basic textbooks did not exist in most elementary school subjects and those available were produced according to outmoded theories. Supplementary texts did not exist in any subject area, recreational readers were not available and there were no games or other manipulative materials. Audio-visual aids were lacking and professional books and pamphlets for teachers were generally unavailable. The Paraguayan teachers needed instructional and guidance resource units, including teaching aids such as maps, globes and reading charts, however not a single resource unit existed in the country.

To assist the MOE in meeting the need for textbooks and school materials, SCIDE helped develop a Curriculum and Materials Center in Asunción, which went into operation in 1956. The Center was to play a major role in training teachers to prepare and revise courses of study. It was to produce large varieties of instructional materials such as bulletins, units of work, manuals for teachers, guides for teaching and philosophical materials, and in writing curriculum materials including some textbooks. By 1959 the Center had conducted a six week seminar in writing children's educational material, and numerous workshop programs for teachers. In addition, the staff prepared supplementary readers, a children's picture dictionary and various teacher manuals. Fifteen Paraguayan teachers, assisted by the Center's staff, rewrote the curricula for the first six grades of Paraguay's school program.

Another undertaking by the Curriculum and Materials Center was the creation of a Children's Bookmobile, which was supplied with copies of the supplemental readers, textbooks, and storybooks. The bookmobile went from town to town, visiting the school districts on the outskirts of Asunción, in an effort to stimulate interest in reading. This program was well received, but literally ran out of gas within a few years after the termination of SCIDE. The Center also created a micro-museum of science which accompanied the bookmobile. Funding for the gas and

maintenance for the micro-museum was no longer provided after the termination of SCIDE.

Despite advances in the area of materials production, the Center was not having a country wide impact due to insufficient budget support for the project. USAID's "Master Program Submission Book, FY 59/60", repeated in the FY 61 submission, said, "A major problem allied with the materials shortage is the financial inability of either the Paraguayan Government or SCIDE to produce and distribute completed materials to teachers and school children in sufficient quantity to result in improved education. The Host Government seemingly cannot bear the cost of providing free texts to children or professional materials. The end result is simply that new instructional materials produced by SCIDE or the Ministry of Education find their way into only a very small percentage of the classrooms in Paraguay. Until this situation can be remedied, Paraguayan educators will be seriously handicapped in providing an adequate education for their young people." The USAID document went on to recommend, "A SCIDE program for increased production of textbooks for children and professional materials for teachers. This involves doubling the present staff of six full-time writers at the Curriculum Center and planning for increased materials production by the staff at San Lorenzo Rural Normal School. The same action should be taken for the staff of supervisors in the in-service training program. Every SCIDE professional person should spend some time on materials production." SCIDE was phased out in 1962 and a new project, Rural Education Development (REDP), began. REDP continued to use, and provide support for, the Curriculum and Materials Center.

Under SCIDE, the main activity of the Curriculum and Materials Center had been the development and production of supplementary readers. The Center also produced some textbooks, trained teachers in the utilization of the materials and books produced, and trained writers. From June 1962 to the termination of REDP in December 1967, major emphasis was placed on textbook production for the primary grades of rural schools, and production of the accompanying teachers' manuals. Also during this period, emphasis was placed on the development of vocational-agriculture curricula introduced in the middle schools and high schools at the Regional Education Centers and in Pilar. U.S. specialists were brought to Paraguay by USAID to conduct seminars on the subjects of writing and production of textbooks, teacher manuals and vocational-agriculture materials. The seminars were for writers at the Center, in-service supervisors and Paraguayan teachers. The first group to use the vocational-agriculture materials graduated from high school in 1972.

In 1963, a national survey was made on the availability of books and audio-visual materials in elementary schools. From this survey it was determined that there was a tremendous need for additional textbooks in the schools. The total number of books printed from 1955 to 1967 was 592,100 copies of 60 different titles. Of these, 135,050 were produced

by SCIDE at a total cost of \$15,070. The remaining 457,050 books were produced by REDP at a total cost of \$42,200. All of these books were written by Paraguayan authors employed by the Curriculum Center. These were distributed free of charge to schools in rural areas. In addition, 39,087 books, which cost \$18,574, were purchased from the Regional Technical Assistance Center (RTAC) in Mexico by USAID between 1964 and 1967, for distribution to schools in Paraguay. In spite of these efforts, there remained a great need for books, especially in the rural areas where many schools had only one or two books for an entire class.

In the "Report to the Ford Foundation on Education in Paraguay", September 1966, Daniel J. Socolow summed up the situation in the following manner: "Minimum supplies and equipment are lacking in almost all Paraguayan schools. This situation is particularly serious in the rural schools where blackboards, maps and paper are rarely found. The Ministry of Education allocates very little for the acquisition of this material, most of the Ministry's funds allocated for supplies are used for the acquisition of furniture. USAID, under their now defunct program for rural education, had established a Curriculum Center for the dissemination of educational supplies; because of lack of Ministry support and interest, little was accomplished. UNESCO, 1962, began a program of technical assistance for large-scale production and dissemination of educational aids; because the Ministry has again failed to cooperate substantially, the program has not been fully implemented."

Despite the apparent lack of success at developing a permanent, well funded system for production and nation-wide distribution of textbooks, supplemental readers, etc., USAID continued to assist with the production and acquisition of educational materials. One example of this help was when USAID started a cooperative book program with the MOE, in 1970. USAID provided \$3,000 and the A.I.D. sponsored Regional Technical Aids Center (RTAC) provided a matching \$3,000 to establish a fund for the purchase of teachers guides and reference books. These books were requested by, and sold to, primary and secondary teachers. The recuperated funds were then used to purchase additional books for the teachers. This program, which is the only surviving RTAC-USAID project in Paraguay (see Chapter Four-Textbooks), has continued, despite the termination of the RTAC program in the mid-1970's. MOE staff responsible for the program looked for alternative book distribution centers. At its inception, people from the MOE and the USAID traveled from school to school, around the country, informing the teachers and taking requests. The teacher was required to make a 25 percent deposit on all books requested. Today, the system lacks funds for promotion and promotional travel, and teachers have to come to the local distribution center to buy books and make requests. Because of financial constraints, partially due to the fluctuating exchange rate, the program is run on a cash-and-carry basis. The program is used mostly by MOE personnel and teachers working in the capital city, and turns over between \$5,000 - \$6,000 a year.

Those maintaining the roll-over funds feel that the program could again reach the more rural areas of Paraguay if some program promotion were done.

Between the termination of the REDP program, in 1968, and the signing of an A.I.D. loan agreement for the "Education Development Program", EDP, in 1970, USAID provided both long- and short-term consultants to assist the MOE in writing the loan application and in evaluating the educational system for primary and secondary schools in Paraguay. A goal at the MOE, which was incorporated into the new USAID loan project, was to redirect and restructure the Paraguayan educational system for primary and secondary schools through the development of new curricula and teaching methods appropriate to the needs of the country. Concurrently, the MOE took an interest in reorganizing the Curriculum and Development Center, giving it more autonomy and encouraging its role as a support agency for other departments and programs in the MOE. The loan project assisted in this reorganization.

In an evaluation of the REDP written in August 1972, it said, "Report concludes that project developed slower than anticipated with significant delay in textbook production program. MOE has not completed production of first of 18 titles, with most manuscripts as yet incomplete or even unplanned. The program did not take into account insufficient capacity/poor organization of MOE printing shop." It also reported that the imported paper and cardboard sheets provided by this project were not being properly stored nor adequately inventoried.

Headway, however slow, was being made, and a special evaluation report, written in May 1973, stated "The new curriculum is an excellent piece of work." The development of this new curriculum was initiated in 1971 with the assistance of a long term loan funded advisor, later succeeded by a grant funded technician. The final report, in August 1976, stated that the MOE, although having started, had not completed the work of introducing the new curriculum which had been developed for all courses of study for grades 1 through 9. It was felt that a plan needed to be developed to coordinate work on textbooks, teacher training and the new curriculum because all three elements were necessary to the implementation of the new curriculum. The report stated that the mission and the contractor were remiss on this. Printing and distribution of textbooks and teacher manuals for the primary grades was wrapped up in 1985, with 1,198,212 textbooks and 81,000 teachers manuals having been distributed since 1972.

The Curriculum Center and the development of educational materials were important components of the USAID's Bilingual Education project (discussed below), which was carried out between 1978 and 1984. In May 1982, a project evaluation was written which said: "41,000 specifically Paraguayan curriculum materials have been developed; a new functional Department of Curriculum has given the MOE the capability for countrywide implementation of Bilingual Education; a six-member steering committee

has been directing the project." The materials developed under this project were: (1) a 177 page manual for teachers, (2) first and second grade workbooks, (3) a reading and writing book, and (4) a math workbook. Also, the project developed cassettes in Guarani for the first through third grades.

In 1954, a "Mass Communication" project was developed to provide publicity for Point Four projects and to introduce the GOP to the potential use of audio-visual (AV) materials in its various ministry operations, including the MOE. An AV committee was formed, with representatives from the three Servicios, from the Ministries and other GOP agencies, and from the National University. Thus an AV Production Center was established. Although the Center had managed to assemble considerable equipment and train five people in AV skills by 1959, its hands were tied because of political considerations, inadequate financial support and a lack of spare parts to repair inoperative equipment.

It was decided in 1959 to increase USAID advisory support for the project in order to help SCIDE develop an AV capability working in conjunction with the Curriculum and Materials Center to produce materials for primary and secondary education, particularly in the rural areas. The project activities provided were integrated into the USAID Mission in 1963 as part of its technical support for projects as well as its own in-house "public relations" needs.

### Primary Education

Introduction - The 1959 population census estimated that only 39.6 percent (109,756) of the compulsory school age children (7-14) were attending school. The elementary school children only attended half day sessions, with the schools providing two or three sessions a day due to a lack of facilities. The number of classrooms and teachers would have had to double to provide even the minimum required facilities. Literacy was claimed for 68 percent of the population, but only 61 percent of the population was supposed to have had some primary education, according to the 1959 census. As primary education was taught in Spanish, this latter figure correlated more closely with the figure of 40 percent listed for persons who spoke only Guarani, and therefore, were presumably uneducated. Some observers in the 1950's felt that functional illiteracy was considerably greater than 40 percent, and that it was concentrated in the population group which normally spoke only Guarani.

Nearly 30 years later, the FY 1980 USAID "Annual Budget Submission" stated, "An estimated 90 percent of rural Paraguayan children entering school are monolingual speakers of Guarani, an indigenous Indian language. Almost all classroom instruction is given in Spanish. The difficulties rural children experience in learning Spanish contribute to the very high rate of dropouts and grade repeaters in rural schools." Figures on dropouts from primary school between 1955 and 1969 were reported in "Alliance for Progress and Paraguayan Education" by Herbert

Reeves. The report indicated that of the 116,446 students who entered primary school in 1955, 106,634 (almost 92 percent) dropped out by 1960. The report went on to say that of every 100 children of school-age, only 4.09 percent complete the primary cycle, with 55 percent having dropped out before entering the third grade.

Training, a primary concern in both the agriculture and health Servicios, was a mandate for SCIDE in the field of education. The SCIDE technicians needed to start by training teachers to be teachers. In Paraguay, as in many other countries, teaching was a profession taken for granted. There was a basic premise that if a person had graduated from a course or a grade, then that person was qualified to teach that course or grade. The Department of Statistics of the MOE provided information on primary teachers in 1955 which indicated that of the 9,111 primary school teachers, a full one-third of those teaching had no more than three months of summer courses beyond the sixth grade. More than 58 percent of the teachers fell into the category of teachers with one year of education beyond sixth grade plus a few extra courses or less. The top category of teachers, those with two years of higher education, was comprised of ten percent of the group, with most of those teaching in either Asunción or Encarnación. There was a serious shortage of trained teachers employed in the rural areas where 82 percent of school-aged children lived.

Education in Paraguay with its high rate of attrition and plagued by the lack of quality teachers, was further crippled by an ineffective curriculum, a lack of classrooms, a lack of materials, supplies and books and a very serious overcrowding problem. In 1959 USAID described the rural classroom as damp, dreary and crowded, with many schools having as many as fifty children in one room. All primary school teachers were poorly paid part-time employees, with many teaching a morning and afternoon session, and in some cases teaching a session at night in order to make ends meet. Other teachers met their financial needs through holding a second job outside of teaching. Supervision for schools and teachers, with corresponding in-service training, was also sorely lacking in the system.

In Service Training (1951-1966) - SCIDE entered the primary education subsector in 1951 with a project for training supervisory Paraguayan teachers who, in turn, would provide in-service training for elementary school teachers. Most of the supervisors were trained through a U.S.-funded scholarship program at the San Lorenzo Educational Center, which was later housed at the SCIDE-built Normal School in San Lorenzo, a suburb of Asunción. Supervisors trained in San Lorenzo, who were not absorbed by this project, were often employed by the MOE in positions of responsibility in various schools throughout Paraguay. Some of the supervisors, as well as key MOE personnel, were sent to the U.S. and other foreign countries for higher education. The supervisors, all qualified teachers with at least one year of additional training, gave in-service workshops in such areas as: the development and production of

instructional materials for elementary education, the introduction of modern educational practices, the revision of the school curriculum to upgrade the level of instruction, and the development of studies, experimentation, investigation and dissemination of the information which could improve the quality of elementary education and the economic and social status of the teachers.

By 1958, SCIDE had a staff of 25 trained supervisors working in eleven normal school centers. (In the USAID documents, for unexplained reasons, the number of supervisors and corresponding number of normal schools with which they were working changed from year to year, with a maximum of 30 supervisors working in 12 normal schools). Normal Schools were charged with the responsibility of training teachers in modern educational practices, child growth and development, teaching of reading, nutrition, social studies and school administration. In the Fifties, there were basically two types of normal schools: (1) those for "professors" which provided eight years of education beyond the elementary school level, and (2) those for "teachers" which offered five years of education beyond the primary level. The SCIDE supervisors concentrated on in-service training of teachers in the elementary demonstration schools attached to all the normal schools. They also directed workshops and seminars for teachers in nearby schools.

The in-service training project was continued under the Regional Education Development Project (REDP) when SCIDE was terminated in 1962. Under REDP the in-service training expanded to include a nucleus of schools outside the immediate vicinity of the San Lorenzo normal school. The USAID Elementary Education Advisor from February 1963 to January 1966, worked with the project until it was transferred to the MOE. Excerpts from her end-of-tour report severely criticized the near demise of in-service training through the transfer of many of the trained supervisors to other departments, the reassignment of the A.I.D. financed vehicles to other individuals, the lack of financial support from the MOE, and poor planning and administration within the MOE.

San Lorenzo/Teacher Training (1952-1965) -- In March 1952, SCIDE established an experimental elementary school at San Lorenzo to supervise practice teaching for Paraguayan elementary teachers in newer methods of instruction, as well as give training in community cooperation and services. The staff of the school was trained through the same scholarship program as the supervisors for the in-service training project. This project provided primary education for children and was a pre-teaching program for students aspiring to be elementary teachers. By 1954, over 40 education students had received training at the experimental school. This project also prepared teaching materials on: the philosophy and objectives of education; the organization and administration of elementary school supervision; the training of teachers; child study; and the teaching of reading, language arts, social studies, physical education and health. A professional library was established and contained selected books in Spanish and English.

Conferences were conducted for teachers of the other public and private normal schools in the country.

On June 29, 1954, a project agreement was signed for the construction, equipping and operation of the Rural Normal School in San Lorenzo. The GOP contributed 14 acres of land, on which the school was built, and annexed the land and buildings of the experimental elementary school called "Franklin D. Roosevelt". Construction started in April 1955 and was completed in April 1956. During the execution of this project, 10 of the professional employees for the Rural Normal School in San Lorenzo, received training either in the United States or Puerto Rico.

SCIDE and the staff at the San Lorenzo Rural Normal School undertook to provide a demonstration center which could be a model and inspiration to all other normal schools in Paraguay. In comparison, San Lorenzo was far superior with its new buildings and equipment, modern dining-rooms and dormitories and ample grounds for work in agriculture. The San Lorenzo School had to follow the same educational curriculum developed for normal schools by the MOE, but it enriched the experience and expanded the knowledge of the students by including training in music, art, physical education, agriculture and homemaking. The staff also assumed the responsibility for preparing teaching materials and providing in-service training to teachers. In addition, the program for training supervisors was moved to the school. There they expanded and further developed the training program for supervisors, with from 25 to 35 teachers accepted yearly into the special one-year training program. Only teachers who had attained the MOE's first category for teachers, that being two years of higher education beyond high school, were accepted and granted scholarships by USAID to teach and continue their training in the San Lorenzo Rural Normal School.

The first class of teachers was graduated from this school in December, 1958. Also, during the six years of SCIDE leadership, hundreds of teachers from Paraguay and several foreign countries had participated in short courses and seminars on different subjects such as: teaching methods, interpretation of programs, organization and operation of libraries, and home life education.

Regional Education Centers (1962-1976) - Since San Lorenzo was really the only school of its kind in Paraguay, it was retained under USAID's new education project called the "Rural Education Development Project" (REDP), when SCIDE closed out, in 1962. USAID continued its financial support of the school in order to continue in-service training, pre-teacher training, training of supervisors, and materials development. At the same time it had potential for offering specialized training to teachers aspiring to teach at the middle school, high school and normal school levels, and for directors, vice directors and non-certified teachers of the country. In 1962, when SCIDE underwent a metamorphosis, there were, according to the "Report to the Ford Foundation on Education in Paraguay", no specific institutions for the

# REGIONAL EDUCATION CENTERS BUILT BETWEEN 1962 - 1976



training of middle school teachers in Paraguay, and secondary education had too few teacher-training institutions and too few trained teachers.

The Faculty of Philosophy of the National University, the Faculty of Philosophy and Education of the Catholic University, and the Institute of Science of the National University were the major institutions offering degrees for secondary school teachers. In addition, some teachers for the basic cycle of secondary education (middle school) were trained by the Normal School in San Lorenzo, the Superior Normal School in Asunción, and the private Normal School María Auxiliadora, in Asunción. The majority of the teachers, for grades seven through twelve, were graduates of the Faculties or Institute of Science.

Concerned about the quality of teacher-training for primary teachers, and realizing the need for training teachers beyond the primary level, REDP, in 1962, developed the concept of the "Regional Education Center" (REC). The RECs were to be the hub of information, knowledge and training for their area. They were to provide education through high school, including agro-industrial education for the students.

The project focused on the development of qualified primary teachers for the nation. It also extended the influence of the project through construction of new primary schools and refitting of other schools in the areas surrounding the RECs. The project had the potential of developing, within Paraguay, a regional education program which, on the one hand, would decentralize the education system, and on the other, meet the needs of each region on a more area specific basis.

REDP began with the construction of five new classrooms at the Rural Normal School in San Lorenzo, in February of 1963. These were finished in August 1963 and provided the necessary space to develop classes for middle school, high school, commercial and agricultural-industrial courses. From the time the construction was completed in 1963, this school began to operate as the first Regional Education Center. Under the guidance of REDP personnel, this school graduated 224 teachers. The operational and financial responsibility of the San Lorenzo Regional Education Center were turned over to the MOE on September 1, 1964. In 1965, 1,120 students were enrolled, making San Lorenzo the largest teacher training school in Paraguay. By 1966, UNESCO had become interested in the San Lorenzo school and was sponsoring a series of seminars for in-service training of rural primary teachers.

Using the San Lorenzo Regional Education Center as a model, REDP went on to build three more RECs, which provided teacher training programs similar to the one used at San Lorenzo. Under this project, USAID had originally contemplated the construction of six regional centers. Due to problems with the local contractors and their bidding practices, insufficient funding and the inability of MOE to take action on closing some of the outdated, dilapidated normal schools, the project was reduced in scope.

The REC at Encarnación was started in 1964 and completed in March, 1966. It was constructed on six acres of land in the center of town. The 6,411 square meters of construction provided 31 classroom, administration offices, lavatories and office space for teachers and secretaries, at a total cost of \$295,100. By 1967, this center had about 2,000 students and 30 teachers. It operated three shifts a day with the evening classes providing adult education, an activity that was gaining interest. In addition to helping construct the center, USAID furnished, through the PL 480 local currency, laboratory equipment for the chemistry and physics departments, agro-industrial tools, teaching equipment and supplies, and agriculture equipment and supplies. The REDP project provided 2,000 units of new furniture to this REC.

The third REC in Paraguay began construction in Villarrica in December 15, 1965, and was completed in April 1967. This center was built on 11 acres of land at the edge of town at a total cost of \$256,106. The total framed area of the complex amounted to 6,704 square meters and include nine sections. As with the REC in Encarnación, USAID provided furniture, and with PL 480 local currency furnished this center with all necessary materials and supplies.

The last of the four RECs developed by REDP was started in Concepción in May 1966 and completed in December 1967. This center was built on ten acres of land at the edge of town. The buildings had a total of 31 classrooms, with the agro-industrial buildings having been incorporated, repaired and remodelled from two buildings already at the site. The school began operations in March of 1968. It was attended by 2,000 students during morning, afternoon and evening classes, who were taught by thirty teachers. This school was also equipped by USAID with furniture, laboratory equipment and supplies, office furniture and supplies and agro-industrial equipment, materials and supplies.

The REDP also assisted the school at Pilar by providing furniture and equipment and renovation of its facilities. In Pilar, REDP started a vocational agricultural education program. These centers and the Pilar School provided the most modern public educational facilities then available in Paraguay, and the USAID used these facilities as focal points for a new technical assistance and loan project which was to: (1) construct three additional centers and a Superior Institute of Education, and (2) print and distribute new textbooks and improve the curriculum, teaching methods, and public education administration for the existing centers and their surrounding areas.

The new loan/grant project for primary and secondary education began in 1969 and continued through June of 1976. Although the project fell short of most of its targets due to escalating construction costs and a seeming unwillingness in the MOE to make effective administration changes, it did construct two additional Regional Education Centers; one each in Puerto Presidente Stroessner and Pedro Juan Caballero, which added to the infrastructure necessary for Paraguay to be able to decentralize its

education system. The pieces of the system were, if not well coordinated, at least being put in place for future utilization in a more decentralized education system in the country.

Currently, the RECs provide students with schooling from pre-primary through high school. Many of the nation's primary school teachers receive their training at the RECs. This training still includes practice teaching and the student teachers develop small gardening projects with the school's students. Over time, space for agricultural activities has given way to the development of sports facilities, such as soccer fields. The program for teaching home economics is now being provided to school students, but not to the teacher-trainees. In-service training for the professional personnel involved in training the student teachers is, since 1970, provided once every four years. Beginning in 1986, the administration personnel of the RECs are also receiving in-service training once every four years. Teachers aspiring to work at the middle-school and high-school levels are trained at the universities and in the Superior Institute of Education.

#### Superior Institute of Education (1968-1975)

The idea for a Superior Institute of Education (ISE), which would be dedicated to the training of all levels of teachers from pre-primary through high school and adult education, emerged in 1968. In 1968, the ISE began working in borrowed space at the San Lorenzo Regional Education Center. In 1969, ISE moved to rented quarters in Asunción. There it continued its development as an institution, until 1975, when it moved into new facilities, which were constructed with USAID loan funds, under the Rural Education Development project. This facility was completed in 1974, and put into service for the school year beginning in 1975.

The Institute trains professionals for teaching in the pre-primary, primary and secondary grades as well as adult education. It provides post-high school training, along with the RECs and nine other teacher training institutes (Institutos de Formación Docente), which came into existence as institutes in 1972, when the MOE closed 42 normal schools. In 1975, 486 teachers graduated from these accredited institutions. By 1983, a total of 5,282 teachers were graduated from these institutions, with 788 of these having attended the Superior Institute of Education and 1,815 having graduated from the Regional Education Centers built by USAID. The teachers who graduate from these institutions learn to use the new curriculum originally developed through USAID projects.

Originally all students attended a two-year, full-time, teacher-training program at the ISE. The ISE has since extended the training program for high school teachers to three years. Classes are held from February through mid-December, which is unusual in Paraguay where most schools finish the year in November and begin again in March. The ISE also provides a nursery for the children of employees and students.

People involved with the ISE believe that the Institute is more functional than the Regional Education Center and the faculties of the universities because of its unique dedication to the training of teachers. USAID's assistance developed the location which has provided stability to the program. The ADC program has renewed a relationship with ISE through participant training of its instructors.

#### Classroom Construction (1962-1978)

From the time that SCIDE began working in Paraguay, until the termination of that organization, one of the major constraints to better primary education and more students prepared to enter the middle level school was the real lack of facilities for teaching the young children. In the FY 1963 "Country Program Book" the situation was described as follows: "The educational program of the Ministry to increase literacy, especially in the 0-14 age range which constitutes nearly 45 percent of the total population, is seriously impeded by the lack of school houses and by existing sub-standard buildings. It is estimated that approximately 60,000 children of school age are now excluded from school attendance because of insufficient classrooms. Many public elementary schools operate three sessions daily. The Ministry estimates that 1,200 additional classrooms are required to meet present needs. The Minister of Education has stated that 85 percent of the classrooms now in use do not meet minimum health-safety standards. If U.S. standards were applied the percentage of sub-standard classrooms would be approximately 95 percent. Hundreds of rural classrooms have dirt floors, no windows, and thatched roofs. All light and ventilation in such classrooms must enter through the door opening or cracks in the walls. Toilets are unsanitary and primitive. Drinking water is usually taken from uncovered wells which are contaminated."

Given the need for improvements in all areas of primary education, SCIDE, within its budget, concentrated on developing the teachers responsible for working with the children, as well as the teacher-trainers. They also worked on improving the materials available to teachers and their students, in an effort to increase the retention of students attending classes in the existing schools.

It was not until the REDP project got under way in 1962, that an effort to build new classrooms and refurbish existing schools began. The REDP project aspired to: (1) construct 650 typical rural elementary and secondary school classrooms during the first two project years; (2) rehabilitate 518 classrooms with 118 of these being utilized in connection with training activities in the Regional Education Centers; (3) provide training for Ministry personnel in economical and functional schoolhouse planning which would meet the minimum health and safety standards; (4) provide additional classrooms to meet elementary and secondary school population needs and eliminate triple sessions; and (5) provide pure drinking water sources and sanitary toilet facilities in collaboration with the Public Health Division wherever possible.

The Construction Department of REDP was formed in November 1962. The Chief of the Department was the architect who had been the head of the MOE School Construction Department and was transferred to REDP. He was assisted by a Paraguayan Civil Engineer, draftsmen and clerks. He also received the assistance of a USAID provided engineer, who helped with the preparation of plans and cost estimates for the Rural Education Centers. During the construction phase, USAID furnished technical assistance in the form of various engineers and engineering contracts. The first assistance of this kind was provided through a direct hire engineer who worked with the Construction Department from June 1963 through July 1965. The last engineering contract for assisting with the construction phase was in effect from June to October 1967.

The REDP Construction Department started its construction program in 1963 by rebuilding and repairing a group of 10 elementary schools. These schools were located in the surrounding areas of Lambare, Villarrica, Luque, Carapegua and Piribebuy. During the same year, two new elementary schools were built in the San Lorenzo area and seven other elementary schools in this area were repaired. Additionally, five new classrooms were added to the San Lorenzo Normal School making this the first Rural Education Center in Paraguay.

In the Encarnación area, two new elementary schools were built, and four schools were repaired and refurbished. The Rural Education Center built in Encarnación had 31 classrooms. In the Concepción area three new six-room elementary schools were built and one four-room school was repaired. The Regional Education Center in Concepción was completed in 1967 with 31 new classrooms. In Villarrica a Regional Education Center was also completed in 1967.

In all, REDP built 10 new elementary schools, repaired 19 elementary schools, built three Regional Education Centers and built an addition to the San Lorenzo school, making available 188 new and rebuilt classrooms at a total cost of \$935,488. Thus, construction fell short of the contractual agreement signed between the MOE and USAID in 1962, which called for the construction and reconstruction or termination of 1,100 classrooms. In part, the tremendous shortfall seems due to financial considerations, \$683,000 in cash was originally budgeted for the construction and reconstruction of classrooms. This was to be matched by \$653,300 worth of self-help contributions at the village level. Time is required to develop a village level self-help project and this construction program did not allow for that. It seems that it was more important to get construction underway and to finish the classroom, rather than develop the self-help concept. Despite that shortcoming, the construction of four Regional Education Centers, with their improved and new elementary school nuclei, were extremely valuable to improving the educational system in Paraguay.

Construction of new schools continued under the follow-on loan/grant project for primary and secondary education. Like the REDP project, the

new project fell short of its construction target, which originally called for the construction of 120 new schools. Because of long delays and high cost over-runs, 32 schools were constructed by the end of the project, in 1976, with most of the work being accomplished in the last two years of the project. The new schools provided 272 classrooms with a capacity of educating 20,000 students.

#### Rural Radio (1976-1979)

The MOE became involved in mass communication in 1976 when, with USAID, it developed the Rural Radio Education project. This pilot project was to expand access to primary education in rural areas where there was a high percentage of children not attending, or dropping out of school. Many children in the rural areas still only had access to primary school through the third grade, without any means to aspire to higher education. This project, originally designed to provide programs for the fourth through sixth grades, was expanded to include programming for the third grade. According to USAID documents, it was expected that this would provide the opportunity for a large number of children to complete their primary studies and be ready to enter middle school. The project was carried out in the Department of Caaguazú, with one government and two private radio stations cooperating.

In the USAID project evaluation summary, written in November 1978, it notes that the project was delayed almost two years because of unanticipated problems in contracting a technical advisor and the inclusion of a one year pre-testing phase. Despite the delay, the project had by that time managed to provide a fully equipped and functioning radio station. The project had trained 21 technical and eight administrative personnel, had 495 courses of study for grades three and four transcribed on tapes, and had eight workbooks for the same grades written, produced and distributed. Evaluation instruments were being developed, and the program was becoming well institutionalized within the MOE.

The pilot project concluded in December 1979. A project evaluation summary was written on the project in January 1981. The evaluation noted that most of the project objectives were successfully met. The three participating radio stations broadcast for one hour a day for 180 days for each of two program levels (third/fourth grade and fifth/sixth grade) for a total of 1,080 radio programs. MOE also produced all back-up materials, including over 10,000 workbooks. To develop an evaluation system, MOE continually tested students, revised project materials, and conducted monthly staff meetings and periodic review sessions. Participating students numbered 700 in 1978, 1,500 in 1979 and over 1,800 in 1980. However, the rapid expansion in the program was offset somewhat by a drop in the percentage of students who passed their final examination, down from 74 percent in 1978 to 54 percent in 1979. This was possibly the result of a decline in the quality of materials, the recruitment of unprepared students, or too rapid an expansion in the program. It may also be attributable to a decision in the MOE to

experiment with the number of monitors needed to effectively carry out the project. In some areas a monitor was visiting a different school district each day, in other districts a monitor was available to the students for consultation on a daily basis. Licenciada Mabel Palacios, director of the Telecommunications Department at the MOE, stated in an interview that the MOE found no significant difference between the group of students who were provided a monitor on a daily basis and those who were not. However, she believes that the current program, which is run by the Department for Adult Education, does provide monitors on a daily basis.

According to USAID documents, the project, despite its success in reaching the rural student population, failed to meet the project goal due to emphasis on practical education. Consequently, before admission to the secondary schools, students from this project were required to take an additional one to two month complementary course emphasizing academic materials. Ms. Palacios said that it was never the intention of the MOE to prepare these students to enter secondary schools, although, if they completed the extra study and passed the entrance exams, they were accepted. The objective, according to MOE, was to train these students so that they would be more effective workers. She also said that it was never the intention of this project to provide education to children. Paraguayan law provides that all children between the ages of 7 and 14 must attend school, and, therefore, her staff focused on providing materials more suited to the 15 and over age group. Consequently, the project was passed to the Department for Adult Education in 1981.

Ms. Palacios feels that the project's real importance lay in the fact that this was the first major project ever developed with the Department of Telecommunications. The project developed an awareness in the MOE to the potential of the Telecommunication's Department. The Department, she believes, is being better utilized and may even be asked to develop a radio program for young primary students.

#### Bilingual Education (1978-1984)

Paraguay is usually considered a bilingual nation because Spanish and Guarani are widely spoken. However, in general, Spanish is the language of the urban centers while Guarani is the language of the rural sector. A 1962 investigation carried out in the interior zone of Cordillera, approximately 50 miles from Asunción, indicates that of the 1,475 children in first grade, 39.8 percent only spoke Guarani, 46.4 percent understood but did not speak Spanish, and 13.8 percent spoke Spanish.

The problem of high dropout rates in the early grades is noted throughout the SCIDE and USAID documents. USAID recognized that a major constraint, to improving the possibility for a successful school experience for rural children, was language. At the same time, it was generally accepted that Spanish was a valid language to speak, and that the purpose of schooling

should be to teach reading and writing in Spanish. Teachers would prohibit students from speaking Guarani in the classroom and during recess. At the same time, in the classrooms they spoke only Spanish, but did not teach it as a new language. To make the situation even more difficult, all primary schools were required by law to administer three examinations each school year. The first exam was given after three months, the second three months later, and the final exam at the end of the year. A student who failed the first two examinations, but passed the final, was still required to repeat the entire year. In the first two years the examinations were oral, and, of course, in Spanish. As a consequence, those students unable to speak or understand Spanish, frequently, repeated the first few grades. A table, prepared by the MOE for school year 1961-62, showed that in the 13 schools studied, almost 40 percent of the students enrolled in first grade had to repeat the year.

UNESCO seems to be the first organization to have dealt directly with the problem of Guarani speaking children entering a Spanish speaking environment. In 1965 UNESCO began a small two-year experiment in a rural primary school 20 miles from Asunción. The school was divided into two groups, one with a standard curriculum and the other with significant modification in the program of studies. Because the MOE required the use of only approved texts in public primary schools, the UNESCO program was able to effect a change of emphasis rather than a completely new program. UNESCO's major innovations were: (1) Spanish-language training emphasis and (2) the elimination of all examinations in the first two years. Lesson plans, virtually unused at the primary level, were required of the teachers. The purpose of the experiment was to demonstrate that children who were given special training in Spanish and who did not have to pass a test during the first two years of schooling could carry on successfully in the third grade.

In 1977, USAID completed a study of 2,352 rural households, which sought to profile the poor by examining not only the extent of poverty in rural Paraguay, but also such characteristics as where the poor lived, how they supported themselves, and the extent to which they have access to land, medical services, and educational opportunities. The study found that there was a relation between poverty and the use of the Guarani language. Almost 76 percent of all families interviewed spoke only Guarani. Of the households earning less than \$75 per member, 88 percent only spoke Guarani. The poorer the family, the more likely it was to speak only Guarani, and the less access it had to educational and other opportunities.

USAID, always aware and concerned about the language problem in educating young rural Paraguayans, signed an agreement with the MOE, in September 1978, to address the problem. Specifically, the MOE requested USAID's help in developing a systematic program for the instruction of Spanish as a second language, with Guarani being the primary language of instruction in the early school years. The project was implemented on a pilot basis in the Department of Paraguari.

Under the project six schools were to be selected based on their similarities, and then through random selection three of the schools were to be chosen as the experimental schools while the other three were used as the control group. Guarani was to be the language of communication in the first semester of the first grade, and as long after as deemed necessary by the teacher. Spanish, in the three experimental schools, was to be taught orally as a second language by using the spoken Guarani language and didactic materials which reflected the Guarani culture. In the second semester of first grade, or later, reading and writing in Spanish were to be introduced. In the second and third grades, Spanish language transitional textbooks were to be used. By the fourth grade, it was expected that the students would be able to understand, speak, read and write Spanish. The experiment was to run four years.

To begin the project, USAID first assisted the MOE in developing a Bilingual Education Department within the Ministry. In December 1979, the project was revised to extend the termination date to September 1983 and to increase the number of experimental schools so that 12 schools would be covered in the project by 1983. The project got off to a rather slow start because USAID had difficulties locating a qualified specialist.

In January 1980, USAID contracted the services of an Educational Material Development Specialist, Dr. Jose Vicente Alvarez. In March 1980, a short-term specialist was brought to prepare audio-visual materials for bilingual education. These materials, including tapes, films, slides and video tapes, were reproduced and used for training teachers and others in the interior of the country. In 1982 the terminal date was extended to February 1984 and the number of schools targeted to participate in the project increased to 22. The control group was increased to seven schools.

Using a scale of zero for non-speakers and four for native speakers, the evaluation found that by the end of the third year of the experiment, 51.8 percent of the first graders in the experimental group reached level two of language acquisition, while only 4.8 percent of the control group reached level two. The results for second graders were even more impressive, with 53.6 percent of the experimental group having reached level two and 20.7 percent having reached level three. In the second grade control group, 8 percent of the group reached level two. At grade three the difference was even more pronounced, with 76.9 percent of the control group having obtained a level one language acquisition rating, compared to only 3.2 percent of the experimental group still performing at level one. The majority of the experimental group was performing at the third and fourth levels, represented by 48 percent of the students at level three and 3.7 percent at level four. The importance of teaching Spanish as a second language was clearly demonstrated.

In the area of academic achievement, the second year of the project showed that the students in the experimental schools were advancing faster than their counterparts in all academic areas, but still not

significantly so. It was in the third year that the value of teaching Spanish as a second language really began to translate into accelerated learning for the experimental group as compared with the control group. School dropout rates also declined in the second year, although there was not a significant difference between the control group and the experimental group. In the third year of the evaluation, the difference was more pronounced at all three grade levels, with the largest difference being in the third grade where 6.2 percent of the experimental group dropped out while 14.8 percent of the control group left school. In the area of attitude towards school and self, it was noted that entering students in both groups had positive attitudes. It was in the third year students that a difference was noted. The experimental group maintained a positive attitude about learning, and their self images were high, while the control group was becoming disillusioned with self and school.

The experiment was tremendously successful, so much so that after only the first year, the Minister of Education announced that the program would be extended to a national level. To successfully implement the national program all elementary teachers need to receive additional training in teaching Spanish as a second language. Additionally, new materials in sufficient quantities need to be produced.

#### American School (1960-1976)

The American School was originally established for native English speakers in 1953 under the name American Community School and operated out of rented quarters. In 1959 it was granted a charter by the Paraguayan Ministry of Education as The American School of Asunción, which would function as a center of learning with the following objectives, as stated in the official governmental decree: (1) to impart learning, primary and secondary, at a level of superior practices, which will permit transfer of its students to similar educational institutions in the United States of America, and which will prepare its graduates for entrance into American colleges and universities; and (2) to promote understanding and mutual comprehension between Paraguay and the United States of America, and in consideration of this, the functioning of this institution of learning will contribute to greater development of higher educational standards of both countries.

Following granting of the Ministerial Decree, during the 1959 school year, a pre-primary class was started in which 20 Paraguayan children were enrolled to join the English speaking students for the first time on only one week's notice. Eight of the "graduates" of this three-month kindergarten learned enough English to be registered in the first grade of the American School for the 1960 season. The success of this pre-primary training course led to an advanced enrollment of 20 additional Paraguayan children for pre-school training for the 1960-61 school year. Today the school has 55 children attending pre-primary classes. The success of this program is seen in the fact that each year

there has been a waiting list of children of Paraguayan families trying to get into these pre-school programs. Announcement in 1959 that the school was open to Paraguayan children brought advanced registration for the 1960-61 school year of children in other grades as well.

It was felt that the rented facilities were inadequate to meeting the stated purpose of the learning institution as a window to college preparatory education in the United States. Therefore, in 1960 USAID approved an initial grant of \$133,500 for the purchase of land and the construction of a school capable of handling 200 American, Paraguayan and third national students. This grant was to cover all necessary expenses related to plant improvement including architect's fees, construction costs, imports of certain necessary materials with maximum use of local materials, utility installations, labor costs, and purchase of new supplies, furniture and equipment. Four years, between 1960 and 1964, were necessary for the construction of the school and disbursement of the funds.

USAID gave a second grant of \$12,000 to the school in 1964 to build two additional classrooms and put in sidewalks. As a result, USAID had provided the funding for what is now the administration wing through to the accounting office, the high school wing, the secondary wing, a kindergarden room and three of the current primary rooms. Three additional primary classrooms, a kindergarden, the canteen, computer room and multi-purpose library were added through other sources. In 1965, USAID granted an additional \$4,000 to repair damages to classroom roofs as a result of a storm in late 1963.

The specific targets or end results of the American School project were stated by USAID, in 1960, as "(1) To increase the number of quality personnel needed in the economic development of Paraguay, thus contributing to the achievement and mutual security objectives; (2) Through imparting strictly U.S. oriented education in the English language during primary and secondary training, more Paraguayans will seek college and university training in the United States; (3) Through day-to-day contact in the schoolroom and on the recreation grounds North American and Latin American children will more easily approach the degree of mutual understanding and trust so desired for future good relations and understanding; (4) Through their children, both North American and Latin American parents will have a common meeting ground which will speed mutual understanding and friendship, and will serve to extend personal contacts among this adult group; and (5) Establishment of this type of American institution is considered by the American Ambassador as highly desirable as illustrative of democratic processes of the American way of life and able to make a unique contribution to Inter-American unity by influencing future leaders of the country".

Besides the construction grant, the American School was receiving, and continues to receive annual grant funds from the U.S. Department of State

to insure a high standard of education for the students (\$65,000 in FY 88). According to the USAID Country Program Book, written in 1961, these funds, originally provided by the Inter-American School Service, the American Council of Education, The Department of State, and USIS, were used to supplement the North American teacher's salaries, purchase instructional materials and provide local scholarships. Mr. Ortiz, from the American School accounting office, provided a list of U.S. Government grants given to the school since 1960. He concedes that small grant funds could have been available for salary supplements, materials, etc., prior to 1960, as implied in the USAID 1961 statement, but recalls that it was a USAID grant of \$24,500, in 1965, which laid the ground work for the current system of grant funds. These funds have been used for: supplementary funding for the School Director's salary and teacher salaries, educational materials, curriculum consultants, scholarships, in-service seminars, capital equipment, university-to-school projects, seminars in the U.S. and third countries, library materials, science room supplies and equipment, physical education facilities including the basketball court, video supplies and equipment, community education programs, and computer supplies and equipment. USAID was the basic grantor to the American School up through 1976, at which time the funds were provided through sources at the Department of State. In total, from 1960 through 1965 the United States Government has provided \$1,684,300 to the American School in order to enhance the education of the students.

CHAPTER FOUR - UNIVERSITY EDUCATION  
(\$2,807,000/non-additive)

For the most part, it is the universities which produce the national leaders. USAID has had a long history of involvement with the two universities in Paraguay and, therefore, this subject has been written as a separate chapter. The approximately \$2,807,000 invested by USAID in higher education is non-additive because these funds have been added in under other sectors, such as Medical and Nursing Education in the Health sector.

National University

The National University of Asunción (UNA) was founded in 1889, but the majority of its faculties and institutes developed during the twentieth century. Enrollment at the UNA has steadily increased. In 1955, 2,265 students were enrolled. In 1964, 4,436 students were studying in the various programs of the University. By 1988, there were approximately 30,000 students enrolled.

USAID, STICA and SCISP invested time, money and expertise in the National University. Their efforts encompassed work with the Schools of Medicine, Economics, Agronomy and Veterinary Science, the Departments of Nursing and Public Administration, university-wide textbook programs, and improvements in the organization and administration of the University.

School of Agronomy and Veterinary Science (1954-1976)

The construction of the School of Agronomy and Veterinary Science (FAV) was completed in 1956. A.I.D. and its predecessor agency, ICA, were instrumental in the School's founding and supplied an advisor to the school during the 1955-1961 and 1963-1964 periods. From 1961-1963 three resident advisors were provided under a STICA agreement with Montana State College. In October 1964 USAID signed an agreement with New Mexico State University (NMSU) to provide assistance to FAV through June 1966. Subsequent contracts extended this assistance. Although the last contract, to continue NMSU assistance through December 1972, was signed on April 28, 1969, USAID and other documents indicate that NMSU continued to help FAV through mid-1976. Funding for the NMSU assistance from 1972-1976 was provided under the Livestock Production project. Between 1974 and 1975 the FAV was split into two separate faculties: one for agriculture and the other for veterinary sciences.

The FAV is discussed in more detail in Chapter Two. Included here is a listing of the major accomplishments during the period of assistance by USAID and its predecessors:

Construction and establishment of the FAV;  
Professional training abroad for professors;  
Introduction of "full-time" professors;  
Introduction of teaching departments;  
Development of an in-service teaching program;  
Development of student field experience through--Audiovisual  
equipment, farm equipment, and scholarship programs;  
Development of the FAV library;  
Improvement of FAV facilities through new construction and  
renovation;  
Development of the FAV research ability through laboratory  
construction and equipment, and the establishment of an  
Agriculture Economics Research Center; and  
Curriculum improvement.

School of Nursing (1946-1969)

The Dr. Andres Barbero Institute, now a school of the National University, started in 1939 with a program for training health visitors. In 1941, a program for training hospital nurses was begun by this same institution. In 1943, a school for midwives and a school for dieticians were added to the Institute. Throughout the Forties to the mid-Fifties, SCISP's umbrella organization in Washington, the Institute of Inter-American Affairs, provided advisory assistance to the Institute, with particular emphasis on developing the nursing profession in Paraguay. In 1955, the School of Nursing was accepted as a SCISP project.

In 1957, SCISP contracted the State University of New York in Buffalo (SUNYAB) to work with the nursing school as well as with the medical school at the UNA. The contract was continued by USAID through May 1969, at which time a delegation from the University of Buffalo, headed by its president Dr. Meyerson, visited Paraguay to commemorate the end of twelve years of U.S. assistance to the School of Medicine and the School of Nursing. Major accomplishments were:

Participant training for the professors;  
In-service training programs;  
Introduction of supervised practice for nurses;  
Refurbishment of classrooms;  
Improvement in laboratories;  
Incorporation in 1963 of the Institute into the UNA;  
Introduction of a four year training program;  
Curriculum improvement; and  
Introduction of rural practice experience for nurses.

When USAID terminated its assistance, the School of Nursing was a well-run, quality school, graduating well-trained, highly qualified nurses.

### School of Medicine (1956-1969)

The School of Medicine, described more fully in the Health Sector chapter, began before the turn of the twentieth century. USAID's predecessor agency gave limited technical assistance and equipment to the School's hospital during the early Forties. In 1956, Dr. Kimball, from SUNYAB visited and wrote a report on the School which led to a SCISP contract with SUNYAB for assistance to the Schools of Medicine and Nursing. This assistance was continued by USAID through May 1969. During the last year and a half of this project, emphasis was placed on evaluation of previous work and studies and recommendations for future assistance to the School of Medicine and Nursing program. From the time of Dr. Kimball's visit through the end of the contract, this agreement contributed to improved conditions at the School of Medicine through:

- Participant training for the professors;
- An in-service training program;
- Introducing a one year internship program;
- Improving the medical school library.

### School of Public Administration (1955-1965)

In 1955 a group of Paraguayans formed a Center for the Study of Public Administration. Most of these Paraguayans had studied administration and political science in institutions outside of Paraguay, many of them through the USAID participant training program. They were interested in stimulating and promoting, within Paraguay, broader understanding about public administration. The group received technical assistance from the USAID public administration technician. Through seminars and conferences held each year in the most important communities and urban centers, the group's influence extended throughout Paraguay.

By 1958 the group concluded that Paraguay needed a School of Public Administration at the National University and asked the Rector to request assistance from U.S. in order to create a School of Public Administration. In 1959 the School of Public Administration was created within the Faculty of Economics. Shortly after its inception, an executive decree mandated that the School establish among its objectives the in-service training of high-level government officials. This decree and the initial work accomplished by the new school provided the foundation for the formation of a separate center, which has provided in-service training for government officials at all levels of service. Further information on the In-service Training Center is included in Chapter Six.

USAID provided advisory service to the new school, on a part-time basis, until November 1962. From then through June 1965, full-time, technical assistance was provided through a contract advisor from the University of Pittsburgh. Responsibilities were focused on the planning of the education curriculum, course content, and the administrative organization

for the operation of a four year undergraduate program in public administration. This was expanded to a six year program in 1966. Nine young Paraguayan instructors were sent to the United States to receive master's degrees in various aspects of public administration. USAID also established a professional library for the School. According to the School's current director, Dr. Fernando Jose Ayala, this assistance included improving the library's contents by providing over 15,000 books, as well as its organization and management.

Within two years of being established, the School of Public Administration was recognized as the primary center of expertise in public administration and was fully integrated into the University. With USAID technical assistance, the school provided six months of intensive training to six high-level government officials. The results were productive and the concept was continued by the School's Center for Investigation which conducted two such six month programs yearly. These training courses, mostly funded by USAID, continued during the period of USAID assistance and one year beyond, with supporting funds from the United Nations. Each course included from five to ten high-level officials. Early results included production of the Manual of the Government of Paraguay, the Manual of the Judicial Branch, a study of the Municipal Law, and a translation into laymen terms of the Civil Service Law. The Center for Investigation still exists on paper, but has not been funded since about 1966.

The School of Public Administration was expected to graduate between 15-25 students a year in administration. The first class of nineteen graduated in July 1964. In 1982 the School had 82 students registered for the last three years of specialized training in administration and graduated 12, two women and ten men. In 1985 the 34 students graduated. During the period 1975-1985 the school graduated a total of 246 students for an average of over 22 students a year.

#### School of General Studies (1961-1972)

In 1961, USAID agreed to help the UNA establish a School of General Studies. This agreement was aimed at creating a school which would provide a basic year of studies common to all faculties and which would be required of all students. The School was to broaden the narrow academic focus of higher education and introduce all students to better study habits and improved academic preparation before they entered professional faculties. The School was to raise the education standards generally, by screening and eliminating those students academically unqualified for advanced study, thus greatly improving the quality of students.

In June 1963, the Rector appointed a high level committee of university personnel to work with U.S. advisors to develop an academic and fiscal plan for the school. This committee produced a plan which was incorporated into a project agreement on January 27, 1964. It was then

too late to open the School for that academic year, with planners contemplating the opening in 1965. In the interim other problems arose, including the Rector's appointment of his daughter as director, and a general resistance on the part of the students who were facing the possibility of paying a university tuition, a new concept in Paraguay. The project was put in suspense with all USAID's funds, except \$15,000, deobligated.

The project, although not yet having made any real impact on university-wide reform, did serve as a key element in a 1965 International Development Bank (IDB) Social Progress Trust Fund loan of \$1.5 million which included this school in its project. In 1968 A.I.D. provided a grant to help with technical assistance and overall coordination. A.I.D. continued to provide support to the project through a variety of ways. PL 480 local currency was made available to furnish equipment and help finance the construction of the Economic building. The A.I.D. regional book program helped stock the library with modern texts and references. The participant training program trained librarians and the laboratory heads in the School of Chemistry and Pharmacy. Nevertheless, a 1972 USAID final project appraisal report reflected disappointment with the action by recommending: "USAID should not undertake projects of institutional reform with the expectation of major change without first doing a careful analysis of the administrative capabilities and felt needs of the recipient. USAID should require the institution to develop an action plan. In the future USAID should not involve itself in jointly funded projects without a clear understanding and written agreement with all involved parties as to project goals, priorities and implementation plans." Clearly, only partial steps to administrative and curriculum reform were achieved.

#### University Library and Textbooks (1968-1973)

USAID carried out a textbook project at the National University and the Catholic University of Asuncion. The first project agreement was signed in November 1968 with National University. This agreement was to increase the use of textbooks by students of the School of Chemistry and Pharmacy through rental (including a charge for administration) and/or sale of texts at near cost. It was also to increase library reference materials and improve existing bibliographies. A revolving fund was created to provide for continuation of the program with the income from the sale and rental of the books. In addition, the faculty, with its own funds, was to provide a reserve shelf composed of at least one copy of each textbook used in the faculty under the Textbook project. These were made available for use in the library to students who were unable to rent or purchase their own textbooks. Librarians were trained under the A.I.D. participant training program.

Once having successfully launched the program, USAID expanded it to other faculties and institutes within the UNA, in order to make textbooks available to an increasing number of students. Given the acceptance of

this project at the National University, USAID also signed an agreement in 1970 with the MOE to provide elementary and secondary teachers with reference books in their respective fields.

In March 1971, the textbook project at the UNA was expanded to a university-wide level. Contributions were increased slightly. USAID made a total of \$19,000 available, and the A.I.D. Regional Technical Aids Center (RTAC) matched these contributions with \$21,850 and provided purchasing services in both Mexico and Buenos Aires. Two copies of each textbook were to be placed in the central library, with a third copy placed in the library of the requesting faculty or school.

Given the success of the textbook project, USAID expanded the concept to include the establishment of a central film library at the National University. The film library was for the use of all faculties, schools and institutes of the University, as well as other educational institutions which requested films on a loan basis. The library was to provide audiovisual materials for the improvement of curriculum and teaching methods, making available to professors technical films for utilization in their regular classes as well as in seminars and workshops. The University contributed \$5,000 and USAID provided one copy each of all the films available through RTAC, plus \$15,000 for the purchase of additional films. These programs are remembered by university staff as having been beneficial. However, in 1986, the only indication that the textbook program at UNA existed is found in some of the faculty libraries where the books and films donated are yet shelved. The rotating fund, a good concept, vanished shortly after the termination of USAID's involvement.

Under a similar project agreement with Catholic University of Asuncion (UCA), two university bookstores were to be established and funded through a revolving sales system. According to USAID documents, by 1972, a University bookstore which sold textbooks at just above cost had been established with the assistance of USAID and the RTAC program. The bookstore was managed by administrative personnel of the University's central library. The bookstore did not perform well, however, and it was recommended that it be transferred to the freshmen year building and a full-time sales promoter be appointed. A second bookstore was established at Seminary to serve students at a branch campus. The USAID appraisal of June 1974 states, "Bookstores' sales have not improved due mainly to poor management. The lack of adequate records did not permit determination of whether they will be self-supporting in the future." The bookstores never became self-financing principally because of low turnover. This reflected the fact that Paraguayan students and their teachers were accustomed to education without textbooks and lacked the experience and training needed to put these valuable resources to work.

Despite monetary problems, the UCA continued to provide funding for a social science program, even though the School of Social Science disappeared shortly after the termination of the USAID project. This

career training was available at a new School of Social Studies, opened within the Faculty of Philosophy. This school was closed to new students in about 1983 due to insufficient demand. Between 1978 and 1986 only seven students graduated from the School of Social Studies, which is the reason why it was closed.

In contrast, USAID support to UCA's library through RTAC and training was effective. By 1972, the library resources had been improved and a professionally trained librarian hired. Due to budgetary constraints at the University, the librarian was hired on a part-time basis and USAID provided stipends for several student assistants to help expedite the cataloging of new book acquisitions, which totalled 8,700 volumes. By 1975, the librarian was employed on a full-time basis and the library hours were extended from 20 to 45 hours a week, as they remain today. The library was considered to have the finest social science collection in Paraguay. Book withdrawal from the library increased by 132 percent between 1972 and 1973. Additionally, individual consultations between the librarian and students rose by 75 percent, reflecting a significant increase in the use of the library facilities.

#### Catholic University - Social Science Center (1969-1974)

After two exploratory visits to the Catholic University by Georgetown University staff a report submitted in May of 1969 recommended providing technical assistance to the UCA. The objective was to work with the UCA to create a Center for Social Sciences (CSS) which could, by 1978, provide the students with the skills needed to examine and solve development problems of the country. Designed to serve as a model, the CSS was to be given autonomous status within the UCA and not be linked to any specific department, thus allowing it to become a service institution whose courses would cut across strict department lines.

The project was implemented in two stages. The first was exploratory and included seminars for professors, development of library resources, and selection of participant trainees to be sent abroad for training in the social sciences. The second stage was for the establishment and full development of the Center as an institution focussing on social sciences, as well as serving as a model for the entire university in teaching methods, empirical research, and improved curriculum. It was anticipated that the CSS would be inaugurated at the outset of academic year 1971-72. However, this aspect of the project was developed quickly and the CSS was actually established in 1970.

USAID and the UCA had early problems with selecting professors to be sent to the U.S. on participant training scholarships. As with the National University, professors at the UCA work on a part-time basis, and most could not take time off from their other employment in order to go to the U.S. or other Latin American countries for training. By the end of 1974, nine participants, mostly graduate students, had been sent for post-graduate studies in various areas of the social sciences. When this

project was terminated in December 1974, only two of the participant trainees had returned in time to benefit from the guidance of the Georgetown University advisor. However, eventually all but one of the participant trainees return to assist in developing the CSS after completing their studies.

Created within the University's School of Social Science were the departments of Sociology and of Political Science. Substantial progress was made in the development of new curricula for these departments. With the assistance of USAID advisors, the UCA initiated six new courses in 1973, although only four were planned. Six additional courses were started in 1974. It was expected that the social science curriculum would continue to be improved and enriched as the participants returned with expanded concepts and experience in new specialized areas not then being taught. Also, one UCA professor began teaching a graduate course in foreign relations in the School of Law.

By 1972 the CSS had a Director and six half-time professors who formed its staff. By 1974 the staff had increased to eight full-time professors, who were employed half-time as research professors at the CSS and half-time as teaching professors at the School of Social Science. It was contemplated that the staff size would be increased as the returning participants were incorporated into the system.

The Center was supposed to carry out research projects in the various social science areas and relate these to the actual situation in Paraguay. Early conceptual differences and organizational problems delayed the implementation of research projects until 1973. From then to the end of the project in 1974, the CSS was able to undertake a total of ten research projects under the guidance of the contract advisor, and complete nine. The quality of the research was highly regarded by the advisor. Through this direct experience, the Center gained considerable expertise in several aspects of social science research. In addition to the regular staff at the Center, students and other professors benefitted from their participation in the projects, as associate members of the Center.

Although finally off to a good start in designing and implementing research projects, most of the Center's funding to carry out these activities continued to come from USAID. The Catholic University, operating on a shoestring budget, found it impossible to continue funding new projects at the USAID-established level. To attract funds from non-university sources, the University merged the Center's research program with several other smaller research organizations to form a single research entity. This action was counter to the intent of the project, but accepted as the only alternative which would provide continued research activity in the area of social science.

Originally this project contemplated the technical assistance of two full-professors and two graduate students from the U.S., who would work

with the faculty and two graduate students from the UCA. USAID provided in its budget proposal for a full-time campus coordinator and 40 percent of the salary of the bilingual secretary to assist the Georgetown University group. The project was designed and implemented near the end of the decade for the Alliance for Progress. In a November 1972 A.I.D. program review in Washington it was determined that the project should be phased out since it was no longer in USAID's area of concentration.

Almost eleven years after the termination of USAID's involvement with the Center for Social Sciences, a new project has been designed and is being implemented at the UCA with USAID assistance. The project is to create a master's degree program in business administration. Most of the training and technical assistance will be provided by the Central American Institute of Business Administration (INCAE), under the overall coordination and supervision of the National Association of Schools of Public Affairs in Administration (NASPAA). (See Chapter Seven for further discussion of this activity).

CHAPTER FIVE - INFRASTRUCTURE  
(\$23,871,000)

Overview

U.S. support helped Paraguay develop its infrastructure in roads, telecommunications, and civil aviation. These three basic areas not only opened up more of the country internally, but also externally. Two major road projects increased land transportation to neighboring countries, while expansion of the airport extended Paraguay's possible reach even further. All major infrastructure projects were begun between the beginning of Point Four and the close of the decade of Alliance for Progress, with a total input of \$23,871,000 plus more than \$5 million of PL 480 local currency contributions.

Asunción to Puerto Presidente Stroessner Highway (1958-1975)

Most of the highway from Asunción to Brazil was completed with assistance from USAID. Completion of the road from Asunción to Puerto Presidente Stroessner was a major accomplishment. When completed in 1965 it consisted of a two lane asphalt paved road from the capital city to the eastern border of the country with Brazil. Today, this paved highway stretches 329 kilometers from the capital city of Paraguay to the Brazilian frontier. It is divided into two sections. The section from Asunción to Coronel Oviedo, named after "Mariscal José Félix Estigarribia" and known as route 2, is 134 kilometers. The continuation of the highway from Coronel Oviedo to Puerto Presidente Stroessner, named after "Doctor Gaspar Rodriguez de Francia", is 195 kilometers and known as route 7. Brazil constructed the international bridge over the Parana River, which went into service in March 1965. This linking of the two countries via highway was of vital importance for the exchange of industrial and agricultural products, timber and livestock products and manufactured goods. It also provided Paraguay with a paved route to the Atlantic Ocean.

Because of its importance, Point Four was interested in the construction of the Asunción to Puerto Presidente Stroessner road, even prior to the Alliance for Progress era. The early work on the road was financed through an Export-Import Bank loan and a bilateral agreement with Brazil. The "Country Assistance Program-Paraguay, September, 1963" points out that through a 1942 Export-Import Bank loan, the Government of Paraguay (GOP) contracted a U.S. firm to make the original improvements on the section of road from Asunción to Eusebio Ayala by grading, draining, surfacing and paving that section. The contractor was also responsible for the initial grading and placing of variable widths of base on the section of road from Eusebio Ayala to Coronel Oviedo. It states that all work under the contract was completed in 1942. The clearing and grubbing, grading and drainage structures, on the section of road from Coronel Oviedo to Puerto Presidente Stroessner, were completed in 1959 by

GOP and Brazilian contractors producing a dirt road passable in dry weather. Connection with Brazil was a precarious ferry boat on the Rio Parana, crossing from Pte. Franco to Foz de Iguazu.

Point Four began working with the GOP on construction of the highway, in 1958, when the Development Loan Fund (DLF) provided a \$2.5 million loan, to be used for the reconstruction of embankments, surfacing and application of a bituminous seal on a 50 kilometer segment between Coronel Oviedo and Caaguazú. In 1962, a second U.S. loan for \$7.1 million was provided by USAID to the GOP. This loan was used to widen, reinforce and resurface all remaining segments of the highway--Asunción to Kilometer 8, Eusebio Ayala to Coronel Oviedo, and Caaguazú to Puerto Presidente Stroessner--and to make other needed repairs on sections constructed under earlier agreements between the GOP and the Import-Export Bank and other international organizations.

Construction under the above loans was completed in March 1965, but not before it was noted by USAID's highway engineers that the design was inadequate. However, a political decision was made and the construction continued as originally designed. The pavement failed as predicted, thus creating necessity of yet another loan for the upgrading of the highway to a design adequate for the then present and anticipated future traffic loads and expected axle-weights.

This loan, authorized by A.I.D. in 1966 was for \$4.7 million to rehabilitate and improve the highway from Asunción east to the Brazilian border. Tremendous problems arose in connection with the selection and contracting of the U.S. consulting firm for final design and supervising. These problems were not resolved until 1969 when, due to the delays, it was necessary to redefine the scope of the project. Under the new agreement the U.S. firm was responsible for rehabilitating the more complex sections from Eusebio Ayala to Caaguazú, while the Ministry assumed responsibility for the other sections of road. The U.S. firm brought in less personnel than originally planned and agreed to work with technical personnel provided by the Ministry of Public Works.

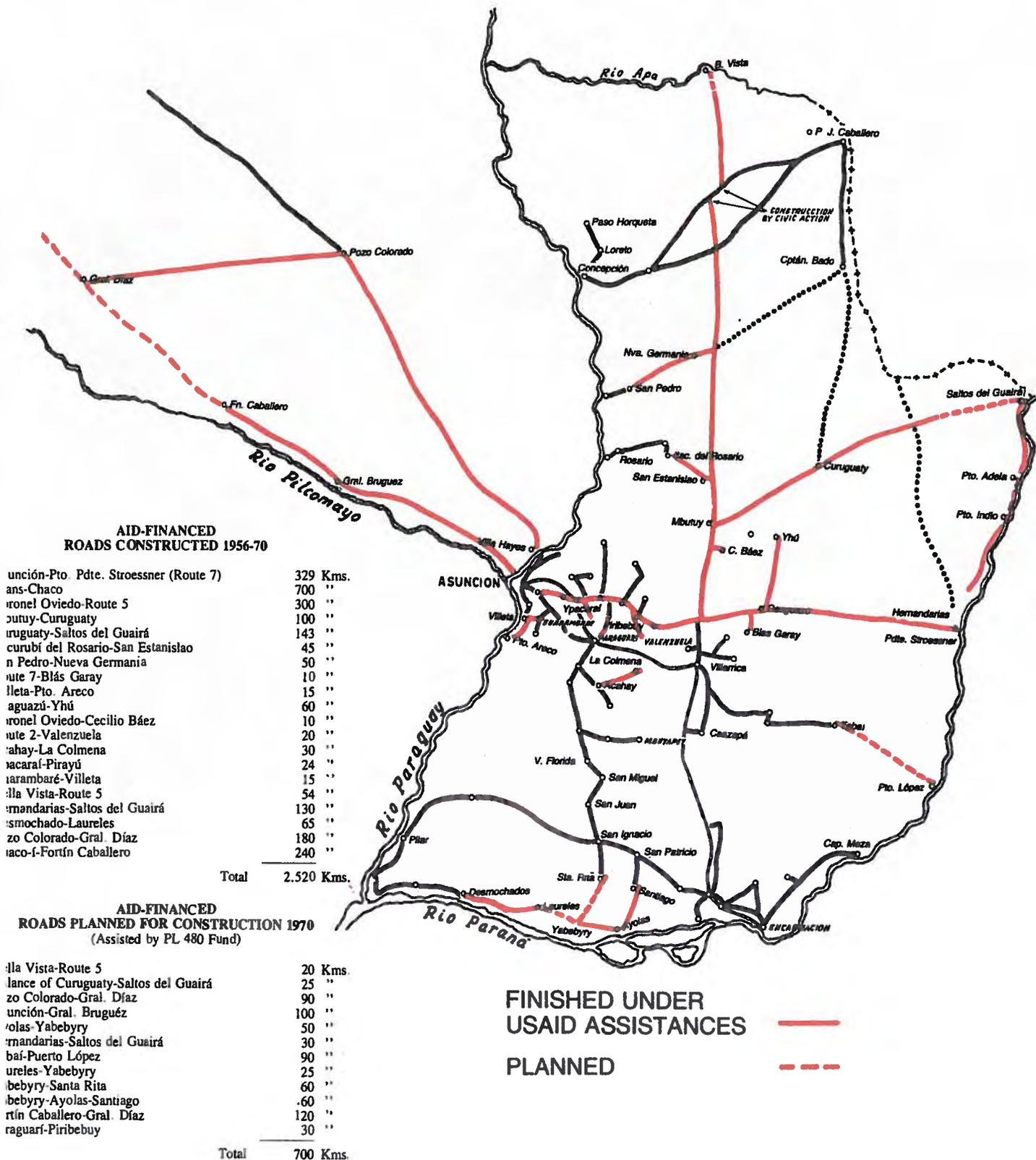
#### Trans Chaco Road (1955-1962)

Even before its involvement in the Asunción to Puerto Presidente Stroessner highway project, the U.S. bilateral assistance program was already pioneering a road construction and training project in the Chaco. The Trans-Chaco Road, which is route 9 and named for Carlos Antonio Lopez, connects the sparsely populated Chaco region of the country with the rest of Paraguay. It has opened up a 700 kilometer land route to the Bolivian frontier, and is now over one-half paved.

Reference to the U.S. involvement in the construction of the Trans-Chaco Road is found under various projects throughout USAID reports, including those of PL 480 local currency and Agriculture Productivity project. Actual U.S. participation began in the mid-1950's with a \$93,000 grant

# ROADS BUILT WITH USAID FINANCING

1956-1970



and the development of the Demonstration and Training-Road Construction and Maintenance project. This was later divided into two projects, one for demonstration and training, and one for construction and maintenance. The project began as a demonstration project and was confined to the area of road between Villa Hayes and the Mennonite colony of Filadelfia. Initially it helped select the most economical route location, furnished field data to the Ministry of Public Works (MOPW) and provided a training ground for Paraguayans in all aspects of low cost road construction and maintenance. The main objective of this project was to develop a core of civilian and army engineers capable of designing and constructing low cost penetration roads.

Road construction in Paraguay was the responsibility of both the MOPW and the Ministry of Defense (MOD). During the Fifties, most of the training involved personnel of the MOPW, inasmuch as the MOD's Army Engineer Construction Battalion, which was to demonstrate the capabilities of the armed forces to assist in the country's development, was not fully organized. In its 1961 annual report, Field Proposed Program for FY 1963, USAID stated, "Due to inadequate financing, a lack of equipment and improper management, this activity was not entirely successful until January 1960, when it was reorganized with the emphasis on training military personnel and an adequate financing arrangement was set up by GOP from a special five percent tax on imports with funds thus derived earmarked for the Chaco road project. In the years previous to calendar year 1960, comparatively few people were trained and the highway had only advanced 92 kilometers from Villa Hayes. With adequate financing, the commitment of a full battalion of 284 officers and men from the Command of Engineers of the Paraguayan Army, the assignment of a team of skilled personnel by the Mennonite Central Committee to assist in training and the providing of equipment by the United States Overseas Mission (USOM) from U.S. surplus stocks the project finally accelerated." The project, by 1960, had developed into a real cooperative effort between the GOP, USAID, the Mennonite colonies and the Paraguayan military forces. The U.S. military assistance group and the cattlemen of the Chaco also gave financial and technical support for the project. Everyone involved, including the President of Paraguay, was interested in seeing the road constructed.

Through FY 1961 the bilateral program contributed \$1,421,000 to the project for technicians, for road building equipment and spare parts, and for training. It also contributed \$158,730 of PL 480 local currency. During the same period the GOP contributed \$2,285,000 for procurement of fuel, oil and lubricants, for locally available spare parts, for some equipment, and for other local costs. The MOD provided some equipment, personnel, camp sites, individual clothing, food, medical facilities and salaries, as well as the administrative services and supplies necessary to the maintenance of the engineer battalion, with an estimated value of \$250,000 to \$300,000. Through this project, approximately 300 military officers and men, and 195 civilians were trained in various aspects of road construction.

The opening of the Chaco Road to Filadelfia was not the end of USAID involvement. Funds were provided throughout the early Sixties for the maintenance of the road. Due to unusually high waters in 1961, it proved necessary to raise the grade on 35 kilometers of previously completed road and increase the number of drainage structures and bridges on that stretch to double the number of originally deemed necessary. In FY 1963 approximately \$40,000 from PL 480 local currency was lent to the GOP to buy lumber for the construction of bridges omitted at the time of the original construction. On a questionnaire sent to USAID Directors who served in Paraguay, Mr. John Wiley responded, "The most dramatic event during my tour was the official opening of the Chaco Road from Asunción to the border with Bolivia, over 700 kilometers to the Northwest. USAID was one of several agencies which participated in building this road (which was almost completed prior to my arrival in 1962). We left Asunción at 4 a.m. one morning, driving all day, and reached the Bolivian border before sunset. The following morning there were the official dedication ceremonies at Nueva Asunción which is quite near the border. This was a pioneer dirt road, usable only in good weather but it opened up the Chaco for development, a project close to the heart of President Stroessner."

This project complemented a \$1 million ICA (an A.I.D. predecessor) Smathers loan to the Mennonites for area development, and other efforts to increase and improve cattle, lumber and crop production for internal consumption and export. It opened up a very isolated area of the country to resettlement and provided opportunity for private investment. It also demonstrated a positive use of the Paraguayan military resources. Most of all, it provided a more progressive way of life for the Mennonites and ranchers living in the Chaco. Before the construction of the road, all commercial goods between the Mennonite colonies near Filadelfia and the principal markets of the country were transported along a 600 kilometers route by a combination of road, railroad and river. Perishables, such as eggs and dressed chickens, were sent by air. Cattle ranchers in the Chaco had to drive cattle to market from as far as 180 miles, resulting in a loss of from 100 to 200 pounds per head due to walking such great distances in the extreme heat. Since the completion of the Trans-Chaco Road, cattle ranchers haul their animals to market in trucks with a savings in poundage and a better end product. The Mennonites have realized a significant savings in transportation costs since the opening of the road, estimated in 1964 to total some \$360,000 a year. Also, it established a working arrangement for road building which was transferred to Eastern Paraguay when construction started in 1962 on a road north from Coronel Oviedo (see next section).

#### Farm to Market Roads (1961-1971)

With the completion of the major portion of USAID assisted work on the Trans Chaco Road in 1961, the Road Construction and Maintenance Training project shifted to road construction and training projects in the more populated areas east of the Paraguay River. The objectives of the

project remained virtually the same. It was intended to train civilian and military personnel, with the emphasis on the military battalion, in all aspects of low cost road construction and maintenance. As well as open up isolated sectors of the country in order to harvest the wood resources and develop the agricultural potential of the area. As roads went in and wood came out, new lands became available for colonization and other agricultural projects. These roads were referred to as either feeder roads, access roads, penetration roads, or farm-to-market roads. Their construction was made possible, in large part, through the use of PL 480 local currency.

USAID encouraged the GOP to develop a national plan for road construction in order that priorities could be set and all national and international organizations could pull together under one comprehensive road building program. Because the National Planning Secretariat was not yet fully functional, USAID unilaterally commenced development of a comprehensive farm-to-market road program in 1961. This program was discussed with MOPW and MOD officials, and on August 1, 1962 project agreements were signed with these two ministries committing a total of \$1,440,000 equivalent of PL local currency funds from the 1961 sales agreement for the construction of certain specified projects within the over-all USAID development program. With this, plus USAID grant money, technical assistance and in-service and participant training programs, the MOD began construction on a 230 kilometer stretch of road between Coronel Oviedo and north to route 5. At the same time, the MOPW agreed to construct nine smaller feeder roads.

From 1964, because the MOD turned over responsibility for this road construction project to the MOPW, greater emphasis was placed on training MOPW personnel. Although the MOD technology relinquished supervisory responsibility for the road from Coronel Oviedo north, in practice they continued to provide personnel to assist in the construction work and were closely involved in on the spot decision making. The Coronel Oviedo to Route 5 project was begun about the time John Wiley arrived as USAID Director to Paraguay, in 1962, and was a favorite project of his. He said, "It was the project I visited in my first field trip and just before I left in March 1967, I was able to drive on the road from Coronel Oviedo to Pedro Juan Caballero where previously there had been no road communication. Shortly after, the road was open to the public. This was a pioneer, dirt road, usable only in good weather. But it did open up a populated part of the country." In 1985, through a loan from IDB, the GOP was able to pave the first 100 kilometers of this road.

Wiley, in fact characterizes the farm-to-market labelling of this project as a cosmetic device to permit USAID to carry out the major route from Coronel Oviedo on a "force account" basis with the MOD given its proven cost-effectiveness in the Chaco. He credits an experienced, resourceful, and forceful USAID road engineer, Theodore D. Morehouse, as the driving factor behind this successful project. Morehouse spent most of each week in the field, only coming to Asuncion as necessary to order equipment and

spare parts, approve payrolls, and check on the equipment maintenance shop in San Lorenzo.

Wiley provided the following anecdote: "When the Chaco road was finished (except for USAID maintenance) Morehouse ordered all of the construction equipment moved across the river to Coronel Oviedo. One day Morehouse called me to say that one of the drag-line cranes in the Chaco was surrounded by a platoon of soldiers who had orders that the crane was to remain behind. On investigation, we found that, unknowns to us, the President had ordered General Careaga to start to build a branch road from the Chaco Road to General Díaz, a post in the SW Chaco near the border of Argentina. Morehouse refused to back down because the drag-line was essential to the new road north from Coronel Oviedo. It was one of four such units but he did not want to release it, saying that the Paraguayan engineers did not know how to use or maintain it and it would rust away if left in the Chaco. This impasse lasted for several days until one day the U.S. Ambassador got a call from the Foreign Minister, Raul Sapena Pastor, inviting the Ambassador to come down to the palace. After the meeting Ambassador Snow told me it 'was a hell-of-a-way to run a railroad', that the allocation of road equipment had to be negotiated between the foreign minister and the U.S. Ambassador. Needless to say, the drag-line remained in the Chaco. Morehouse was disgusted with this decision but went ahead with three drag-lines, one of which had to be cannibalized for spare parts".

USAID involvement in the construction of penetration roads, including the Trans-Chaco Road, stretched over a period of a decade and a half. USAID invested \$3.1 million in grant funds, and provided nearly \$5.3 million of PL 480 local currency. There was also a \$500,000 civic action grant provided by USAID in 1963 for the purchase of new equipment. This was complemented by a donation of equipment and spare parts valued at \$600,000 from the U.S. Military Mission in Paraguay, to the Paraguayan Engineer Construction Battalion. The GOP invested at least \$1.5 million in the project. This total of \$11 million provided around 2,500 kilometers of dirt, dry weather farm-to-market roads in the country. (See annex 4). In addition, USAID provided PL 480 local currency to help cover local costs for the Asunción to Encarnación Highway, which was constructed through loan funds provided by World Bank.

This program began a process of change for much of the rural population of the country. No sooner was a dirt road pushed through to a new little town, than in would come a bus to provide the people with a mass transit system. What had taken days now took hours (as long as it did not rain). As a road was opened, new lands were divided and sub-divided, and farms and colonies were established. Health services, educational opportunities and agricultural extension were more accessible to the people. Former USAID Director, Mr. Abe Peña, who served two tours in Paraguay (1976-1979 and 1981-1984), says that he feels the road



Photo above shows section of road constructed between Curuguay and Saltos del Guairá with the assistance of PL 480 sales proceeds.

construction projects were the ones which had the greatest impact on Paraguay because they really opened up the country to development.

#### International Airport (1955-1970)

An agreement between the GOP and U.S. Overseas Mission (USOM) was signed in August 1955 to assist the GOP in developing an airway system, an airport expansion program and a training program in all phases of aeronautics. The training program was to provide the GOP with competent staff to train other personnel and to ultimately carry out a complete aviation program without further outside assistance.

In 1955 two U.S. technicians were assigned to the project. By 1959 they had set up five communication radios, and formed a mechanics school through training of an instructor in the U.S. and the construction of a classroom. Their work helped improve maintenance and inspection techniques, and they advised on the construction of the first section of the new runway at Asunción's international airport, and had provided general information and advice to the Director of Civil Aviation. In addition to training mechanics, training was provided to flight instructors, air traffic controllers, trainee controllers and airport managers.

Between 1955 and 1959 the U.S. Government contributed \$169,900 to the "Civil Aviation Assistance Division" project, while the Government of Paraguay contributed \$6,500. Due to an apparent lack of interest in the project and the difficulties stemming from insufficient Paraguayan contributions, USOM requested that an early termination agreement be signed. The GOP signed the termination agreement in June 1959, approximately two years earlier than planned.

During this training effort, the Export-Import Bank was providing some \$1,120,000 in loan funds to the GOP to improve and extend the existing runway. The U.S. firm which had finished the 6,000 feet of paved runway early in 1958, was contracted to complete the extension and improvements. The project was to provide for a well-lighted, asphalt-surfaced runway of 9,000 feet to accommodate jet passenger planes. The USOM provided approximately \$250,000 from the PL 480 local currency. Construction was completed in late 1958.

From late 1963 through early 1964, the international airport had to be closed to jet traffic due to failure of a portion of the pavement and sub-structure of the runway (a Boeing 707 sank through the surface about 18 inches while taxiing on the runway).

A USAID report noted "Because of undetermined design or construction problems the main landing strip began to show faults and soft spots about two years ago. Inspections made by competent engineers, FAA and A.I.D. personnel and personnel from U.S. Flag airlines have all attested to the

dangerous condition of the landing strip ... in the interests of safety, and recognizing the possible repercussions against the reputations of U.S. companies involved in the construction, USAID proposed to support an immediate emergency project, to stop further deterioration of the strip by the installation of a drainage system and to entertain reasonable requests for support for necessary permanent reconstruction of a portion of the strip where all present faults have appeared."

An emergency project was implemented with \$143,000 equivalent from PL 480 local currency for procurement of materials and local labor costs. The actual work was carried out by the Ministry of Public Works, with technical assistance and advice from the USAID Transportation Officer. USAID continued to provide small amounts of PL 480 local currency as support for the maintenance of the airstrip, as well as to fund a feasibility study for the construction of a new runway.

Meanwhile A.I.D. and the GOP negotiated a \$ 4.7 million loan agreement that was eventually signed in April, 1967 for the construction of a new runway and improvement and expansion of a taxiway and lighting facilities at the President Stroessner International Airport in Asunción. The loan was repayable in U.S. dollars, over a 40 year period, with 2 1/2 percent interest after a 10 year grace period, during which one percent interest was payable the standard A.I.D. norm during the 1960's.

In December 1967, the MOPC signed a construction contract with a U.S. firm. There were a number of delays in the project due to weather and difficulty in locating a suitable basalt quarry, as well as a delay in issuing a letter of credit. Work was completed in April 1970, only four months behind schedule. The new runway, taxiway, lighting system and reinforcement and surfacing of aircraft areas met with the FAA approval, and in 1974 they were complemented by the construction of a new access road and airconditioned terminal building which cost the GOP something over \$50 million.

#### Telecommunications (1961-1964)

The other important infrastructure project which involved USAID support was in telecommunications. On May 25, 1961, A.I.D. signed a \$1 million loan agreement with the State-owned telephone company ANTELCO, for the purchase and installation of equipment, materials, and services required in the improvement of ANTELCO's international telecommunications system. The project had four components: (a) radio transmitting and receiving facilities; (b) telegraph traffic center; (c) cable plant; and (d) related local works and facilities. ANTELCO signed an agreement with the Radio Corporation of America (RCA) in December, 1963, for the first three activities. ANTELCO completed all the local construction work.

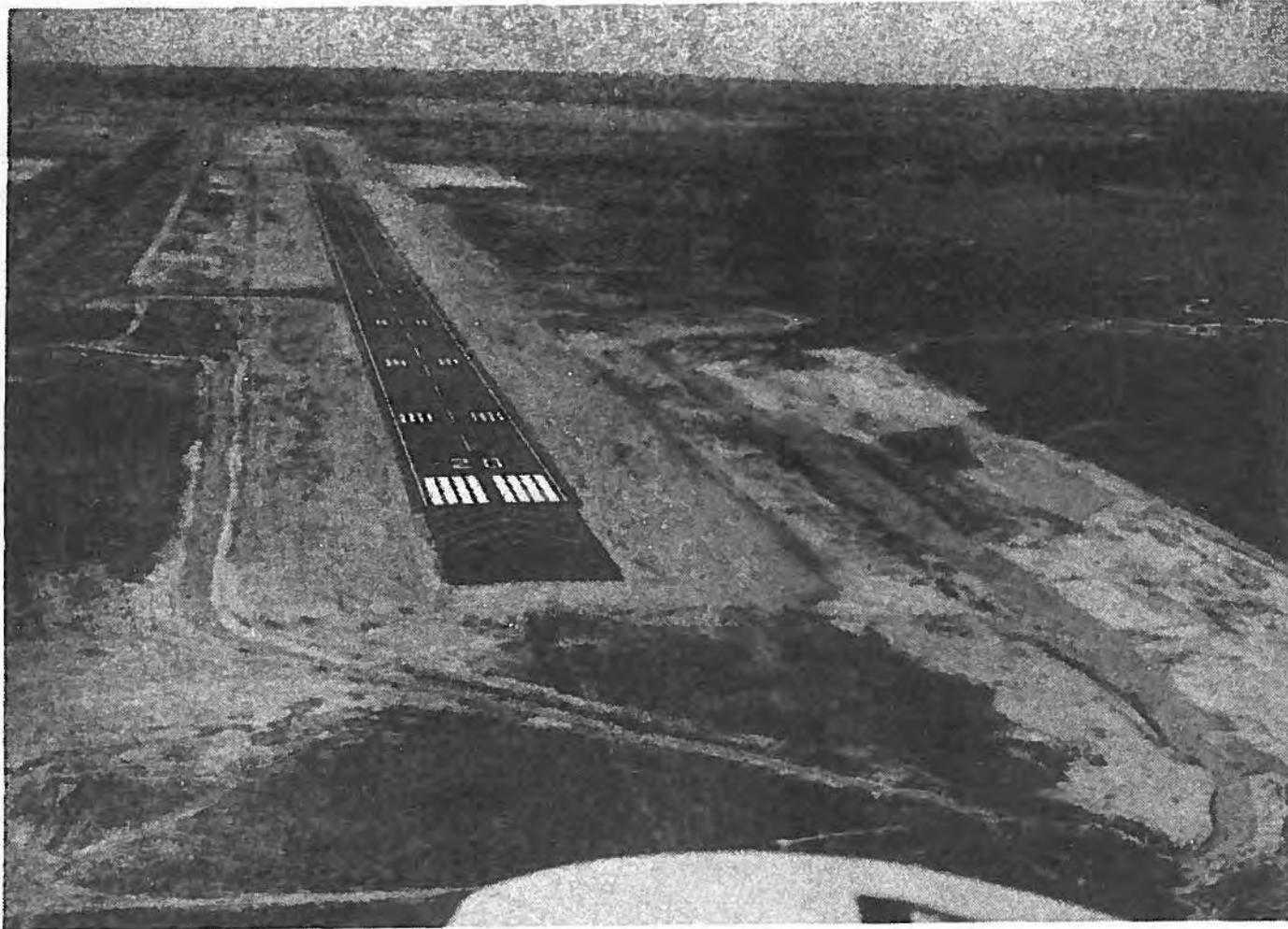


Photo above shows the runway of 11 thousand feet constructed under the USAID loan program.

Once RCA was on board, progress on the project was good and the spirit of cooperation excellent. The project, completed in 1964, provided a high frequency radio telegraph, and radio telephone system connecting Asunción with Hamburg, New York, Rio de Janeiro, Montevideo and Buenos Aires. USAID also provided grant funds to send six ANTELCO employees to the United States for training in traffic handling and in teletype operations and maintenance.

CHAPTER SIX - GOVERNMENT ADMINISTRATION AND URBAN DEVELOPMENT  
(\$19,739,000)

Overview

"It may be stated as a truism that an underdeveloped country-without regard to the excellence of a prepared plan for economic development - cannot go forward unless its administrative system is capable of carrying out such a plan. Paraguay does not have such an administrative system." This description was written in 1958 in the USAID "Country Program Book". In general, operational systems were outmoded, inefficient, and not standardized. By way of example, every ministry had a different system of purchasing. Budget formulation was described as rudimentary with weak control and execution, the accounting system inadequate, and the personnel system ineffective. Adequate administrative planning was lacking; principal officials were so involved in solving day-to-day problems they had no time to develop long range plans.

Several years earlier, the bilateral program begun to address for the improvement of administrative management practices in all the government agencies by signing a master agreement with the Ministry of Finance (MOF). The objective for the 1952 initiative was the development of a new administrative procedures manual for the government. This activity evolved and continued in one form or another through the Sixties before terminating in 1972. U.S. bilateral assistance was directly responsible for the 1959 establishment of a Department of Public Administration at National University Economics School, which in turn led to the creation of a successful private but university affiliated Center for In-Service Training (CAES) several years later.

The decade of the Alliance for Progress gave new impetus to fiscal reform and planning. Projects were carried out in tax and customs administration and national planning.

Similar activities were being carried out in many Latin American countries assisted by A.I.D. at that time. The overall objective was to help generate and administer the local resources needed for counterpart contributions to externally financed projects and domestic development priorities. Yet, as demonstrated in this document, time and time again the continuation of initiatives was drastically curtailed or ceased with the termination of A.I.D. assistance, perhaps indicating a partial failure of these reforms. However, one must ask what would have been the level of accomplishment had these efforts for fiscal reform and improved planning not taken place.

In the following decade, A.I.D. began addressing urban development problems and was instrumental in the formation of Paraguay's Savings and Loan System for home financing and the National Municipal Development

Institute (IDM). This latter program grew out of earlier efforts with the Ministry of the Interior to promote growth poles throughout Paraguay.

Management, Accounting and Budget Control (1952-1972)

In 1952, USAID began the "Government Management and Organization" project to assist with the development and implementation of modern business practices within government institutions and ministries. Priority was directed at strengthening the practices of institutions' importance to Paraguay's economic planning, stability and development, such as the Central Bank, the Bank of Paraguay, the Directorate General of Statistics and the Directorate of Customs. In the Central Bank, organizational and procedural improvements were effected as a result of the assignment of two short-term consultants, early in 1957. Also, by that time, major improvements had been made by SCISP in the administrative practices at the Ministry of Health and the water authority, CORPOSANA. These latter two organizations were used as demonstration show places in order to encourage changes within other GOP entities.

By 1958, a preliminary survey defining the fundamental management problems of the GOP had been completed in the MOF and technicians had begun work on problems of accounting and inventory and stock control. In 1962, the GOP initiated, with USAID assistance, the development of a national budgetary law and a complementary accounting system, necessary to achieve needed operating and fiscal controls both in the fields of revenue and expenditures. A new budget system was developed and installed in some key ministries, but without the complementary accounting system. By 1963, a survey of practices in the supply management field had been completed and recommendations forwarded to the Minister of Finance. Many of the government agencies were becoming aware of the fact that they needed to update their procedures if they were going to be able to carry out the external donor programs needed for Paraguayan development. Many were requesting assistance to reorganize their record keeping and communications procedures. During the same year a detailed management survey of the Ministry of Education had been completed, under the direction of the Public Administration Division of USAID with assistance from the Research Center of the School of Public Administration.

Through a subproject agreement with the GOP, USAID began collaborating with the United Nations in 1966, in order to assist the MOF in improving its accounting procedures and fiscal control methods. USAID provided contracted technical advisors to work under the direction of a UN technician to develop a modern accounting system that would be compatible with a revised budget system. A law to establish a new government budgeting, accounting and control system was passed by the GOP legislature in July, 1967. This system was first developed for use in the MOF. Then, with basic modifications to suit individual GOP entities, manuals for accounting, for auditing and for administrative procedures were developed for the system.

Although legislation establishing budgetary controls was passed, the implementing regulations were never approved. The accounting controls, that had been designed were only implemented in the Ministries of Agriculture, Labor, and Justice, part of the Ministry of Finance, the Judicial System, and the National University. Because of a lack of budgetary support, implementation was slow or nonexistent in the other Ministries and government institutions. Given lack of further progress the agreement terminated in June 1972. Under the supervision of USAID and UN advisors, this project had provided in-service to approximately 800 GOP employees in accounting, organization, administration, financial management, and auditing techniques.

#### Customs and Tariffs (1959-1967)

To assist the GOP in improving its fiscal condition, USAID provided a U.S. Customs advisor to work with the Customs Administration in 1959. This advisor continued to work in Paraguay through July 1963, when he went to Chile, but remained available for short-term assignments to Paraguay. He helped design and implement changes in warehouse and accounting procedures, which accounted for very substantial increases in Customs receipts in 1962-63. The GOP also enacted into Law two important recommendations: (1) the establishment of a permanent advisory office for customs which was provided a staff trained by A.I.D., and (2) a regulation for the disposal of unclaimed imports. Recommendations for more fundamental reforms, however, were not acted on.

Assistance in Customs Administration was limited by USAID in 1964, through the employment of a full-time Paraguayan customs statistician to work in the technical advisory office. The statistician helped facilitate the conversion of the tariff to the Brussels nomenclature, an important step in the program of tariff revisions. By late 1965, work with the Customs Administration was phased out.

#### Tax Administration (1965-1976)

In the first half of the 1960's with OAS assistance the GOP was struggling with ways to increase taxes to cover rising budgetary expenditures, to improve tax collection, and to alter tax rates which were disincentives to production. It provided tax exemptions for the meat packing firms which were producing corned beef for export. It removed import duties on such agricultural items as fertilizers, insecticides and seeds. It introduced a complex tax law designed to plug tax loopholes affecting companies, and established new taxes affecting commercial activities. The GOP substantially increased duties on passenger automobiles to encourage the use of foreign exchange for essential imports. It also increased tax on gasoline. At the same time, it lowered duties on a wide range of essential and luxury imports, such as cigarettes and whiskey, in order to discourage contraband by making imports competitive. OAS consultants completed and submitted several

recommendations in tax reform during the 1963 to 1965 period which, however, were not adopted.

A revised program for the fiscal area was devised by USAID's Public Administration Division in the first half of 1965, emphasizing improved tax administration and more effective tax collection systems under the existing tax laws of Paraguay. Two tax specialists, secured through a U.S. inter-governmental (PASA) agreement from the U.S. Internal Revenue Service, were supplied to GOP tax offices to analyze administrative deficiencies, primarily in the collection of income taxes and real estate taxes. As a result of recommendations for administrative improvements, implementation for improvements began in 1966 with the continued assistance of PASA personnel. In 1967, largely as a result of a campaign of taxpayer identification and improved auditing procedures, an increase of \$2.3 million in excise tax collections was realized.

In FY 1968, one PASA advisor was contracted to continue work begun on tax reforms and expand the training program. He was assisted by short-term advisors from IRS, and joined by a second long-term advisor in 1969. As a result of this work, the project showed excellent increases in tax revenues during every year of the project, far exceeding the planned target of 8.5 percent per annum.

This project was terminated in 1976, after more than eleven years of assistance. The IRS advisors were able to develop and implement various changes within the three offices with which they were associated. One such change was the decentralizing of the tax collection and taxpayer education and appeal function in each of the offices. Recommendations for updating and maintaining taxpayer and property files and other records were made and implemented. New audit forms and procedures were developed and used. In-country training was provided for the training of recruited field auditors. These auditors were instrumental in reducing the number of delinquent accounts. As a result of in-country training programs, organization and methods groups were established in each office. These groups were assisted in designing organizational charts for their respective offices and in consolidating all effective rulings and regulations. The only disappointment and persistent problem encountered was the failure to install a centralized planning function within the Ministry of Finance which would coordinate the activities, training, program planning, etc. of all the tax offices. Also, the GOP never passed a general income tax as recommended by USAID.

#### Cadastral Survey (1974-1981)

In May 1974, the GOP and A.I.D. signed a \$ 2.3 million loan agreement for the Rural Cadastral project to help implement the suggestions provided to the Property Tax Office under the Tax Administration project. The cadastral survey was based on a pilot study conducted by OAS advisors and complemented an earlier cadastral survey conducted by the GOP in Asunción. The loan project was designed to cover 160,000 square

kilometers of territory in the eastern half of Paraguay, where some 60 to 80 percent of Paraguay's population live, and 70 percent of land value located. It included: (1) identifying property boundaries and ownership through aerial mapping in the rural areas and field tape and compass measurements in urban areas, (2) correcting property and tax registers to reflect the improved identification, and (3) adjusting current assessments of land values for tax purposes. The project was carried out to raise revenue needed by the GOP for development investments by increasing the property taxes. The improved property records also would facilitate the legal transfer of rural properties, thereby providing more favorable conditions for the granting of agricultural credit.

The project did not progress as originally planned. Delay in the production of base maps and aerial photos put the project two years behind schedule by 1978. The number of rural properties to be surveyed was underestimated by 70,000 or 25 percent, and urban properties were overestimated by the same degree. The GOP's decision to include the identification of land improvements in the cadastral survey also contributed to the delays, but increased potential tax revenue. By 1978, 175,000 urban and 89,600 rural properties had been surveyed, with tax collections, as a whole, exceeding the original estimates. A new billing system which would enable the listing of delinquent taxpayers was being installed. Only eight of the planned 14 department tax collection offices had been opened, and only two of them had functioning departments for record maintenance. Five of the ten planned field collection agents had been hired and were performing well. Action to develop a legal system for maintaining cadastral tax records had stalled. Despite all this, the amount of taxes collected in the field had increased by 22 percent. By 1978, the project confirmed land tenure and registration to be one of Paraguay's most pressing problems.

By 1981, the Office of Real Property Tax still only had eight of the 14 targeted field offices opened, with record maintenance services functioning in only five of these offices. The eight field offices were reported as functioning satisfactorily, with tax collection during 1980 up 27.5 percent over 1979. Guidelines from the central maintenance office in Asunción, organized through assistance from this project, were instrumental in updating the cadastral records of 96,344 properties. However, the Real Property Tax Office made no attempt to increase the number of tax collection officers, even though it had proven to be efficient in collecting back taxes. Laws to maintain cadastral and tax records were in place, but not totally enforced in the rural areas. At the goal level, total real estate tax collections was up 122 percent during the period from 1975 to 1980, far exceeding the target, and substantial data were developed on land distribution, tenure, and use.

In an interview, in November 1986, Mr. Juan Simon Oviedo, the new head of the cadastral division, said that it will be another 10 years before the whole eastern sector or Paraguay has been completely surveyed and recorded. To date, about 70 to 75 percent of the work is completed. The

eight field offices, which are still functioning, include approximately 35 to 40 employees who collect and verify information for the cadastral survey. Maintenance of the records is done centrally, with 30 employees managing the records of the urban areas and 10 for the rural sectors.

Mr. Oviedo went on to comment that the collection of property taxes has continued to increase since USAID's involvement with the project in 1980. The project has brought 180 towns into the system which previously were classified as rural. He explained that although information on the improvements, such as houses, fences, barns, etc., are recorded for both the rural and urban sectors, only the urban sectors are currently being taxed on these improvements. Therefore, the 180 towns covered by the cadastral survey have contributed most to the increase in property tax revenue for the GOP. According to Mr. Oviedo, the GOP had no plans to include in its tax base the improvements made on land in the rural areas of the country. Property titling remains to be problematical in rural Paraguay. Part of the difficulty is the normal complexity involved in coordinating between the three government entities involved in the titling process - the Office of Real Property Tax, the General Property Registry of the Ministry of Justice, and the Institute of Rural Welfare (IBR). Nevertheless, the cadaster is the starting point for clarification of titling problems and as greater coverage is achieved, rural property owners are being provided the basis for clarifying their title situation.

#### In-Service Training Center (1961-1972)

In-service training began at the National University in 1959. With USAID assistance, the School of Public Administration was established as part of the School of Economics. Among the stated objectives of the School of Public Administration, was "the organization of a program establishing the School as a Center for in-service training of Paraguayan Government officials at all levels of government". An executive decree, which contemplated in-service training for high-level government personnel, was issued in September 1959. The school's in-service training activities for top level officials began in October 1959, and consisted of training courses and short seminars covering approximately 20 subjects.

Demand for these courses grew. Consequently, a three year agreement was signed between USAID and the MOF in October 1961 to provide in-service training. The Center for In-Service Training (CAES) was established under this agreement and received government funding directly from the national budget. The agreement terminated in 1965 and was replaced with a new agreement signed directly with the National University. Under the terms of this agreement, the School of Economics became the supervising agency for CAES. CAES continued to be funded directly from the National budget and was permitted a semi-autonomous relationship with the University.

During the initial years, USAID helped finance the internal management costs at CAES. In later years, USAID dollar grants were used to finance training specifically related to other USAID projects, and to improve public administration in general. When the termination agreement was signed in April 1972, CAES had a regular staff of eight, which was supplemented by instructors and lecturers contracted from the public and private sectors. In a September 1986 interview, the current director, Dr. Soler, indicated that the full-time administrative staff had grown to 22 and the instructional staff was comprised of some 50 professionals contracted on an hourly basis, with approximately 10 teaching a full-time schedule at the Center.

The Center matured from the early years when emphasis was given to relatively short in-service training courses for medium and lower-level government employees, and even shorter courses for higher level employees, to more comprehensive training. Training programs were developed in the areas of organization and methods, tax administration, clerical, accounting and fiscal control, data processing and other related fields. Besides training public administrators, CAES provided advisory services to municipalities in town management, and, on a contractual basis, in-service training and technical counselling to firms in the private sector. The latter was a means to raise funds, which were used to supplement the basic in-service training program for government employees.

In 1962, the Center graduated 610 people. By December 31, 1971, a ten year total of 14,235 people, from both the private and public sectors, had received training at CAES. By the end of 1985 CAES had provided courses to over 45,900 people. Financial assistance continues to be combined with resources generated within the Center through consulting work, registration fees, and external donations. Since the initial start-up period, each of these three sources has continually provided for approximately one-third of the total operating budget. An exception was between 1979 and 1982, when fewer funds were available from donations and the Center, consequently, had to reduce the number of courses it offered during those years.

With USAID's assistance, new courses and techniques were tried out and developed. Traditional teaching methods were replaced by "active learning" techniques. In the termination report it states, "The Center enjoys enormous prestige in Paraguay, and the support of most Ministers and heads of agencies in both the public and private sectors. Repeatedly, directors of departments and division chiefs have stated unequivocally that employees who have participated in courses of the Center fulfill their functions with greater effectiveness." By the termination of USAID assistance, the Center had expanded from offering 20 courses to offering 65 courses, of which 27 were for the private sector and 38 for the public sector. The Center has continued successfully since 1972 and has provided assistance to one of A.I.D.'s new grantees under the ADC program.

### Statistics (1964-1974)

The Alliance for Progress gave new impetus to the demand for statistical information for development planning project appraisal and evaluation. In 1964, an advisor in industrial statistics from the Economic Commission for Latin America (ECLA), helped the Ministry of Industry and Commerce (MIC) carry out an industrial and commercial censuses and establish an industrial and commercial register. This census was financed with PL 480 local currency. A U.S. expert from the Bureau of the Census, under a U.S. inter-governmental (PASA) agreement, was brought in for a three week period to review the techniques and results prior to publication of the census. The census results, in addition to providing data vital to the preparation of the national income accounts, served as a benchmark for establishing a statistical series on industrial and commercial activities. Another PASA advisor from the Bureau of the Census was brought to Paraguay, later in 1966, in an effort to assist the MIC in developing a continuing series of data on industrial production and commercial sales utilizing the recently published 1963 census as the base. By 1964 A.I.D. had initiated a participant training program in labor statistics and census. The first trainee was the Chief of the Statistics Department in the GOP's Department of Labor who attended an 11 month course in labor and price statistics held in Puerto Rico.

In 1969, USAID initiated a five year program to improve the GOP's compilation and dissemination of official statistics. The project was to produce a national council and sectoral working groups, programs for the sector working groups, sector inventories, physical improvements in the Directorate General of Statistics and Census (DGEC), technical improvements in the DGEC and other GOP statistical units, and centralization of the data processing and printing of statistical information. Major USAID inputs were to include a PASA advisor, short-term consultants, training locally, in the U.S. and third countries, and commodities for data processing. The GOP was to increase its budget support of the DGEC and cover the local costs of the project activities.

An evaluation covering the period December 1973 through December 1974, indicated that the DGEC had been a bit overwhelmed by this project since, at the same time, it was attempting to improve its census capacity with assistance from the U.S. Census Bureau. The census activity left very little personnel which could devote itself to general statistics. Despite GOP yearly increases to the DGEC, with several mid-level positions created and others upgraded, the Directorate remained understaffed. As during prior attempts, little progress was made toward centralizing data processing and printing of statistical information.

One positive aspect was DGEC's initiation of an in-country training program for employees of the GOP statistical offices, and the designation of more staff members for training abroad. This in-country training component, although late in getting started, was one of the most

successful project components. Participant training was also an important component. It provided training in the U.S. and elsewhere for statisticians, with nearly half the funding for this training being provided by international organizations other than USAID. Too, the project was able to establish the National Statistics Council, which was meeting regularly but not functioning efficiently. It was not until September 1974 that the Council finally organized its first sector working group, in agricultural statistics.

#### Development Planning (1961-1968)

USAID was instrumental in the development of the Technical Planning Secretariat (STP) for economic and social development planning, under the Office of the President. In 1961, USAID contracted an economic consultant to work at the Central Bank, in order to prepare an investment budget covering a five year period. This was to serve as the initial basis for developing a long term national development plan as called for in the Charter of Punta del Este that marked the beginning of the Alliance for Progress. In March, 1962, an executive decree authorized the creation of a planning secretariat which could: (1) diagnose the whole economy, (2) a formulate investment decisions on a national basis, and (3) prepare a long-term economic development program.

The Economic Commission for Latin America, the Organization of American States, and the Inter-American Development Bank had formed in Washington an ad-hoc Committee of Cooperation for the recruitment of planning advisers for Latin America. In November 1962, the GOP requested the Tripartite Advisory group to aid Planning Secretariat in the formulation of a national development plan. USAID's support was aimed at providing technical advice to supplement that of the Tripartite Group. USAID offered training for as many of the Secretariat's personnel as could be spared from the office. Financial support for salaries and office equipment was provided through the PL 480 local currency. In FY 1965, PL 480 local currency covered 40 percent of STP's budget. STP's lack of direct authority over the budget process and sectoral level planning limits its role. Nevertheless, it has been instrumental in drawing attention to new national levels concerns. Its support and participation in the 1985 A.I.D.-financed environmental profile and subsequent workshops was instrumental in generating increased activities in this area. Currently, STP is receiving UNDP administered IDB support for improving its external assistance coordination.

#### Urban Development

Shelter Improvement (1971-1982) - USAID became involved in housing programs in Paraguay in 1971 with a \$100,000 technical assistance loan to the Government of Paraguay (GOP) for the formation and development of a home finance system under a National Savings and Loan Bank (BNAP). The next year, A.I.D. and the GOP signed a \$2 million loan agreement to be

used by BNAP to purchase mortgages extended by the new S&L Associations. By 1974 three of these private S&L Associations had been formed and were participating in the project.

That same year, A.I.D. carried out Paraguay's first Shelter Sector Study. The study confirmed the need to continue to support the new S&L System and recommended that A.I.D. assistance be used to help BNAP initiate new programs within the system directed at improving the housing for low-income families in suburban and neighboring areas of Asunción as well as in some cities of the interior. The A.I.D. Housing Guaranty (HG) mechanism was the recommended source of support. (Under this program A.I.D. guarantees repayment of a long-term loan made by a U.S. private lender to the host government at slightly less than commercial market rates).

A \$4 million HG loan was approved in 1975. Negotiations with the GOP were completed in 1977 and the program started immediately thereafter. The funds provided were intended to enable the Paraguayan S&L Associations to finance approximately:

- 1) 650 loans to improve, expand and complete existing houses of low income families (average loan - \$750);
- 2) 750 loans to low income families who own lots to build a house "self-help" (average loan - \$2,000)
- 3) 625 loans for development and financing of contractor planned and built projects for low income families (average loan - \$3,200)

In addition, BNAP and the S&L received short-term technical assistance to help them adopt their capabilities to administer programs for lower income families.

The funds were quickly utilized in full and BNAP was forced to turn away new applicants. In view of the popularity and success of the project a new HG was planned at \$8 million, in which shelter credit was to be channelled not only through the S&L Associations, but also through the GOP's Municipal Development Institute (IDM) in order to broaden geographic coverage. The rural credit union confederation, CREDICOOP, was to administer a cooperative component. The Ministry of Finance, however, decided not to authorize BNAP to seek a U.S. lender this time because it did not want the GOP to assume the foreign exchange risk of a dollar loan for this purpose. By July 1982, the USAID's cooperative housing advisor departed.

Between 1977 and 1980, BNAP was able to mobilize \$6.2 million medium term loans from the A.I.D. sponsored Interamerican Savings and Loan Bank (BIAPE) located in Panama. Today, six S&L Associations continue to

operate actively in Paraguay. However, the nature of their lending has changed substantially given the lack of long term financing for housing.

Municipal Development (1958-1973) - Bilateral involvement in municipal development began in 1958, with assistance to the Division for Municipalities, in the Ministry of the Interior (MOI). The assistance was to help institutionalize an annual Congress of Municipalities and to stimulate inter-municipal competition in order to improve local public services. These activities helped strengthen the Division for Municipalities, and the Division began advising the MOI on the preparation of a revised law for governing municipalities in Paraguay. Further efforts for promoting municipal development did not take place until the last half of the 1960's.

The GOP's 1968-73 "National Industrial Development Program" adopted the concept of regional growth poles to decentralize development activities and stimulate the exploitation of potentially rich areas of the country. Between 1967 and 1969, three teams of Paraguayans, representing five separate regions of the country, were sent to observe local and state development organizations in Puerto Rico and the United States. Participants from three of the interior cities returned to create local organizations aimed at promoting local development investment opportunities. These organizations received limited support from the Ministry of Industry and Commerce (MIC) and the Technical Planning Secretariat. In October 1968, USAID sponsored a visit by Paraguayans to private sector institutions, in Argentina, Bolivia, Brazil, and Uruguay, to discuss investment possibilities of common interest to businessmen within the River Plate Basin sub-regional grouping. This resulted in a later multi-national conference in Paraguay, hosted by the Development and Productivity Center.

By July 1969, the GOP had designated two areas, Villarrica and Concepción, as regional development poles and other municipalities were under consideration for this program. A team of five community leaders from one of the poles had been trained under a USAID-sponsored community training program. USAID also assisted the MIC, on a pilot basis, in carrying out this regional development program with consulting services from Georgia Institute of Technology (GIT) in 1970. The results of this pilot program exceeded expectations. In a period of 30 weeks, two regional development centers were organized, full-time executive managers were hired, an inventory of human, natural, and capital resources was completed, and several private investment opportunities were identified. The MIC created a Regional Development Department in order to provide permanent and continuous backstopping to the development efforts of the poles. A director of the new department was designated, and the future funding of that department was incorporated into the regular MIC budget.

At the request of the MIC, USAID assistance to the regional development poles was continued and expanded under an agreement signed in February,

1971 and extended in June, 1972. Additional help was given to Villarrica and Concepción, especially in preparing pre-feasibility studies and in promoting the already identified investment opportunities. Encarnación, Pedro Juan Caballero, and Pilar were incorporated as three new municipal poles. All participating regions were required to organize regional development centers and contract the services of paid full-time executive managers, who would coordinate and implement regional enterprise development programs, with the advice and guidance of MIC officials and the Georgia Institute of Technology specialists. Further, the program would be implemented in cooperation and coordination with the National Planning Secretariat, the National Development Bank, the Development and Productivity Center, the In-Service Training Center, and other pertinent public and private institutions. Finally, the MIC was to establish a Data Center, within the Regional Development Department, for the deposit and analysis of basic information acquired at the regional and national levels.

A 1973 Project Appraisal Report states that of the five established poles, only two had full-time paid directors. One had a part-time director and very limited funding. The other two poles were inactive, but efforts were being made to reactivate one of them. During the life of the project, USAID sent 12 participants to study at GIT and GIT technicians assisted the poles in the development of at least 19 feasibility studies. The result was a growing awareness, at the regional level, of development opportunities, problems and benefits. It motivated the private sector to identify investment opportunities and to establish new industrial or commercial activities within areas outside Asunción.

In a separate but related activity USAID assisted in the development of a National Municipal Development Institution (IDM) through a \$2 million loan agreement signed in February 1972 together with almost \$100,000 of PL 480 local currency. USAID's loan provided subloans funds for municipalities, and technical assistance to help establish the IDM as a national umbrella organization to support municipal development in Paraguay's growth poles.

Technical assistance contracts were carried out by three different consulting firms. The Brazilian Institute of Municipal Administration (IBAM) furnished the technical assistance in municipal administration. The Paraguayan consulting firms MONITOR and Equipo Guarani were responsible for the development of the training and other aspects of the project. A total of 20 key officials, from IDM and the municipalities, were sent to other Latin American countries to participate in various training courses and/or on observation trips.

The GOP appeared to hold the project in high regard. After operating losses during 1975 and 1976, and concerned about the future of IDM, the MOF submitted to the Congress a revised municipal tax law. Approval of this law in 1977 produced increased collections to the municipalities

and, consequently, to IDM, which was receiving two percent of municipalities current revenues, as established by law number 291. IDM also received two percent of the proceeds of a newly established tax on imported alcoholic beverages, and, for a period of 12 years, 10 percent of real estate tax as levied on all urban properties outside Asunción.

Even without the new municipal tax law, municipalities were effecting an increase, in real terms, in their revenues as result of the training component of this project. IDM, in cooperation with the consulting firms, carried out a total of 99 seminars and 35 short courses, aimed at improving the quality of administration provided in the various municipalities. In addition, during 1976, an IDM mobile team was formed to provide on-site training in administration to personnel in 156 municipalities. In 1977, the same team organized regional courses to train the municipalities in the use of the new Municipal Tax Law. The total attendance in all these training events amounted to 4,694 participants, far exceeding the 1,400 originally envisioned.

The municipalities showed a high degree of enthusiasm in adopting IDM recommendations. The enthusiasm created a spirit of competition among the municipal leaders, in which they were eager to adopt and even surpass the improvements implemented by others. Technical skills in the municipalities continued to be weak, however, due to a high turnover of personnel. With most of the local improvements being the result of seminars and on-the-job training provided by IDM, it was necessary for the Institute to continue to provide programming funds for this area after the termination of USAID's involvement. According to Sr. Agustin Bareiro Yegros, present Director of IDM, the training programs for municipalities have continued. Courses are given regionally and locally by the mobile team, and nationally by IDM personnel. He stated that the problem of a high turn-over of personnel at the municipal level has diminished.

The broadly defined goal of the project was to promote the development of the Paraguayan communities outside of the capital city. However, the instrument for measuring this goal was never well defined, with the only indicator being a description of the type of municipal public works projects to be funded through subloans. As a result, a definite conclusion as to the success in meeting the goal was never drawn, but it was stated that IDM had been successful in carrying out a sound and well run lending program. The program got off to a slow start with the first sub-loan, in 1974, taking over six months to process. With experience, IDM was able to increase the number of sub-loans it provided and cut the time involved in processing the loan applications. By 1977, IDM had assisted 86 geographically dispersed municipalities to carry out 133 municipal development projects classified as follows:

Slaughterhouses	31
Street paving	24
Municipal Markets	23
Municipal Office Buildings	14
Water Systems	7
Electrification	6
Bus Terminals	5
Gymnasiums and Auditoriums	5
Tourism Projects	5
Municipal theaters	3
Road Equipment	2
Various	8

Many of the projects were revenue producing, thus providing the municipality with a continuous additional source of income, which after the subloan was amortized could be invested in other public works projects. This also led to one of the real successes of the project, the almost total absence of delinquency in the repayment of loans and the payment of interest by the municipalities. Payments in arrears as of May 1977, amounted to the equivalent of \$17,079, or only 1.34 percent of the total portfolio. Moreover, the age of most of the accounts in arrears was less than one month.

USAID assistance to IDM terminated in 1977. A follow-on loan project was designed. The agreement was never negotiated, however. The best recollection of a USAID Paraguayan employee is that the growing U.S. concern for human rights in the late 1970's delayed this project, which was eventually cancelled. Nevertheless, IDM was able to mobilize other external assistance including IDB loans and bilateral loans from Brazil and Germany.

CHAPTER SEVEN - PRIVATE SECTOR DEVELOPMENT  
(\$13,278,000)

Overview

This section is presented in three clusters of projects. The first grouping is composed of four activities that emphasize the provision of outside technical assistance with very little of resource transfer. One dates back to the 1950's; a new activity, started under A.I.D. 1985 Advanced Developing Country (ADC) Strategy, also is included. The second cluster consists of three projects that involve the extension of credit to the private sector. The third component is two activities that are directed at improving managerial and administrative human resource skills in the private sector, both at the labor and at the executive or director levels. The institution building element of all these activities ranges from very little to very strong.

Industrial Development Center (1952-61)

In 1952, with the inception of Point Four, the United States included in its Overseas Mission to Paraguay a Commercial and Investment Division which began with the "Trade and Investments" (T&I) project. This division included economists and, in fiscal year 1960, added an industrial advisor. The division was born out of a need to counter internal inflationary problems created by a continuous demand for money greatly in excess of the real resources available to Paraguay. Through the T&I, the Investment Division (ID) actively participated in the process of raising the understanding and ability of the GOP and the country to deal with its fiscal problems. The educational process was designed to insure that internal policies were adopted, with sufficient regard for their impact on the best use of available resources for development, and on Paraguay's international economic relations.

In August 1957, the International Monetary Fund negotiated a stabilization plan with the GOP. The plan, which abolished trade and exchange restrictions, was fully supported by the U.S. Embassy and USAID. The Paraguayan population was growing at a faster rate than production, which meant that the national output needed to be increased and exports expanded to satisfy the requirements of imported capital goods for development and to keep down the volume of borrowing. T&I contributed to the industrialization of meat for export. In 1959 alone the annual level of beef exports were increased by about \$5 million.

To institutionalize the capacity for on-going technical assistance for industrial development, the T&I project developed an agreement with the Ministry of Industry and Commerce (MIC) in 1960 for the establishment of an Industrial Development Center in Asunción. An Executive Board was selected with representatives from the MIC, the National University, private enterprise, and USAID. In May 1961, the activities of the center

were suspended in view of the lack of agreement by the cooperating parties on its aims and operations. USAID's industry officer left Paraguay in July 1961 and the Center was closed. At that point, the USAID Mission decided to discontinue this activity.

The principle objectives of the Center were: (1) the identification of new industrial production opportunities, (2) the improvement of productivity in existing enterprises, and (3) management training. The project was meant to stimulate imaginative and creative thinking on the part of businessmen and government officials, and to foster the spirit of entrepreneurship which would venture investment in newly identified industrial production opportunities. In closing the project in 1961, USAID noted the following, "While activity in this sector is now being discontinued, the work that was done during the life of this project can be considered significant in terms of laying the ground work for future work in this sector, if and when the GOP and private enterprise renew their interest in establish a favorable climate for cooperation."

The groundwork that was laid included the actual, if short lived, establishment of the Center, with its executive board designated and hired by a Paraguayan director. Through collaboration with the Office of Technical Cooperation of the Department of State of Puerto Rico, eight Paraguayan industrialists and GOP representatives were sent to Puerto Rico on a three-week trip to observe, first hand, "Operation Bootstrap", and then went on to visit the international lending agencies in Washington, D.C. Of greater importance were the two two-week seminars and the four-week course, given successfully by Chilean technicians from the Chilean Industrial Development Corporation (CORFO), on economic and management subjects. These were the first such courses ever held in Paraguay, and they elicited a favorable response from the local business community. A Spanish and English technical and business library was established. A technical inquiry service was organized and functioned effectively. The industry officer visited more than 40 factories and initiated meetings with special industry groups to lay plans for contracting specialized help. A special study on forest products utilization was initiated in cooperation with the USAID Agricultural Division. This work was continued by USAID's forestry personnel. This project also cooperated with the USAID Education Division in the survey on vocational training needs and industrial employment opportunities for graduates of the Technical Vocational School of Asunción.

#### Development and Production Center (1966-1974)

Even after the closing of the Industrial Development Center, USAID continued to recognize the need for supporting and assisting the development of the industrial sector of Paraguay. The sector, rather than being dynamic and bold, tended to be stagnate and timid. Businessmen in Paraguay were characterized as conservative, with most of the businesses in the private sector being family owned and run.

Management practices were handed down from generation to generation, and there was a lack of entrepreneurs to develop new industry.

In September 1966, USAID signed a new agreement with the MIC. The purpose of the agreement was much the same as the agreement which established the Industrial Development Center. The activities under the agreement were to stimulate: (1) private enterprise development, especially the creation of small and medium scale enterprises; (2) private investment, both foreign and domestic; (3) trade promotion; and (4) in general, increased active participation of the private sector in the economic development process.

The real difference lay in the structure of the new project. The first endeavor tried, through the selection of a diversified board of directors, to pull government and private concerns together to work on investment problems that were of mutual concern. Through that attempt USAID learned that although the problems may have been of mutual concern, the solutions were not usually viewed from the same perspective. In the new project, although it was signed with the MIC, emphasis was placed on developing the private sector and local entrepreneurs. To accomplish this, the board of directors for the new organization was comprised of representatives from two local trade associations, the Federation for Production, Industry and Commerce (FEPRINCO) and the Paraguayan Industrial Union (UIP), and worked as a liaison between the private business community and the government. Limiting the technical and financial assistance to small and medium size businesses added to the project's emphasis on developing Paraguayan entrepreneurs as compared to subsidiaries of foreign firms.

The new private organization, called the Development and Productivity Center (DPC), was founded in October 1966. USAID provided the technical assistance necessary for the formation of the Center and continued into fiscal year 1974 to provide financial and technical assistance. The Center, as described by Dr. Fernando Jose Ayala, Director of the Superior Institute of Administrative Studies (ISEA), was located in a two story rented building which teemed with activity.

Throughout the project period USAID had problems contracting the technical assistance necessary to meet all the requirements. The project, therefore, developed at a slower pace than originally planned. In a June 1969 Project Appraisal Report USAID wrote, "As shown in the Funding Table on Page 1, the major A.I.D. resource input for this activity has been USAID funding for contract and A.I.D. personnel services. A critical factor in the use of this input was the initial difficulty in locating suitable U.S. contract advisors for the Center, and the break in continuity when the USAID Private Enterprise Advisor was forced for personal reasons to return to the U.S. with several months elapsing before the arrival of a new advisor. In addition, one of the two original contract advisors did not work out for a variety of reasons and had to be replaced, with a lapse of almost a year in obtaining the

replacement. Also, the second advisor has proven to have strength only in one of the two fields in which he was supposed to work."

Similar problems continued to plague the project into the early 1970's. The contracted marketing expert preferred to work alone rather than with the Paraguayan technicians at the Center. He did not feel that it was his job, although written in his job description, to train these young professionals to take his place. Because of this and previous interruptions in the training of the Center's personnel, the Center relied very heavily on short-term USAID consultants to meet the training targets for local businessmen.

The DPC received much of its initial impetus by sending participants to observe the workings of centers elsewhere in Latin America. USAID provided short-term training to more than 30 participants, from both the public and private sectors and to members of the Center's Directive Council and staff. This training, along with the USAID technical assistance, helped the staff to organize and expand the consulting services it provided to private concerns.

Unfortunately, in-house fighting between the presidents of FEPRINCO and UIP (merchants vs. industrialists), among other things, resulted in the participant trained to become Director of the Center taking another job upon his return.

Because of the in-house fighting and the fact that the executive leadership did not always show the efficient and progressive attitudes expected of it, control of the DPC was modified in early 1970. The statutes were revised to allow individual firms, as well as the trade associations, to become members. Three positions on the Board of Directors were reserved for representatives from participating business members, and a campaign to attract new members began.

The GOP also proved to be unhelpful in developing this project. The project appraisal report, dated September 1970, states, "Although the GOP has not been directly involved in the operation of the DPC, it has at times been uncooperative. The Minister of Industry and Commerce, for example, sometimes tries to exercise too much government control over the Center's operations." In 1970, the Minister asked that he not be required to sign the "Project Agreements" for the DPC, thus, eliminating the only direct GOP link with the project.

USAID endeavored to develop a center which, upon the termination of foreign assistance, would be able to function and expand on its own. Revenues for the continuation of the Center's activities were to be generated from: (1) the training courses for private businessmen, (2) management consulting, (3) investment studies, (4) membership dues, and subsidies from FEPRINCO and UIP. By 1973, the DPC recognized the financial difficulties it might face at the termination of USAID assistance, and began to make adjustments. It made various

administrative changes, including a major reduction in the permanent consulting staff. It was felt, at least at the Center, that this would not reduce the DPC's ability to carry out its programs, because the same technicians were to be available on an as-needed basis. These adjustments, and an intensified drive for new members from the business community, were not enough to keep the organization afloat after USAID terminated its assistance.

While it did not become a permanent leader in the modernization of the private sector, it had a significant effect on the industrialization of the country. Many new investments took place as a direct result of the Center's 72 management consultations and investment studies. The 165 different training courses, which were offered by the Center, developed a capability within local enterprises that led to modernization and managerial improvements. Also, the Center had a strong demonstration effect. Through its influence many other private consulting firms were established, and several private and public schools began offering courses similar to those offered by the DPC. More importantly, it furthered the concept that private industry was, in fact, important to the development of Paraguay.

#### Export Promotion-CEPEX (1967-1972)

In December 1967, in recognition of the need to reverse the unfavorable trend of Paraguay's balance of foreign trade, USAID signed an agreement with the Ministry of finance (MOF) and the Ministry of Industry and Commerce (MIC) to allocate the equivalent of about \$80,000 from PL 480 local currency to support export promotion activities. A second agreement was reached the following year through which USAID funded a consultant for a period of eight months to survey institutions, plans, and programs related to the promotion of exports and to present recommendations for a long-range plan of export promotion through an institution combining the efforts of the public and private sectors. The technician arrived in November, 1968 and his contract was extended to 14 months.

The consultant recommended the creation of an export promotion institution and outlined its organization and functions. Following the presentation of his report, a decree was issued by the GOP creating an Export Promotion Center (CEPEX) and a National Export Promotion Council, with organization and objectives essentially the same as those recommended by the USAID technician. The Center began operations in November 1969. USAID continued to provide technical assistance to the project through fiscal year 1972.

Through the Export Promotion Council (EPC), the project created the first national forum where the GOP and private exporters could discuss their exporting problems. The technical committees of the EPC brought the public and private sectors together to focus on specific problems. It provided the contact point where private and public concerns on export

matters could be presented and converted into recommendations for GOP action. It started a dialogue which was designed to reduce traditional mistrust.

The EPC does not seem to have survived the termination of USAID assistance to the project. There was no one available at CEPEX who could comment on why the Council ceased to function. However, historically, the GOP and the private sector do not work well in a public setting, such as the forum described above. Also, the idea of establishing the Council was probably supported more by USAID than the GOP, and the GOP probably took no interest in continuing to support the EPC once USAID was out of the project.

The Export Promotion Center (CEPEX) was to create a favorable export climate that would stimulate the private sector to export more. To do this, it was to act as a clearing house for export opportunities, motivate the private sector to increase exports, and advise the government on policies and measures required to encourage the expansion of exports. Staff were recruited for the Center and received formal training from various international agencies and on-the-job training from the USAID technical advisor. After 1972, technical assistance was provided by the A.I.D. Regional Export Advisor stationed in Buenos Aires.

During the first nine months of operations, the groundwork for a strong institution was laid. There was a steadily increasing use of CEPEX's services by the private sector, and unsolicited requests from the GOP for assistance in trade negotiations, which indicated the actual and potential strength and value of the institution. When USAID terminated its direct assistance to CEPEX at the end of fiscal year 1972, the institution was deemed a viable organization, capable of carrying out its various duties. The Center had had a positive influence on the government, with nine government decrees reducing export charges being the direct result of CEPEX's work. The Center had produced eight product and marketing studies. These proved to be expensive, and experience showed that the Center could produce about three such studies a year.

Since 1972, the objectives of CEPEX have remained unchanged. The Center has continued to provide services and export information to both the private and public sectors. According to a current technician at CEPEX, the private sector, particularly those in livestock, agriculture and agro-related activities, uses the Center's information the most. CEPEX has continued to promote Paraguayan export products and coordinate the activities of the private and public sector. CEPEX generally is able to send Paraguayan products to two international fairs a year, one in Argentina and one in Germany. The Center has continued to try to have an input into policy decisions and laws which affect the export sector. Its influence seems to have diminished, but CEPEX was influential in the promulgation of a June 1986 decree which allows for the tax exempt importation of raw materials, spare parts, machinery, packing materials and other inputs necessary for the production of goods for export. Over

the last three years CEPEX has been able to mobilize support and assistance from UNDP, ALADI, and the OAS.

International Executive Service Corps (1985-present)

One of the first activities initiated under A.I.D.'s Advanced Developing Country (ADC) program in 1985 was the provision of \$300,000 to IESC, International Executive Service Corps. IESC is a U.S. Private Voluntary Organization (PVO) that assists and advises private local businesses by providing volunteer, short-term experts, principally recently retired executives, on a cost-sharing basis.

The purpose of this assistance was to help establish a permanent IESC presence in Paraguay that, in turn, would help Paraguayan private enterprise modernize and expand through the provision of U.S. expertise. Plans were that by the end of the activity the demand for IESC services would assure an annual caseload level sufficient to cover the direct costs of each case as well as a pro-rate share of maintaining a local IESC office. A.I.D.'s agreement encouraged IESC to develop operations in other countries of the region in order to use Asunción as a regional base, the costs of which could be allocated among the several countries. The annual case load for Paraguay set forth as a target for self-sufficiency was 20, once the activity was well underway.

For a number of reasons, including a serious and lasting downturn in the business climate shortly after the agreement was negotiated, the annual caseload target for Paraguay was not achieved. Moreover, the degree of continuity of conservatism of family owned and operated businesses mentioned in earlier sections together with a penchant for secrecy, proved to be greater obstacles than originally anticipated. Despite these difficulties, after two years of operations, some 17 sub-project agreements had been signed for providing advisory services in such activities as: development of a line of agricultural implements for local manufacture; assistance with the design, machinery layout, and equipment purchase of a plant to produce cotton thread; improvement of the management information system for a cotton gin and oil mill; trouble shooting for a sugar mill; quality control improvement and marketing assistance for soap production.

The project successfully helped start A.I.D. assisted IESC programs in Bolivia and Uruguay. Also, but without any A.I.D. funding, an IESC representative in Argentina was identified and trained. Caseload developed satisfactorily in each of these countries, but because of the funding arrangements it was impossible to obtain a contribution for the Asunción based office.

Accordingly, A.I.D. and IESC agreed to terminate the full-time IESC office in March 1988 before the scheduled expiration of the A.I.D. grant. The remaining funds were reprogrammed to help subsidize individual client proposals presented by IESC on a case by case basis and

to support the operating costs of a part-time IESC representative. Backstopping is now provided out of the new IESC office in Bolivia.

#### Industrial Credit, COMDESA (1967-1978)

One of the major constraints to developing the private industrial sector in Paraguay seemed to be the lack of credit. A feasibility study on the possibility of establishing a private finance corporation to fill this gap was carried out by a USAID funded technician in January 1967. The study showed the need for a private development finance institution, and a local business group was formed to promote the idea. By 1968, a preliminary project design had been developed and USAID had received approval to continue to promote the project. In 1969, final approval was received and organizational plans were developed for the creation and functioning of the new private finance corporation, called Compañia Paraguaya de Desarrollo, (COMDESA). The corporation was established in August 1970.

According to the USAID "Country Field Submission, 1971", "The lengthy negotiations leading to the formation of COMDESA provided excellent insights into the distrust existing between the government and some elements of the private business community. The USAID believes that the net results of the lengthy discussions were, however, beneficial since it resulted in a broadening of the base of the Financiera as well as a deepening of the dialogue between the business community and the government."

In August 1970, USAID signed the first loan agreement, which provided \$2.6 million to COMDESA to be used for making sub-loans and equity investments in private industrial and agricultural enterprises that lacked alternative sources. The loan was matched by \$1 million of local capital from private investors, the private foreign banks, and the Chile based entity ADELA which participated with 25 percent of the privately subscribed capital. The original investors numbered nearly 200 and were represented by a 20 member board of directors. The general manager was Paraguayan and reported to a six member executive committee. A GOP loan of \$400,000, from PL 480 local currency was also provided to COMDESA.

Given rapid commitment of the original loan, COMDESA requested USAID to consider a second loan, and as a result a second loan agreement for \$3 million was signed in August 1973. The principal objective of the second loan was to assist COMDESA'S continued expansion as a financial institution, with sub-loans priority given for the development of projects that could increase exports and, thereby, improve Paraguay's balance of trade.

By 1974, 82 percent of COMDESA's loans, accounting for 96 percent of their portfolio, had been for medium and long-term loans. The availability of longer term credit, coupled with COMDESA's management services to clients, contributed to the establishment of 24 new business activities between July 1973 and June 1974. COMDESA insisted that the

borrowers have sound accounting and administrative standards within their businesses. It imposed these standards on even its most prestigious clients, with many initially resisting. This practice, however, resulted in several companies adopting modern operating procedures, which may otherwise not have been adopted.

According to the project agreement, COMDESA was to emphasize loans for four of the national priority areas: (1) production for export, (2) processing of Paraguayan agriculture, mineral and forest products, (3) processing, marketing and distribution of foodstuffs, and (4) employment opportunity and income distribution. By June 1974, COMDESA had provided 117 loans to the private sector. Of these, 38 were not specifically directed to the four priority sectors established in the loan agreement, but were either complementary or closely related to those priority areas.

COMDESA used none of the \$300,000 allocated under the loan agreement for pre-investment studies. It had been thought that the Itaipú hydro-electric project would create large scale investment opportunities that would require major pre-investment studies. Given this lack of demand and in view of the 1972 Congress Mandate emphasizing the need to reach the poor more directly, USAID eventually dropped this requirement and suggested that more emphasis be placed on small scale entrepreneurs.

Similarly COMDESA did not use the \$100,000 allocated for additional technical assistance. COMDESA management felt that its staff had received sufficient technical assistance during the organizational period. (The actual Director had been one of the technicians who had provided assistance during the initial years of the project). USAID continued to provide support and oversight to COMDESA through June 1978.

The major area of concern during the mid-Seventies was COMDESA's ability to maintain an adequate level of sublending. There was a sharp unexpected drop in foreign demand for Paraguay's basic exports in 1974, particularly beef and lumber, which caused a sudden decline in domestic activities oriented toward external markets. These were the two areas where COMDESA had invested the greatest percentage of its portfolio, and the effect was that COMDESA was experiencing difficulties collecting on its subloans. All delinquent accounts were covered by sufficient collateral, so that the risk to the COMDESA investors was minimal, but the slow recuperation of loans reduced funds available for new loans. This put in question COMDESA's ability to maintain an adequate level of sublending.

In the project completion report, dated October 13, 1978, USAID concluded that the COMDESA project demonstrated, in Paraguay at least, that a specialized development bank was not needed to finance development projects. Commercial banks would finance such projects, if they had access to medium-term funds. In fact, COMDESA eventually changed its name to the Banco de Desarrollo del Paraguay, and changed its internal structure. With authorization of the Central Bank of Paraguay, it became

the first recognized multi-purpose bank, which allowed it to continue its lending program and to begin a savings program with the general public.

COMDESA has successfully expanded its capital by issuing new shares locally. The original Paraguayan investors have continued to support the bank through purchasing additional shares in the bank as they come available to the public. New local shareholders have also been added. The bank is still in the process of repaying the USAID loans, and, as these loans are repayable in dollars, is having some difficulties because of the devaluation of the Guarani to the dollar since the original loan in 1970.

#### Production Credit Guaranty Program (1978 - 1983)

In March of 1978 the Central Bank of Paraguay and A.I.D. initiated an innovative program to stimulate private bank lending to small and medium scale business operators, including small farmers, who had insufficient collateral to obtain credit under normal circumstances. Under this program, private banks had access to a fund in the Central Bank to guarantee a portion of their risk on loans to eligible borrowers. The fund was established with guaranty commissions paid by the individual borrowers (five percent), the interest income generated by the fund, and reserve or back-up guarantees by A.I.D. and the Central Bank. A.I.D. signed two agreements, one for \$1.5 million worth of coverage in 1978 and an increase of \$2.0 million in 1979. A.I.D. charged one fourth of one percent for its guaranty.

Thus established, the fund assured each participating private financial institution the collection of 75 percent of the outstanding principal balance of each loan made to an eligible borrower. If the fund's accumulated resources were not sufficient to pay claims, A.I.D. had to pay 75 percent of the outstanding principal balance of each defaulted loan, but in the aggregate the payments by A.I.D. to any participating private financial institution did not have to exceed an amount equal to 50 percent of the aggregate outstanding principal amount of loans made in any one year by such financial institution. The Central Bank supplemented the guaranty by agreeing to make payments beyond the A.I.D. statutory limit of 50 percent of each portfolio in order to achieve a guaranty of 75 percent of the lender's eligible portfolio. Participating lenders assumed the financial risk for the remaining 25 percent.

Because only 50 percent of an individual bank's portfolio of eligible loans could be covered, the \$3.5 million of A.I.D. guaranty authority could generate up to \$7 million in credit to the small producers. This level was soon surpassed and the Central Bank requested a second increase. Because of A.I.D. long delay in acting on this request, the Central Bank started, unilaterally, to stop lending under the program to some "saturated" areas (e.g., brick factories, carpentry shops) to minimize the amount of uncovered portfolio. The A.I.D. offices in Washington eventually decided not to increase the size of the guaranty,

but to authorize a reduction in A.I.D.'s coverage to the first 20 percent of each bank's portfolio and an increase in Central Bank exposure to 55 percent. This mechanism would allow the total portfolio to grow to \$17.5 million. The Central Bank accepted the new arrangement since the probability of exceeding a 20 percent default rate on an individual bank portfolio was considered to be very low.

By the time this revision was implemented the enthusiasm of the commercial banks had decreased due to tightened overall liquidity in the banking system and growing delays within the Central Bank in processing payment of the guarantee on bad loans and in approving new loans. The project essentially became inactive by 1984.

The total portfolio covered under the project reached about \$11 million equivalent by the September 1983 terminal date for new loan approval. Close to 700 loans had been authorized. Total local currency payment by A.I.D. through mid 1988 reached about \$15,000 equivalent (at the current exchange rate). A.I.D.'s outstanding liability on the unrepaid balances of outstanding loans is less than \$20,000. This project must be considered one of the most successful ventures of the bilateral program given its low cost to the U.S. Government.

#### Micro Enterprise Development - PFCD (1985 - ongoing)

One of the objectives of the Advanced Developing Country (ADC) program started by A.I.D. in 1985 in Paraguay was to act as a catalyst for private sector development through the transfer of appropriate technology and know-how. The ADC program successfully brought together a U.S. Private Voluntary Organization (PVO), called Accion Internacional/AITEC, with a group of motivated Paraguayan business and community leaders to address the technical assistance and credit needs of Paraguay's informal business, or micro-enterprise, sector. Accion Internacional/AITEC had extensive experience with this type of program throughout Latin America.

With technical support from Accion, a new, non profit private foundation, the Paraguay Foundation for Cooperation and Development - Fundacion Paraguaya - was established in 1985. The initial staff was selected and trained, operating procedures designed, and offices facilities refurbished and equipped under a USAID project grant. The Fundacion Paraguaya opened its doors to the low income micro-entrepreneurs in early 1986. By mid 1988, over 3,000 Paraguayan businesses in the informal sector had received credit and business training. Delinquency and default experience has been very satisfactory. The Fundación Paraguaya already has graduated some of its early clients to the formal banking sector as their needs grew and their good credit history can be documented.

The initial A.I.D. grant totalled \$220,000, including the book value of donated used A.I.D. office furniture. The grants were used for technical assistance, training, and initial operating costs. From the inception, Peace Corps has participated in the project with volunteers and small

grants for relending from the A.I.D. SPA (see Chapter 9) fund. Fundación Paraguaya has been exemplary in raising local contributions and seeking other donors. Agreements have been concluded with the Inter-American Development Bank (IDB), the Inter American Foundation (IAF), and the Center for International Private Enterprise (CIPE) the more than triple A.I.D.'s original seed capital investment which was fully disbursed in mid 1987.

In 1988, Fundacion Paraguaya obtained a \$100,000 A.I.D. furnished guarantee through Accion to use as collateral in local currency loans from private Paraguayan banks. Also, in 1988 A.I.D. provided the initial increment of a \$150,000 to be used by Fundacion Paraguaya and Accion in establishing an affiliated micro-enterprise foundation in the secondary city of Encarnación.

#### Labor Development (1971 - ongoing)

In Paraguay, labor unions were originally organized by the Confederación Paraguayan de Trabajadores (CPT). This confederation was a strong, independent, democratic organization, up until 1958, according to an official of the American Institute for Free Labor Development (AIFLD). It allowed freedom of speech and elected its officers through open democratic elections. The CPT was well respected internationally and held membership in two international labor organizations: the Organización Regional Interamericana de Trabajadores (ORIT), and the International Confederation of Free Trade Unions (ICFTU).

In 1958, the CPT helped organize a movement to secure better wages and better working conditions for its members. The Government of Paraguay (GOP), according to official observers, cracked down on the CPT, jailing some of its members, exiling others, and naming an interventor to take over as leader of the CPT. Consequently, the CPT was expelled from the international organizations.

Between 1958 and the early 1970's, the labor movement in Paraguay was weakened in its membership, its financial support, and its leadership ability to play an important role in the economic and social development of the country and its members. This goal could be achieved through such activities as securing enforcement of existing labor legislation and developing a system of collective bargaining contracts. Thus, in 1971, USAID began a labor project with the assistance of AIFLD, and in cooperation with the Ministry of Labor (MOL) and the CPT. The project was limited to developing the labor movement in Asunción. ORIT and ICFTU once again took an interest in the CPT and, by 1973 accepted it back into the family of international trade unions.

The project, originally funded by USAID Paraguay, became regionally A.I.D. funded in April 1973. The purpose throughout the project was to develop a stronger democratic trade union movement. The main method was through training the workers, based on the premise that the trained

people are able to provide the leadership necessary to help make rational decisions in the economic interests of the workers. AIFLD had successfully formed an Ex-Alumni Association of top national labor course graduates, who were able to present basic evening courses for fellow laborers. This represented an important self-help input to the project, as it allowed AIFLD to concentrate on more advanced courses and seminars on such subjects as collective bargaining. In 1974, Dr. Ruben Ramirez Pane, in his book "La Republica del Paraguay y los Estados Unidos de America", wrote, "through the help of the United States' Economic Mission (USAID), the Paraguayan trade union movement is overcoming its major problems, which consist of limited resources and a lack of knowledgeable leaders, and is developing into an active movement with trained managers, who will be excellent collaborators in the economic and social progress of the Republic."

In about 1977, AIFLD, accompanied by members of the CPT and government officials from the MOL, began training programs for rural groups. The Minister of Labor occasionally attended the closing ceremony at various of these seminars and courses. By 1978, there was further concrete evidence that Paraguay was progressing toward a democratization of the labor organizations in Paraguay. The new leadership of the CPT, elected during the National Labor Congress in May 1978, based its political campaign on one important issue: more independence from the government and from the ruling party. This new leadership obtained the support of both rural and urban unions, thus defeating the former government-appointed board which had ruled the Confederación since USAID began the labor project in 1971.

By 1980, there were still further indications that the labor movement was becoming a more independent democratic movement. For example, for the first time in 20 years, the CPT held a meeting of the union delegates for the purpose of strengthening the relations with member unions. A total of 85 of the 156 affiliated unions were present and approved a plan to strengthen unity among the various labor organizations. Top union leaders showed their interest in the over-all labor movement and expressed their concern for workers' problems. The meeting was considered highly beneficial. Another positive sign was the desire of CPT to increase union affiliation and to encourage union autonomy. During 1980, a group of eight unions and one federation, with its entire leadership formed by AIFLD program graduates, joined together for membership in the National Executive Committee of the CPT. This group was issuing its own newspaper and operated freely.

There were various targets developed during the project implementation period and covered in USAID's 1980 Project Appraisal Report. One such target was, "To strengthen the trade union organizations. By 1980 there will be ten new unions formed, five restructured and 3,040 new members added in CPT affiliated unions." All these targets were exceeded. There were, by 1980, a total of 15 new trade unions formed, six restructured and a total of 4,200 new members in unions affiliated to the CPT.

Two other targets, which required statistical input from the labor unions and CPT, could not be fully measured, even in 1980, due to a lack of recorded data. In 1980 it was calculated that about 85 percent of the leaders of the CPT had been trained by AIFLD, either locally or in the U.S., but no information was available on the training status of the leaders of the member unions and federations. The second target lacking statistical information was of a more political nature; it was to track the number of labor leaders from minority political parties. AIFLD felt that it would be inappropriate to maintain this information inasmuch as they were trying to promote an apolitical union movement and consequently, did not do so. Throughout the USAID Project Appraisal Reports, the need to improve the labor statistics within the individual unions, federations and CPT was repeatedly mentioned.

The last target measured, in 1980, was rural workers incorporation into CPT. A campesino department was established by 1981 and 5,000 campesinos affiliated by 1983. In the 1980 Project Evaluation Summary, it said, "A campesino department started working closely with campesino leaders and has been gradually progressing in its operations. In March 1980, however, a group of people assaulted and robbed a public bus in a rural area. In a subsequent shoot out with authorities at least ten people died and officials have recently been taking a close look at all rural organizations. As a result, all CPT programs with campesinos have been interrupted for the time being." (sic)

In March 1981, the CPT held elections to vote on the leadership it would have for the following three years. Modesto Ali, the incumbent president of the CPT, was informed by the MOL, that he could not run for reelection. Ali was forced to walk out of the National Labor Congress, and was followed by his supporters, known as the group of nine. This ended the official AIFLD program with the MOL. At approximately the same time, ORIT and ICFTU again expelled the CPT from their organizations.

Modesto Ali and his group of nine immediately went to work to build a new democratic labor movement in Paraguay. In 1983, although no official program existed, the newly emerged Movimiento Independiente de Trabajadores del Paraguay (MIT-P) received financial support to open an office, and were provided funding for promotional, educational and organizational activities. Through the A.I.D. Regionally funded AIFLD program, about 12 members from the MIT-P are sent to the U.S. yearly to attend training courses at the George Meany Center in Silver Spring, Maryland. The current leadership of the MIT-P have all received this AIFLD training. As well, AIFLD supports a small program for education and economic assistance and is recognized by ICFTU and ORIT as the only democratic union movement in Paraguay. The MIT-P, although not an affiliate of these international trade organizations, has been invited to attend some of their programs and is receiving limited assistance from the ICFTU.

Graduate Management Training - UCA (1985-1988)

Shortly after establishing the Advanced Developing Country (ADC) presence in Paraguay, in late 1984 the A.I.D. office was approached by the School of Accounting and Administrative Sciences of Catholic University of Asuncion (UCA). In cooperation with Kansas State University under linkages promoted by the United States Information Service (USIS) and the Paraguay-Kansas Committee of the National Association of Partners of the Americas (NAPA), UCA began designing a strategy for starting a graduate level business administration program in Paraguay. Because this Paraguayan initiative fit so well the A.I.D.'s renewed focus on private sector development under the ADC program, the A.I.D. response was positive.

From 1985-1988 A.I.D. provided \$550,000 in financial support to assist UCA's School of Accounting and Administrative Sciences design and initiate the country's first graduate level university program. This support was channelled through the U.S. National Association of Schools of Public Affairs and Administration (NASPAA) which, among other things, served as overall consultant to the project. NASPAA also arranged for technical assistance and training services from the Central American Institute of Business Administration (INCAE).

Drawing on the basic design conceived under the earlier work with Kansas State University, the new Graduate Business Administration program offers a modular approach to fit the needs of its students - typically individuals with at least five years of work experience and currently in managerial positions and unable to attend on an extended full-time basis. During a 21 month period, four intensive (i.e., full-time) three week modules are taught using INCAE professors. Between each intensive module, two-month intermodule courses are given in the evening drawing on instructors available locally.

Over fifty Paraguayan students inscribed for the first cycle of the Graduate Business Administration program, despite the tuition cost of \$3,800. The initial module was held in November 1987. The first graduating class is scheduled for May of 1989.

This project, together with the A.I.D. Participant Training program, is helping UCA improve its business school faculty. Five faculty members have received master's level training and two more are receiving combined masters/doctors of business administration training. In-country training course have been held for other faculty and assistance is planned with the development of case writing skills for classroom exercises. The project is also expanded linkages with the Paraguayan business community by offering several short-term seminars and workshops to business managers and executives.

CHAPTER EIGHT - SUPPORT PROJECTS  
(\$24,822,000)

The U.S. bilateral assistance program included three activities which were cross-sectoral: development use of local currency proceeds from the sales of agricultural commodities under PL 480 agreements with the U.S. Department of Agriculture (USDA), Participant Training, and Special Development Activities. The first two were mainly to provide support for sector specific projects. The PL 480 program provided a means for supplementing project funding, while the Participant Training project provided a mechanism for sending Paraguayans to the U.S. and elsewhere for further education and training. The Special Development Activities project is included in this chapter because activities under this project were carried out in various sectors. These small projects have always had to meet specific criteria, but the criteria has changed from time to time and, under the Advanced Developing Country (ADC) program have evolved into a Peace Corps administered activity. The ADC program also initiated an activity with the Paraguay-Kansas Committee of the National Association of Partners of the Americas to establish a resources center that will provide information and assistance to private and non-profit entities involved in development activities.

Public Law 480 Sales Proceeds (1956-1970)

The Public Law (PL) 480 program provided wheat and other agricultural products to countries for social, economic and foreign policy reasons. The funds generated by this program were used to support projects that were of special interest to the U.S., the Government of Paraguay and other binational agencies. The program changed names three times. First, it was PL 480 Title I, then PL 480 Title IV, and finally, by at least 1967, PL 480 title I once again. Here it will be referred to as the PL 480 local currency program.

The Public Law (PL) program was begun in Paraguay in 1956 largely for the sale of wheat to the Government of Paraguay (GOP), through long term, low interest loans repayable in local currency. The GOP resold the wheat with the local currency from the sales accruing to the U.S. to use for (a) grants and loans to the GOP for economic and social development purposes: (b) Cooley loans to U.S. agro-enterprises in Paraguay, and (c) Embassy and USAID local expenses. There were five separate sales agreements under this early PL 480 local currency program with an equivalent cumulative value of \$15,870,000. These agreements were signed in 1956, 1961, 1962, 1963 and 1964. The funds were distributed as follows: 21 percent for grants, 44 percent for loans to the GOP for economic development, 8 percent for Cooley loans, and 27 percent for USAID and Embassy use. These latter funds belonged to the U.S. Department of Treasury, and disbursements were charged against USAID and Embassy dollar accounts in Washington.

Although 21 percent of the total was available for programming grants, these funds remained unused in the U.S. account at the Central Bank until FY 1966, when the first \$280,000 were released for use with the Agricultural Credit project. This apparently was a "gentlemen's agreement" between the U.S. Embassy, the local representative for the International Monetary Fund, and the President of the Central Bank to freeze the local currency grant account in order not to add inflationary pressure. The GOP was, at that time, trying to maintain a stable monetary system and felt that the grant fund, which would put additional money into circulation, would be counterproductive to these objectives. The frozen account was a problem which plagued USAID Director John Wiley throughout his tour and was finally resolved by his successor, Peter Cody, through sheer persistence. The PL 480 agreements stipulated that a major portion of the funds be used for agricultural projects.

The loan funds, as opposed to the grant assistance, were disbursed in a timely manner. Funds from the 1956 agreement went to: the Asunción water company, CORPOSANA (\$600,805); a coffee production project, CAFE, (\$475,000) and the Ministry of Public Works for the Trans-Chaco highway, other road projects, and airport construction (\$979,930). From the 1961 loan funds, the Ministry of Public Works receive a total of \$1,608,413 to be used for road construction and to complete the drainage system around the airport. The Ministry of Industry and Commerce received \$69,048 to be used in taking the industrial census of Paraguay. The National Development Bank received \$634,920 for loans to the agriculture and forestry sectors of the country in conjunction with the Agricultural Credit program, and the Planning Secretariat received \$77,603. Funds from the 1962 and 1963 agreements were programmed for: the Ministry of Public Works for the continuation of the road program (\$414,436), and the National Development Bank for local costs of the Agricultural Credit project (\$980,000). Loan funds from the 1964 agreement were programmed for the Planning Secretariat (\$300,000), the Statistical Sampling Center (\$57,000), the National Development Bank (\$400,000), the Ministry of Public Works (\$650,000) to continue work on the road North from Coronel Oviedo and other farm-to-marked roads, and for rural water systems, (\$100,000). Also programmed were \$20,000 for local support of the "Food-For-Work" project and \$243,000 to be used in conjunction with the construction of a new teaching hospital. The funds generated from the 1964 agreement were not as large as anticipated, so the latter two projects were not funded, and the proposed teaching hospital has still not been built.

In 1963 there was a small (\$50,000) PL 480 pilot project which brought in a milk substitute to be sold to the dairy industry for feeding calves. The idea was to increase the availability of fresh dairy milk for human consumption. The real significance of this small project was that it introduced a change in the Management of the local currency generated and a change from grant to loan basis. On the other hand, the program

provided Paraguay with a means to save scarce foreign exchange and an alternative to its dependence on Argentine for wheat. Paraguay secured its basic food needs at very favorable prices. Moreover, through use of the local currency proceeds agricultural production was stimulated to the point where, today, the country is virtually self-sufficient in wheat.

Under the revised program there were five agreements with a total value of \$8,303,700: 1963 for \$50,000, 1966--when the program completed the transition--for \$2,478,000, 1967 for \$2,385,400, 1968 for \$1,835,300, and the last one in 1970 for \$1,555,000. Of the funds generated from the sales under the 1966, 1967 and 1969 agreements, 36 percent was used for agricultural development, with the largest amount going to support the project at the National Development Bank. Smaller amounts went to support the Salesian Agricultural Training Institute, a U.N. Forest Industries Development Project, five of the activities transferred from SFICA to the Ministry of Agriculture, technical and social assistance of agricultural settlement colonies and other agricultural development activities. The second category was support of USAID projects, which received 34.9 percent of the funds and was used primarily for road construction, maintenance and repairs in the amount of \$1,363,375. Other areas in this category included export promotion, school construction, in-service training and international travel for participant trainees, and activities at the central statistics and tax administration offices. The remaining category was a catch-all termed other development activities and received 29.1 percent of the funds. The largest amount of these funds went to the Ministry of Defense and was used for road construction and repair (\$926,671). The second largest amount (\$783,650) went to ANDE (the electrical company) in connection with an International Development Bank loan. Other financial help went to the Cancer Institute for selective help in the nutrition field, and for government support of the National Development Bank.

During, and possibly since, the PL 480 Title I Program, there was public criticism of the PL 480 local currency program. The program was sometimes referred to as a U.S. agriculture surplus program. The general interpretation, without further analysis, was that the United States was taking advantage of smaller, less developed countries by dumping unwanted agricultural produce on them thereby lowering the prices paid to farmers for the same or competing products. The first set of agreement involved sales that generated local currency accounts under A.I.D.'s direct control. The second set of agreements also generated local currency, but the administration of the local currency was located under GOP responsibility subject to prior USAID approval. Also, the value of the agricultural commodities shipped under the second set of agreements had to be amortized by the GOP in dollar payments to the U.S. Treasury over a 20 to 30 year period at low interest rates.

Participant Training (1942-ongoing)

A necessary component of almost all USAID and predecessor agency projects was that of training. From the very first projects through to the current ADC activities, there has been a realization that education and exposure to new technologies of those Paraguayans associated with the development of Paraguay, could make the difference between success or failure. In the days of the Servicios, particularly in the Forties and early Fifties, training was based on the need to have educated counterparts and program personnel who could work with U.S. technicians. Under Point Four, and to a greater extent, under the Alliance for Progress in the 1960's, it became necessary to prepare Paraguayans to take over and become the leaders in program development in their respective fields. Some of the participants trained during the reign of the Servicios, received additional training in the Sixties and Seventies as development needs changed.

In part because of changing needs in Paraguay and in part because an evolving philosophy of development assistance, the concept of training changed periodically. During the Forties and until 1952, training seems to have been project specific and provided for from the funds of each of the Servicios. With the administrative changes under Point Four in 1952, funds were made available for a more general type of training program, which was referred to as the "Participant Training Program". This program expanded significantly in the Sixties and allowed for more flexibility so that participants could receive training related to national needs and future projects, as well as current U.S. development projects. With the 1973 Congressional Mandate U.S. training tended to become project specific and financed by sector activities. In 1982 once again separate funds became available for training outside of specific projects. USAID signed a new agreement for participant training with the GOP in 1982. This more flexible funding policy was supported by a 1984 report on Central America, known as the Kissinger Report, that highlighted the decline in technical and advanced training for Latin Americans in the U.S., and the tremendous increase in Soviet Bloc and Soviet surrogate training for Latin Americans.

The USAID kept precise records of the numbers and categories of participants trained during 1952 through 1973 (and then again since 1982). The number of participants and the number of training programs do not match exactly, as some participants attended more than one program. In total, between 1952 and 1973, 1,227 participants went to the U.S. or third countries to attend 1,307 training programs as shown below:

U.S. AND THIRD COUNTRY TRAINING PROGRAMS  
1952 through December 1973

Field	United States				Third-Country				Grand Total
	AT	ST	OT	OJT	AT	ST	OT	OJT	
Agriculture	68	73	23	10	15	68	34	12	303
Industry & Mining	1	-	9	6	-	-	1	1	18
Transportation	6	5	-	12	1	21	-	14	59
Labor	-	6	-	-	-	-	-	-	6
Health & Sanitation	63	22	22	15	33	147	2	45	349
Education	138	29	19	6	28	16	-	12	249
Public Administration	46	65	2	16	10	19	2	23	183
Social Welfare	8	-	-	-	2	1	-	1	12
Private Enterprise	5	18	43	-	12	16	8	-	102
Gen. & Miscellaneous	3	3	1	1	-	16	-	2	26
	339	221	119	66	101	304	47	110	1,307

AT: Academic Training  
OT: Observation Training

ST: Specialized Training  
OJT: On-the-Job Training

Figures are from Table I of the "Directory of Returned Participants, 6th supplement, 1971 through December 31, 1973"

Records on the amount of funds required for training during 1952-1973 are not available. Taking into account inflation and reflecting average current costs, USAID estimates that at least \$3.5 million was expended during the period to achieve the level of training accomplished. USAID further estimates that 60 percent of this training occurred in the 1952-60 period, accounting for approximately \$2.1 million of the total.

Most of the participants sent for training returned to fill the positions and carry out the responsibilities for which they were trained. As an example, of the 202 participants trained in the years 1971, 1972 and 1973, 187, or almost 92 percent, were reported as utilizing their training. No information was available on two of the participants and 13 were not utilizing the training as intended. The category of persons not utilizing their training included those who were deceased, retired, or living outside of Paraguay. For the 1,025 participants who attended 1,101 training programs between 1952 and 1970, 838, almost 82 percent were reported, in 1970, as utilizing their training.

Information on participants sent for training related to and funded by specific projects for the period 1974 - 1981, is incomplete. Between 1974 and 1977, available documents indicate that participants were sent to at least 92 programs for further education, with the majority, 57,

trained for agriculture related positions. Of the remaining, 16 were sent in relation to the education sector, 10 for the health sector, six for census and tax administration, two for social welfare, and one from the miscellaneous or non-priority sector. The majority of these participants were funded in 1974 and 1975. Apparently only eight participants went for short-term training in 1977, and it is unlikely that not more than 20 were sent between 1978 and 1981. The total number of programs provided for study abroad under the bilateral program from 1952 through the end of 1985 is approximately 1,450.

Not included in the 1,455 figure is the number of training programs funded by the Servicios before 1952. Through both the research materials and personal interviews, it is quite apparent that all three Servicios were sending counterparts to the U.S. and other countries for higher education before 1952. To put a numeric figure would be merely a guess. Few, if any would have been sent in 1942. In 1952 there was a total of 10 professionals studying in the areas of health, agriculture, and education.

In 1982 the A.I.D. offices in Paraguay received \$100,000 to resume participant training outside specific project needs, with \$216,600 provided in 1983 and \$150,000 in 1985 for this purpose. With the initiation of the A.I.D. Advanced Developing Country program in Paraguay in 1985, and its emphasis on human resource development, the funding for participant training increased to \$300,000 in 1985 and again in 1986, to \$345,000 in 1987, and \$300,000 in 1988.

The total number of trainees financed during 1982-88 is approximately 111 reflecting the much higher costs of training compared to earlier decades. Of this number, 24 participants received post-graduate training, ususally at the Master's level for two years duration, and 87 short term training ranging from one to four months.

Areas of program emphasis since resumption in 1982 have been: business management and economics; agriculture and environment; teaching methodologies for science, math and English; and primary health care. A.I.D. has collaborated with Peace Corps in identifying rural health workers for short term training in groups. Also, the group approach has been used for updating teacher trainers in updated math and science education methodology.

The total number of U.S. sponsored trainees through 1988, including the renewed AID efforts, the 1952-82 period, the Servicio level of effort prior to 1952, and the ongoing training from other A.I.D. regional sources (e.g., labor), exceeds 1,600. The available evidence indicates the return rate is among the highest level world-wide for A.I.D. and that the training is being used. A selected sample of Paraguayans trained by the U.S. assistance program is listed below for illustrative purposes.

<u>Name &amp; Present Position</u>	<u>Field of Training and Place</u>	<u>Training Period</u>
Luis A. Alvarez Director of Research Ministry of Agriculture	Horticulture, P. Rico and Cornell University U.S.	1/59 - 2/63
Juan Balsevich President Assoc. of Economists and Member of Board of a Financiera	MPA Univ. of Pittsburg U.S.	8/60 - 10/62
Hernando Bertoni Minister of Agriculture	Crop Production, P.Rico Agronomy, Texas A&M U.S.	11/51 - 12/53 8/57 - 7/58
Dario Castagnino Director CEPEP Paraguayan Center for Population Studies	Medicine State University of New York U.S.	7/63 - 12/63
Atilio Centrón (Deceased) Former Dean, School of Ag. National University	Ag Science, New Mexico State University U.S.	9/63 - 8/64
Ladislao H. Centrón Production Manager, AGRIEX AGRIEX	Plant Breeding New Mexico State Univ. U.S.	8/70 - 8/72
Ramon Centurion Nufiez Director National Cement Industry	Private Enterprise Program Puerto Rico	8/55 - 11/55
Antonio Dacak Ass. Peace Corps Director for Ag. & Cooperatives	Agronomy, Soils New Mexico State University U.S.	1/72 - 7/74
Enzo E. Debernardi Administrator National Electric Power Administration (ANDE)	Peaceful Uses of Atomic Energy U.S.	5/57 - 5/57
Modesto Elizeche Judge	Criminology Fla. State University U.S.	7/74 - 5/76
Carlos Fernandez Gadea Director Legal AID to the Poor School of Law National University	Legal Studies Chile	7/72 - 10/72

Luis O. Ferreira (Former Director, SEAG) Private Business	Tung Production, P. Rico Ag. Production, P. Rico	8/53 - 9/54 6/64 - 9/64
Magno Ferreira Falcon Member of Board of S&L OGARAPE S.A. and President of Club Cerro Portefio	MPA Univ. of Pittsburg U.S.	8/60 - 9/62
Salvador Filizzola Director Financentro	Master in Public Adm. U.S.	8/62 - 5/64
Daniel Fretes Ventre Economic Advisor Fretes Ventre y Asociados Consulting Firm	Business Administration U.S.	8/70 - 9/71
Rubén Fretes Head, Pasture Department School of Agronomy	Plant Science New Mexico State University U.S.	9/63 - 8/64
Raul Gauto Coordinator, Conservation Data Center, MAG	Natural Resources Management Virginia Polytechnic Inst. U.S.	7/83 - 6/85
Oswaldo Genes Quevedo Instructor, School of Vet. & private business	Livestock Produc. & Mgmt. New Mexico State University U.S.	1/71 - 9/71
Celso Gimenez R. Planning Secretariat	Ag. Econ. Development, Kansas State Univ. U.S.	6/83 - 6/85
Adan Godoy Gimenez Minister Public Health and Social Welfare	Hospital Administration Mexico	10/56 - 12/56
Enrique Gonzalez E. Instructor School of Agronomy	Soil Fertility U.S.	8/66 - 9/68
Julio Cosme Gutierrez President Petroleos Paraguayos	Monetary Studies Seminar Puerto Rico	8/54 - 9/54
Jose Eugenio Jacquet Minister of Justice and Labor	Program for Customs Inspectors Puerto Rico	7/63 - 9/63

Carlos Jariton Manager Agromonte	Cattle Breeding U.S.	10/87 - 10/87
Gabriel Malvetti Instructor, Sch. of Agronomy & Ag. entrepreneur	Animal Production New Mexico State University U.S.	3/63 - 5/64
Jose D. Martino Director Instituto Nacional de Tecnología y Normalización	Standardization and Measurement Services U.S.	8/78 - 8/78
Oscar Meza Director, Technical Unit Ministry of Agriculture	Ag. Economics New Mexico State University U.S.	1/72 - 5/74
Juan Molinas Director, National Ag. Extension Service (SEAG)	Crop Development New Mexico State University U.S.	1/70 - 7/73
Daniel Nasta Director Publicitaria Nasta	Advertisement Management Costa Rica	8/87 - 9/87
Manfredo Nill Manager Nill Muebles (Furniture)	Lumber Ind. Program U.S. and Mexico	4/68 - 5/68
Luis Paleari Deceased - Former Dean Faculty Physical Sciences and Mathematics	Organization and Admi- nistration of Higher Education U.S. and Costa Rica	1/68 - 1/68
Luis A. Pampliega C. Director General, MAG	Ag Policy USDA	7/71 - 9/71
Raul Peña Deceased, former Minister of Education	Public Administration U.S.	10/56 - 12/56
Ricardo Pedretti Wheat Expert Ministry of Agriculture	Plant Genetics, Wheat Oregon State University U.S.	7/83 - 9/87
Emilio Ramirez Russo Director Technical Dept. Ministry of Ind. & Comm.	Project Development U.S.	4/65 - 8/65

Luis Alberto Reyes Dean School of Medicine National University	Medicine U.S.	11/65 - 3/66
Efren Rivelli Director, Poultry Dept. School of Veterinay	Poultry Pathology Auburn University U.S.	9/67 - 4/69
Manuel Riveros Director Cancer Institute	Medicine State Univ. of New York U.S.	10/61 - 2/62
Ernesto Rotela President of Ahorros Paraguayos S. and L. Assn. and member of Board of Banco Union	Course on Savings and Loans U.S.	8/70 - 9/70
Eduardo Ruiz Almada Dean, School of Veterinary Sciences	Organization and Admin. of Higher Education U.S. and Costa Rica	1/68 - 1/68
Ricardo Samudio Director, PRONIEGA Ministry of Agriculture	Range Management New Mexico State University U.S.	7/69 - 1/71
Epifanio Salcedo Director Fondo Ganadero and Dean of School of Economics, Nat'l University	Professional Development Seminar Peru	7/67 - 7/67
Tito Scavone Manager Laboratorios Catedral	Urban Leader Seminar for Private Sector U.S.	11/70 - 12/70
Alfredo F. Stauffer Instructor, School of Ag. & Private consultant	Botany and Plant Pathology U.S.	9/67 - 7/69
Hernan Vargas A. Export Manager La Industrial del Norte	Export and Trade Development U.S.	9/71 - 11/71
Luis Maria Vega Industrialist Former President Paraguay Industrial Union	Private Development and Productivity Course Peru	2/66 - 2/66

David Vera Chief Census Dept.	Sample Household Surveys Mexico	2/65 - 4/65
Kornelius Walde Director Mennonite Colonies	Farmer Coop. Service Operations U.S.	4/69 - 5/69
Maria H. Yelsi Retired Director School of Nursing	Nursing U.S.	10/65 - 1/66
Pedro Zucolillo Owner Lumber Industry	Lumber Study U.S.	9/59 - 10/59

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#### Special Development Activities (1964-1986)

The majority of USAID projects in Paraguay were large in scope and relied on a ripple effect to magnify their potential and reach the intended beneficiaries. Once an institution was created or improved, or once a system was developed it was planned that the system or the institution would continually expand to reach more and more of the neediest groups in the country. These projects were not designed to solve all the problems of everyone at one time. Therefore, in order to meet some of the more pressing needs at the local level, USAID began the Special Development Activities project (SDAP) in 1964, based on favorable A.I.D. experiences in Peru and Colombia. The objective was to assist organizations and communities at the grass roots level in Paraguay through very small grants, flexibly administered.

Originally, the project supported only agriculture organizations. By 1965 it included youth projects, and by 1967 the project was expanded to include all types of community development projects. Self-help activities were carried out in such areas as: constructing and equipping schools and health clinics, digging water wells, developing community projects for street improvements and community centers, providing tools for voluntary workers, and implementing agricultural projects for rabbit breeding, family gardens and 4-C Club projects.

Between 1964 and 1970 a total of 91 individual projects were approved by a USAID. To provide a range of inputs in the review and approval process, a Special Development Activities Review Committee was formed in 1966, consisting of the USAID program officer, food for peace officer, and the vocational education advisor, as well as the U.S. Embassy political officer, USIS information officer, and the newly arrived Peace Corps director. The individual projects ranged in cost from \$71.43 up. By 1970, a maximum of \$3,000 was established for the upper limit.

With the presence of Peace Corps volunteers (PCV) in Paraguay, beginning with the first group of 36 in 1967, the number of applications for SDAP funds grew, and the types of projects became more varied. When selecting projects, special emphasis was placed on community development activities involving rural youth and on those projects of a pilot nature with a potential for a significant multiplier effect. Project implementation required a considerable degree of community participation. A project committee had to be formed by the community, and a project director appointed by this committee. The criteria for project eligibility for assistance included a minimum self-help component of 50 percent of the total project cost, whether in cash, labor or materials.

USAID invested \$648,000 in these small community projects between 1964 and 1982. By providing assistance to these low cost, high impact activities, which were not supportable under regular USAID projects and by emphasizing the self-help aspects of the activities, this project was able to generate considerable public awareness of and support for the more general assistance efforts provided by USAID.

In 1982, the U.S. Congress approved the implementation of a new USAID program called the "Small Project Assistance Fund" (SPAF), which in Paraguay replaced the SDAP. The funding for this program is provided by USAID, while the program administration and project implementation are Peace Corps responsibilities. The Peace Corps places emphasis on projects which increase production and income for the poor in Paraguay. Projects receiving SPAF funding are those in agriculture production, energy related fields and appropriate technology. Appropriate technology projects are to increase the use of local resources in the development of new products. Beginning in 1985, projects developed in the health sector are also included for consideration. Health sector projects can include the building of rural health posts, whereas construction of buildings in other sectors has to be directly related to production.

The current maximum U.S. dollar input per project is \$10,000. In Paraguay, the Peace Corps has been receiving \$40,000 a year in connection with this program. For fiscal year 1986, this was increased to \$65,000, \$50,000 for income generating projects and \$15,000 for health related projects. Since the inception of the SPA fund in 1982, a total of 62 projects have been financed for a total amount of \$192,521, including health related projects.

#### Information Resources Center (1988 - ongoing)

Perhaps the most important indirect support to local development efforts under the bilateral program was the daily person-to-person contacts of A.I.D. technicians with Paraguayan counterparts. A.I.D. and its predecessor organizations were resources for development information. When the required information was not readily on-hand, it could be obtained through inquiry. This inherent function of an overseas development mission was particularly important in Paraguay given its past remoteness and lack of communication facilities.

The phase out of the regular bilateral assistance program and the inception of A.I.D.'s current Advanced Developing Country (ADC) approach for Paraguay meant that U.S. staffing was reduced to one development professional (after 1986 this individual maintained only a part-time presence in Paraguay), with support from several experienced Paraguayan USAID staff members. Capacity to respond to general inquiries and initiatives was severely curtailed under the ADC approach.

At the same time, the Paraguay-Kansas Committee of the National Association of the Partners of the Americas (NAPA), a U.S. PVO, was expanding its own development initiatives. Through its various subcommittees, the Paraguay-Kansas Committee studies, designs, and promote a wide range of activities through technical exchanges, training, resource mobilization, and evaluation. The organization approached A.I.D. for assistance in establishing a center that could support its efforts and those similar Paraguayan entities by providing timely access to development information needed for:

- the identification of community needs;
- the definition of specific goals;
- the analysis of alternatives solutions;
- the search for support and resources; both human and financial; and
- impact evaluation

A.I.D. approved a \$350,000 grant, partially funded in late 1988, for the establishment of an Information Resources Center for Development (IRCD). By the end of 1988 the IRCD is expected to have established an office in Asunción with the information resources equipment and trained staff needed to assist the various subcommittees of the Paraguay-Kansas Committee, its general membership, and other users of development information. Through coordination, information exchange, and joint collaboration, the IRCD will establish a network that can draw on existing sources of development information in Paraguay as needed. The IRCD will access information outside of Paraguay mainly through special arrangements with the Kansas Partnership that, in turn, draw on the Kansas university system and other centers of information.

## BIBLIOGRAPHY

1. PARAGUAY ADVANCED DEVELOPING COUNTRY (ADC) STRATEGY, Paraguay, January, 1985
2. ANNUAL BUDGET SUBMISSION FY 1986, Paraguay, May 1984
3. ANNUAL BUDGET SUBMISSION FY 1984, Paraguay, June 1982
4. ANNUAL BUDGET SUBMISSION FY 1983, Paraguay, June 1981
5. PARAGUAY COUNTRY DEVELOPMENT STRATEGY STATEMENT FY 82, Jan. 1980
6. COUNTRY DEVELOPMENT STRATEGY STATEMENT FY 81, Paraguay, Jan. 1979
7. ANNUAL BUDGET SUBMISSION FY 1981, Paraguay, May 1979
8. ANNUAL BUDGET SUBMISSION FY 1980, Paraguay, May 1978
9. ANNUAL BUDGET SUBMISSION FY 1979, Paraguay, June 1977
10. DEVELOPMENT ASSISTANCE PROGRAM, Paraguay, June 1977
11. ANNUAL BUDGET SUBMISSION FY 1978, Paraguay, July 1976
12. ANNUAL BUDGET SUBMISSION FY 1977-PART II, Paraguay, August 1975
13. FIELD BUDGET SUBMISSION FY 1976, Paraguay
14. FIELD BUDGET SUBMISSION FY 1976, Paraguay, August 1974
15. FIELD BUDGET SUBMISSION FY 1975, Paraguay, July 1973
16. FIELD BUDGET SUBMISSION FY 1975-ANNEX, Paraguay, July 1973
17. FIELD BUDGET SUBMISSION FY 1974, Paraguay, August 1972
18. DEVELOPMENT ASSISTANCE PROGRAM FY 1974, Paraguay, July 1972
19. COUNTRY FIELD SUBMISSION FY 1972, Paraguay, July 1970
20. PROJECT BUDGET SUBMISSION FY 1972, Paraguay, August 1970
21. PROJECT BUDGET SUBMISSION FY 1971, Paraguay, August 1969
22. COUNTRY FIELD SUBMISSION FY 1971, Paraguay, July 1969
23. PROJECT BUDGET SUBMISSION FY 1970, Paraguay, August 1968
24. PROJECT BUDGET SUBMISSION FY 1969, Paraguay, August 1967

25. COUNTRY ASSISTANCE PROGRAM-PART II FY 68, Paraguay, September 1966
26. COUNTRY ASSISTANCE PROGRAM FY 67, Part I &II, Paraguay, July 1965
27. COUNTRY ASSISTANCE PROGRAM-PART II FY 67, Paraguay, September 1965
28. COUNTRY ASSISTANCE PROGRAM-PART II FY 66, Paraguay, February 1965
29. COUNTRY ASSISTANCE PROGRAM FY 1965, Paraguay, August 1964
30. COUNTRY ASSISTANCE PROGRAM FY 1964, Paraguay, September 1963
31. FIELD PROPOSED PROGRAM FOR FY 1963, Paraguay, December 1961
32. COUNTRY PROGRAM BOOK, BUDGET PROPOSAL FY 1961, Paraguay, Nov. 1959
33. MASTER PROGRAM BOOK SUBMISSION FY 59/FY 60, Paraguay, August 1958
34. APPENDIX A. THE 1942 STICA AGREEMENT, Asunción, December 24, 1942
35. REPORT ON AGRICULTURAL TECHNICAL ASSISTANCE IN PARAGUAY 1942-52, July 1953
36. A HISTORICAL SUMMARY OF STICA OPERATIONS 1943-1968, By Arthur B. Lyon, USAID Paraguay
37. SUMMARY OF TECHNICAL ASSISTANCE CONFERENCE (UN-POINT FOUR IN PARAGUAY), Asunción, June 19, 1953
38. ALIANZA PARA EL PROGRESO, THE RECORD OF PUNTA DEL ESTE, by the Pan American Union and the Agency for International Development
39. ECONOMIC, TECHNICAL, AND RELATED ASSISTANCE (Agreement between United States and Paraguay), signed in Asunción Sept. 26, 1961
40. ALLIANCE FOR PROGRESS... ONE YEAR LATER, A.I.D.
41. EL DISCURSO INAUGURAL DEL PRESIDENTE KENNEDY, D.C. Jan. 1961
42. PRESIDENT KENNEDY SPEAKS ON THE ALLIANCE FOR PROGRESS, A.I.D.
43. ALIANZA PARA EL PROGRESO EN EL PARAGUAY, 1965
44. COOPERACION ECONOMICA Y SOCIAL DE LOS ESTADOS UNIDOS DE AMERICA, Paraguay October 1968
45. RESUMEN DE LAS ACTIVIDADES DE USAID EN EL PARAGUAY, February 1968
46. LA ALIANZA PARA EL PROGRESO, by John P. Wiley, March 31, 1965
47. USAID BRIEFING MATERIAL ON PARAGUAY, August 7, 1967

48. TERMINATION AGREEMENT SERVICIO TECNICO INTERAMERICANO DE COOPERACION AGRICOLA, Paraguay, November 1968, 2 volumes
49. USAID BRIEFING MATERIAL AMBASSADOR YLITALO, August 6, 1969
50. ECONOMIC AND SOCIAL COOPERATION PROGRAM OF THE UNITED STATES OF AMERICA, Paraguay January 1971
51. BASIC AMERICAN DOCUMENTS, Huszar Littlefield and company, 1953
52. THEY ALSO RAN, Irving Stone, September 1968
53. AGRICULTURE NARRATIVE, probably by Christina Schoux in 1972-73
54. INFORME ANUAL, Ministerio de Agricultura y Ganaderia, Jan. 1958
55. PRODUCCION Y CREDITO AGRICOLA EN EL PARAGUAY, W.L. Crawford 1963
56. AGRICULTURAL DEVELOPMENT IN PARAGUAY, Survey Team, February 1964
57. LA REPUBLICA DEL PARAGUAY Y LOS ESTADOS UNIDOS DE AMERICA - RELACIONES E INTERESES, Rubén Ramírez Pane, 1974
58. REPORT TO THE FORD FOUNDATION ON EDUCATION IN PARAGUAY, Daniel J. Socolow, September 1966
59. EXTENSION OF LOAN TERMS FOR PARAGUAY-BRAZILIAN ROAD LOAN and PARAGUAY-ASUNCION/BRAZIL ROAD PROJECT, February 5, 1969
60. PARAGUAY SHELTER SECTOR ASSESSMENT, Off. of Housing, January 1980
61. INFORME DE EVALUACION DEL PROYECTO INTENSIFICACION DE CULTIVOS EN ZONAS DE MINIFUNDIO, Miguel A. Rivarola, January 1982
62. INFORME FINAL PROYECTO DE EDUCACION BILINGUE, Paraguay Sept. 84
63. ASSISTANCE TO CREDICOOP'S AGRICULTURAL CREDIT UNION SYSTEM, Jan. 85
64. ASSISTANCE TO CATHOLIC UNIVERSITY, Draft July 29, 1985
65. DEVELOPMENT REVIEW PARAGUAY A U.S. PERSPECTIVE, 1981
66. MEMORIA DE LA CORPORACION DE OBRAS SANITARIAS (CORPOSANA), 12/73
67. EVALUATIONS AND RECOMMENDATIONS FOR EXISTING AND PROPOSED FACILITIES, D.M. Roop, Asunción, 1964
68. SEGUNDA EVALUACION TECNICO-ADMINISTRATIVA DEL PROGRAMA DE ERRADICACION DEL PALUDISMO, Asunción 1975
69. FAMILY PLANNING ACTIVITIES IN PARAGUAY: A PROGRAM EVALUATION,

70. LA SITUACION ALIMENTARIA DE LA POBLACION ANTE EL PROBLEMA DEL DESARROLLO ECONOMICO-SOCIAL DEL PAIS, F. Montalto, Asunción, 1962
71. THE POPULATION ACTIVITIES CURRENTLY UNDERWAY IN PARAGUAY FUNDED BY U.S. AGENCY FOR INTERNATIONAL DEVELOPMENT/PARAGUAY, 1974
72. A REVIEW OF POPULATION PROGRAM ACTIVITIES IN PARAGUAY, 1975
73. RURAL WOMEN IN PARAGUAY: THE SOCIO-ECONOMIC DIMENSION, 1979
74. REPORT TO MINISTRY OF HEALTH AND PREVISION SOCIAL ON INCIDENCE OF GOITER IN PARAGUAY, WITH RECOMMENDATIONS FOR CONTROL, SCISP 1944
75. ANNUAL REPORT OF SCISP, Paraguay, 1959-1960
76. AN EVALUATION OF PROGRESS IN PARAGUAY'S AGRICULTURAL SECTOR 1943-70, Robert R. Nathan Associates, Inc., Washington D.C. Dec. 1970
77. HISTORIA DE LA PRIMERA CATEDRA DE CLINICA MEDICA, (unpublished) 1986, Dr. Carlos M. Ramirez Boettner
78. ATENCION Y EDUCACION MEDICA EN EL PARAGUAY 1980, Dr. Boettner
79. USAID CONTRACT AGREEMENT FILES FOR: Organization & Administration of Higher Education  
Agriculture & Livestock Education  
Medical & Nursing Education  
Education Development (Non-University)  
Rural Education Development (REDP)  
Leadership Training  
Technical Support  
Elementary & Secondary Education  
National University  
Rural Non-Formal Education  
Rural Radio Education  
Bilingual Education  
Health Education  
Population & Nutrition  
Census & Household Survey  
Fiscal Reform & Economic Planning  
Government Management & Organization  
Tax Administration  
General Statistics Improvement  
Financial Management  
In-Service Training Center  
Municipal Development  
Private Enterprise  
Development & Productivity Center  
Export Promotion  
Regional Enterprise Development

80. Various USAID Project Appraisal Reports from 6/69-5/82
81. EL ISE INFORMA, Asuncion 1984, 2do. semestre
82. END-OF-TOUR REPORT, DR. D. K. KROH, Asunción, 1/29/65
83. END-OF-TOUR REPORT, William A. Bakamis, Asunción, 1/11/63
84. END-OF-TOUR REPORT, William E. Reeves, Asunción, 12/17/65
85. END-OF-TOUR REPORT, Sophia RAEL, Asunción, 2/16/66
86. END-OF-TOUR REPORT, Howard D. Lusk, Asunción, 8/8/61
87. END-OF-TOUR REPORT, Dr. A. J. Adkins, Asunción, 11/13/63
88. END-OF-TOUR REPORT, Sherwin Landfield, Asunción, 10/29/65
89. END-OF-TOUR REPORT, George A. Dale, Asunción, 12/30/65
90. FINAL REPORT ON RURAL EDUCATION DEVELOPMENT PROJECT, 1/3/68
91. ANTECEDENTES 1962-1986, El Instituto de Ciencias Básicas
92. CALENDARIO ACADEMICO CORRESPONDIENTE AL AÑO 1986, Facultad de Ciencias Economicas, Administrativas y Contables
93. NEHA'ARU'A PORUNDYHA MBORAYHU ROGAPE PY'AGUAPY NANE RETAME, Centro Regional de Educacion Saturio Rios, San Lorenzo 1978-1986
94. CONSIDERACIONES PARA LA CREACION DE UNA ESCUELA PARAGUAYA DE ADMINISTRACION PUBLICA, Asuncion, Paraguay Junio 1958
95. CENTRO DE ENTRENAMIENTO VOCACIONAL "PTE. CARLOS ANTONIO LOPEZ", Ministerio de Educación y Culto, Asuncion, Paraguay
96. BOLETIN INFORMATIVO CENTRO DE ENTRENAMIENTO VOCACIONAL, Asunción
97. EXPORT DIRECTORY, CEPEX 1986/87
98. DECREE No. 7119, THROUGH WHICH THE EXPORT PROMOTION CENTER IS FOUNDED, August 28, 1969
99. SEGUNDO SEMINARIO NACIONAL DE DESARROLLO EDUCATIVO, Departamento de Curriculum, Asuncion, Noviembre 1985
100. MUNICIPIO-Nos. 1-12, Instituto de Desarrollo Municipal, 1982-1986

## ANNEX 1

USAID PROJECT ASSISTANCE AND ACTIVITIES LIST  
(U.S. Thousands of Dollars)

FIELD OF ACTIVITY	SERVICIO POINT FOUR 1942-1960	ALLIANCE FOR PROGRESS 1961-1984	AID PROGRAMS 1985-1988	TOTAL
HEALTH & POPULATION	23,274	5,375	560	29,209
AGRICULTURE	11,382	32,081	529	43,992
EDUCATION & TRAINING	3,630	12,671	1,958	18,259
INFRASTRUCTURE	3,594	20,277		23,871
PUBLIC ADMINISTRATION	9,282	4,457		13,739
URBAN DEVELOPMENT		6,000		6,000
PRIVATE SECTOR & SDA	34	12,474	775	13,283
PL 480 SALES	2,806	22,016		24,822
EMERGENCY RELIEF ASSISTANCE	<u>          </u>	<u>104</u>	<u>107</u>	<u>211</u>
TOTALS	<u>54,002</u>	<u>115,455</u>	<u>3,929</u>	<u>173,386</u>

PROJECT TITLE TECHNICAL FIELD	PROJECT NUMBER	DATE BEGUN-END	-L- -G-	TOTAL COSTS
<u>PROJECTS BEGUN BETWEEN 1942 AND 1952</u>				
<u>Health Sector</u>				
Tech Asst Supporting Activity	5260000	42 53	G	<u>5,208</u> 621
SCISP	5260054	42 62	G	2,258
Rural Health Development	5260054	42 67	G	2,309
Tech Aid Nurse Education	5260017	52 56	G	20
<u>Agriculture Sector</u>				
Tech Asst Supporting Activity	5260000	42 53	G	<u>7,810</u> 1,514
Agric Prod & Institution Dev.	5260097	42 71	G	5,655
Agric Extension & Inform.	5260007	43 62	G	211
Crop Development	5260008	43 62	G	241
Agriculture Economics	5260009	43 58	G	17
Livestock Development	5260010	43 62	G	172
<u>Education Sector</u>				
Tech Asst Supporting Activity	5260000	45 53	G	<u>3,208</u> 1,254
Administration	5260011	45 62	G	329
Vocational Education	5260012	45 62	G	458
Coop Service of Education	5260013	45 62	G	619
Elementary Teacher Education	5260014	51 62	G	548
1942-1952 SUBTOTAL				<u>16,226</u>
<u>PROJECTS BEGUN BETWEEN 1953 AND 1960</u>				
<u>Health Sector</u>				
University Contract	5260028	55 57	G	<u>18,066</u> 260
Train of Public Health Personnel	5260022	55 64	G	313
Medical and Nursing Education	5260095	56 78	G	1,221
Asuncion Water Supply	5260055	58 59	L	1,000
Malaria Eradication Program	5260036	58 67	G	272
PL 480 Title II - Nutrition		58 73	G	15,000
<u>Agriculture Sector</u>				
Develop Mennonite Colonies	5260033	57 62	L	<u>3,572</u> 998
Modernization of Operations	5260058	58 68	L	2,574
<u>Education Sector</u>				
Educational Administration	5260031	55 56	G	<u>422</u> 12
Training of Pers. in Education	5260035	57 62	G	148
American School	5260040	60 71	G	262

PROJECT TITLE TECHNICAL FIELD	PROJECT NUMBER	DATE BEGUN-END	-L- -G-	TOTAL COSTS
<u>Infrastructure sec.</u>				<u>3,594</u>
Tech Asst Supporting Activity	5260000	53	G	4
Tech Asst Supporting Activity	5260000	53	G	53
Tech Asst Supporting Activity	5260000	53	G	7
Tech Aid Soc W Educ	5260016	52 56	G	11
Trans Chaco Road	5260024	55 57	G	93
Demonstrat. & Train for Road Const	5260025	55 57	G	156
Engineering Survey	5260027	55 57	G	7
Civil Aviation Assistance	5260023	55 59	G	156
Road Const and Maint Training	5260026	55 71	G	3,107
<u>Public Administration</u>				<u>9,282</u>
Tech Asst Supporting Activ	5260000	53	G	300
Tech Asst Supporting Activ	5260000	53	G	599
Tax Administration	5260103	52 64	G	1,318
General Services	5260030	54 56	G	97
Reg Miscellaneous	5260021	54 59	G	50
Technical Support	5260000	56 75/87	G	6,918
<u>Private Sector</u>				<u>34</u>
Industrial Development	5260039	60 62	G	34
<u>Support Projects</u>				<u>2,806</u>
Public Law 480 Title I Commodities		56 56	L	<del>2,056</del>
" " " " " " US Gov't use			G	750
1953 - 1960 SUBTOTAL				<u>37,776</u>
TOTAL FOR PROJECTS BEGUN BETWEEN 1942 AND 1960:				<u>\$ 54,002</u>
<u>PROJECTS BEGUN BETWEEN 1961 AND 1969</u>				
<u>Health Sector</u>				<u>4,947</u>
Potable Water Sanos	5260046	63 66	G	125
Nutrition and Population	5260099	65 68	G	40
Malaria Eradication	5260061	68 73	L	1,900
Population	5260085	69 81	G	2,882
<u>Agriculture Sector</u>				<u>15,895</u>
Credit Coops & Marketing	5260043	61 64	G	8
Livestock Development	5260104	63 68	G	406
Asst Finance Production Increase	5260067	64 76	L	8,786
Agric Productiv and Institut Dev	5260050	69 78	G	4,767
Credit Unions	5260101	69 81	G	1,928

PROJECT TITLE TECHNICAL FIELD	PROJECT NUMBER	DATE BEGUN-END	-L- -G-	TOTAL COSTS
<u>Education Sector</u>				<u>9,711</u>
Rural Education Development	5260045	62 72	G	2,771
Education Development Program	5260095	68 78	G	2,750
" " "			L	4,190
<u>Infrastructure Sec.</u>				<u>20,277</u>
Road Improvements/Brazil Road	5260037	61 66	L	9,556
Telecommunications	5260041	61 64	L	1,000
Airport Rehabilitation	5260059	67 70	L	4,663
Brazil Road Rehabilitation	5260060	67 75	L	4,668
Pedro J. Caballero Electrification	5260093	69 73	L	390
<u>Public Administration</u>				<u>2,248</u>
In Service Training	5260018	61 72	G	396
Tax Administration	5260018	64 76	G	1,696
Financial Management	5260018	68 72	G	156
<u>Support Projects</u>				<u>22,016</u>
Public Law 480 Title I Commodities-9 Agreements		61 70	L	13,295
" " " " " "			G	3,369
" " " " " " Cooley loans			L	1,204
" " " " " " US Gov't use			G	3,500
Special Development Activities	5260601	64 82	G	648
1961-1969 SUBTOTAL:				<u>75,094</u>
<u>PROJECTS BEGUN BETWEEN 1970 AND 1984</u>				
<u>Health Sector</u>				<u>428</u>
Census and Household Survey	5260302	70 79	G	292
Health Education	5260303	75 78	G	49
Health Education II	5260306	78 81	G	87
<u>Agriculture Sector</u>				<u>16,186</u>
Marketing Services Coops	5260102	72 78	G	682
Small Farm Development	5260113	75 79	L	3,000
Farm Mgt Service Small Farmers	5260105	75 79	G	423
Ag Planning and Statistics	5260104	75 82	G	276
Technical Support	5260100	75 83	G	504
Small Farm Livestock Production	5260103	75 79	G	284
Leadership Training for Rural Enter.	5260107	76 80	G	38
" " " " " "			L	2,500
Honey Production	5260119	78 81	G	19
Indian Settlement	5260120	78 82	G	450
CREDICOOP Rural Cooperatives	5260122	78 83	G	247
Minifundia Crop Intensification	5260118	79 85	G	1,809
Small Farm Technology	5260109	79 85	G	950
" " " "			L	4,994

PROJECT TITLE TECHNICAL FIELD	PROJECT NUMBER	DATE BEGUN-END	-L- -G- -O-	TOTAL COSTS
<u>Education Sector</u>				<u>2,960</u>
Technical Support	5260500	74 81	G	432
Rural Non-Formal Education	5260501	75 79	G	480
Rural Radio Education	5260502	76 79	G	579
Vocational Institute	5260507	77 79	G	96
Community Services	5260506	77 80	G	119
Bilingual Education	5260503	78 84	G	996
Legal Rights for Rural Women	5260509	79 82	G	135
Legal Aid to the Poor	5260510	79 83	G	123
<u>Public Administration</u>				<u>2,209</u>
Drug Abuse Prevention	5260304	73 77	G	64
Cadastral Survey/Property Tax	5260703	74 81	L	2,068
Technical Assistance	5260600	78 80	G	77
<u>Urban Development</u>				<u>6,000</u>
Municipal Development	5260801	72 77	L	2,000
Housing Guaranty Project		77 84	O	4,000
<u>Private Sector</u>				<u>12,394</u>
Private Development Bank/COMDESA	5260802	70 78	L	5,417
Labor Development	5260098	71 74	G	153
Finance Natl and System	5260051	71 77	G	1,227
" " " "			L	2,097
Productive Credit Guaranty Program		78 84	O	3,500
<u>Special Development Activities</u>				<u>80</u>
Small Projects Assistance	598-0625	83 84	G	80
<u>Emergency Relief Assistance</u>				<u>104</u>
1970-1984 SUBTOTAL:				<u>40,361</u>
TOTAL FOR PROJECTS BEGUN BETWEEN 1961 AND 1984:				<u>115,455</u>
COUNTRY TOTAL AMOUNT FUNDED 1942-1984:				<u>169,457</u>
Total grants funded (G):	\$ 83,601	Percentage of total:	49.0	
Total loans funded (L):	\$ 78,356	Percentage of total:	46.0	
Total guaranty projects (O):	\$ 7,500	Percentage of total:	5.0	

PROJECT TITLE TECHNICAL FIELD	PROJECT NUMBER	DATE BEGUN-END	-L- -G-	TOTAL COSTS
<u>AID PROJECTS BEGUN BETWEEN 1985 AND 1988</u>				
<u>Health Sector</u>				
Child Survival Enhancement	598-0616.06	86 88	G	<u>300</u>
<u>Population</u>				
Private Sector Strengthening	598-0616.06	86 86	G	<u>100</u>
Training & Policy Promotion	"	86 86	G	120
Microcomputer Applications	"	87 88	G	40
<u>Agriculture Sector</u>				
Sorghum and Millet CRSP	598.0616.06	85 86	G	<u>45</u>
Improv of Potatoe Cultivation	"	85 85	G	20
Agricultural Training	"	86 88	G	448
Employment Opportunity Bank	"	85 85	G	1
Nature Conservancy	"	88 88	G	15
<u>Education &amp; Training Sector</u>				
Management Training	598-0616.06	85 88	G	<u>563</u>
LAC Training Initiatives II	598-0640.06	85 88	G	1,245
Information Resorce Center	598-0616.06	88 88	G	150
<u>Private Sector and Selected Development Activities</u>				
Technical Asst for Private Enterp	598-0616.06	85 85	G	<u>300</u>
Micro Enterprise Emp Generation	"	85 85	G	280
Program Dev and Support	"	88 88	G	30
Small Project Assistance	598-0625.06	85 88	G	165
TOTAL ADC PROGRAMS 1985 - 1988				<u>3,822</u>
EMERGENCY RELIEF ASSISTANCE				<u>107</u>
TOTAL AID PROJECTS 1985-1988				<u><u>3,929</u></u>

ANNEX 2

USOM AND USAID DIRECTORS  
1952 through 1988

NAME	DATES
Albion Patterson	1952 - 1953
James Babcock	1953 - 1955
Robert Groves	1955 - 1959
Charles Russell	1959 - 1962
John P. Wiley	1962 - 1967
Peter M. Cody	1967 - 1971
John E. Oleson	1971 - 1973
Oliver Sause	1973 - 1976
Abe M. Peña	1976 - 1979
Paul Montavon	1979 - 1981
Abe M. Peña	1981 - 1984
Paul Fritz (Attaché)	1984 - 1988

ANNEX 3

THE STICA PIONEERS  
1942 through 1946

NAME	POSITION
John R. Camp	STICA Director
Albion Patterson	Assistant Director
Richard Arms	Administrator
Hugh Bailey	Agricultural Program Director
Lyle Peterson	Economist
Bob Boane	Livestock Specialist
Frederick A. Coffey	Census
Louie Nations	Census
Walter Crawford	Credit Specialist
Emma Reh	Nutritionist
Virginia Ortiz	Replaced Emma Reh
Richard Atwater	Engineer
Morton Kline	Forestry Specialist
Mr. Foster	Vocational Education/FFA
Fred Fulgency	Secretary
Harold Christ	Dairy Specialist
Santiago Apodaca	Agriculture and training advisor

#### ANNEX 4

##### KEY DATES FOR U.S. FOREIGN ASSISTANCE

March 31, 1942	Institute of Inter-American Affairs formally established--first technical assistance by United States.
November 27, 1943	Agreement signed to furnish aid to war-ravaged countries through U.N. Relief and Rehabilitation Administration.
December 27, 1945	International Monetary Fund and International Bank for Reconstruction and Development (World Bank) formed.
May 15, 1947	Congress approves economic and military aid to Greece and Turkey.
June 5, 1947	Secretary of State Marshall's speech voices U.S. interest in rebuilding European economies.
April 2, 1948	Economic Cooperation Act (Marshall Plan) creates Economic Cooperation Administration.
January 20, 1949	President Truman's Point IV inauguration speech.
June 1, 1950	Act for International Development (Point IV) creates authority for Technical Cooperation Administration.
June 30, 1951	Termination of Marshall Plan.
October 31, 1951	Mutual Security Act of 1951 unites military and economic programs and technical assistance. Mutual Security Agency established.
July 10, 1954	Public Law 480 authorizes sale and use of U.S. surplus foods for economic development.
March 1, 1961	Peace Corps created.
March 13, 1961	President Kennedy calls on people of hemisphere to join in an "Alliance for Progress".
September 4, 1961	Foreign Assistance Act combines International Cooperation Administration Development Loan Fund and other U.S. assistance functions.
November 4, 1961	Agency for International Development created.

