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EVALUATION OF TITLE II  
FOOD FOR PEACE  
IN PANAMA

**DEVELOPMENT ASSOCIATES, INC.**

MANAGEMENT AND GOVERNMENTAL CONSULTANTS

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## EVALUATION OF TITLE II FOOD FOR PEACE IN PANAMA

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## PREFACE

The evaluation of the Food for Peace Title II program in Panama was undertaken at the request of the USAID Mission in Panama with multiple objectives: to assess the status and impact, if possible, of the program at that point in time; to determine potential areas for program integration; and to provide recommendations for program improvement.

Two US voluntary agencies have traditionally worked with the Government of Panama in providing supplementary food assistance: the Cooperative for American Relief Everywhere (CARE) and Catholic Relief Services (CRS) through Caritas. The CARE program is relatively large and includes both School Feeding and Maternal and Child Health programs. CRS, through Caritas, has distributed small amounts of food assistance to day care centers, homes for the elderly and minors, and to some special Indian programs. A few small pilot food for work and food for self sufficiency through employment activities were also carried out and showed promise of success in similar future efforts.

It is important to know that other related studies were underway in Panama at the time of this evaluation. It is intended, therefore, that this report be useful as an integral part of the combined undertakings of USAID, the Government of Panama, and the voluntary agencies.

One immediate result of the evaluation effort was the creation of a committee in Panama with representatives from the involved government ministries, the voluntary agencies, and the USAID Mission to work together in program improvement and the implementation of recommendations made.

USAID/Panama, CARE, and CRS/Caritas and the Ministries of Health, Education, Labor and Social Welfare, and Public Works, as well as the National Guard, furnished a great deal of assistance to the evaluation tasks. Their hard work and dedication are sincerely appreciated. Similarly, the Regional Organization for Central America and Panama provided staff help. That assistance is also gratefully acknowledged.



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Office of Food for Peace

## CHAPTER I: INTRODUCTION

The Food for Peace program of the Agency for International Development, US Department of State, was authorized in its present form under Public Law 480, the Agricultural Trade Development and Assistance Act of 1954. Emphasis within its programs has changed some over the years to reflect differing US agricultural conditions and needs in the recipient countries. The law has multiple objectives, but a major concentration, especially since the food shortages in many parts of the world in 1973 and 1974, has been destitute people in poor countries and deaths from starvation.

The Title II part of the law, the only one studied in this evaluation, authorized the President to "determine the requirements and furnish agricultural commodities on behalf of the people of the United States of America to meet famine and other extraordinary relief requirements (85, 87, 102):

- to combat malnutrition, *especially in children;*
- to promote economic and community development in friendly developing areas; and
- for needy persons and non-profit school lunch and preschool feeding programs outside the US."

In a later paragraph, further specification was given, mandating that to the extent possible, priority should be given to those suffering from malnutrition. It again singled out preschool and school children, and also listed the "poorest region of the country" as a high priority.

The central administration of the program was vested in the Office of the Food for Peace, but the US Department of Agriculture has many specific commodity responsibilities. Agencies in both the Department of State and the Department of Agriculture, especially those concerned with health and nutrition, contribute to the total effort.

The 1977 amendment to PL 480 required that the President submit to the Congress a comparative cross country evaluation of the programs conducted under Title II at five year intervals. That report was required to cover no fewer than five countries sampled from the developing regions (Asia, Africa, Latin America, and the Caribbean) and "shall assess the nutritional and other impacts, achievements, problems, and future prospects for programs." Although the Agency for International Development (AID) may contract the studies and/or use consultants in their conduct, the role of those entities is to collect and analyze the data and formulate

a set of tentative conclusions and inferences for presentation to AID. The final evaluative judgments and decisions are made by the AID/Food for Peace office in Washington, DC. Within the context of this legislative framework, Development Associates, Inc., was chosen as the contractor to conduct the evaluation in Panama, the first to be carried out in Latin America.

In all but some very special circumstances, US government offices contract the management and distribution of the Food for Peace commodities with voluntary agencies. In Panama, two perform these functions: the Cooperative for American Relief Everywhere (CARE), and Caritas, affiliated with the Catholic Relief Services of the US Catholic Conference. USAID/Panama is charged with monitoring the work of the two voluntary agencies. This evaluation report is necessarily based on observations, inspections, interviews and discussions with the representatives of all three of these agencies, the distribution center personnel and participants, the offices of the Government of Panama that cooperate with the voluntary agencies, and with some other international organizations concerned with health and nutrition in Panama.

The objective of the evaluation is to give AID/Food for Peace some of the elements needed for the report required by Congress. It has used a constructive approach to aid the several involved institutions, improve the understanding of the work of AID/Food for Peace and the voluntary agencies under the conditions existing in the field, and to give opportunities to cooperate more intensively in overcoming the problems and maximizing the strengths of the program.

#### THE EVALUATION TEAM

The Office of Food for Peace/Washington and Development Associates selected the US members for the evaluation team to meet the specific needs of the study. The team leader had performed the same function in the Food for Peace evaluation in Ghana and had a great deal of experience in many kinds of research in agriculture, education, labor, and management; those studies had been conducted in many countries of Latin America. The nutritionist had had a wide variety of work with nutrition, health and health program implementation and research in the United States, Bolivia and Guatemala. The public health specialist had many years experience with the Agency for International Development in Latin America, Africa and Asia. The education and management specialist on the team had worked in those fields in the United States and Asia. To further strengthen the team, the Food for Peace/Washington program officer in charge of country evaluations joined the US team to add depth to the specification of the Panama design and to aid in the general data collection effort.

Three members of the USAID/Panama staff, including those with responsibilities in Food for Peace and health programs, joined the

evaluation team. Since the knowledge of local foods, food preparation and nutrition is a vital element within any impact study, USAID/Panama contracted a Panamanian nutritionist, the subdirector of the Office of Nutrition of the Ministry of Health, to participate fully in the in country phase of the work. Each of the voluntary agencies loaned a field inspector from its staff. The Office of Nutrition of the Ministry of Education furnished its director and a national inspector full time and another staff member for several days. The Office of the Child and Family of the Ministry of Labor and Social Welfare provided one of its experienced central officers for the evaluation. The nutritionist from the Regional Organization for Central America and Panama participated in part of the design and data collection phases.

The vast majority of the data was collected at the local and provincial levels, making use of the time and knowledge of the school personnel, health professionals and paraprofessionals, community workers and the participants themselves. Thus, in effect, they served in important capacities in the evaluation. The provision of information and guidance to the team furnished by many officers in the national offices of the ministries and voluntary agencies similarly functioned to help complete the study.

## DESIGN OF THE EVALUATION

The AID "Generic Scope of Work" (88) was used for the tentative design developed in the United States by Development Associates and the Office of Food for Peace/Washington. Preliminary instruments in English and Spanish were prepared as drafts for revision in country. The entire evaluation team, during the first week in Panama, revised the design and formulated the final Spanish version of the instruments. Additionally, the institutions were chosen at that time to meet the requirements set for program representatives. This participatory process presented the distinct advantage of utilizing all the expertise in the several fields represented within the large evaluation team, assuring a maximum applicability to the Panama program as well. Too, all the members of the team had the opportunity to extend their experience in the entire research design and conduct phases.

### Objectives of the Evaluation

The team was charged with conducting as complete an evaluation as possible within the allotted time. That general task was then divided into three research areas, each with its pertinent objectives:

### Management and Policy:

- . Describe the nature of the policies, regulations, and programs of the several agencies that contribute to, or detract from, the nutritional, agricultural, and general economic development of the recipients of the Food for Peace and/or the nation.
- . Examine the implementation practices involved at the national, provincial, and local levels.
- . Determine the perceptions and opinions about the administration of the programs.

### Potential Nutritional Impact:

- . Determine the number of recipients being served and the proportions of the served and unserved.
- . Assess the contributions of the rations to the needed nutrition of the recipients in relation to the other foods consumed.
- . Determine the acceptability and use of the commodities as foods or for other purposes and reasons for them.
- . Calculate weight for age differentials from measurements at a six month interval.
- . Determine the possibilities for substitutions to provide nutrients to recipients.

### Agricultural and other Economic Impact:

- . Assess the contributions to, and/or detractions from, economic impact.
- . Describe the community/provincial facilitation or impediments to the potential impact.
- . Suggest the potentials for impact from possible modifications of the presently used products of Food for Peace, other products not now being used, or those of other programs.

This narrative report is thus expected to provide some quantifiable data on the status of Food for Peace in Panama, on the contributions of the several agencies involved, and on the services used in the delivery of the commodities to the recipients. Qualitative information from the observations and the opinions of the many actors in the entire process is used descriptively and in explanation of the quantitative results.

## Sampling

Four weeks were scheduled for the revision of the design and instrumentation, the collection of field data, the interviews and inspections with the central agencies, and the debriefings. The US team scheduled work for two six-day and two seven-day weeks. Unfortunately, the four week period included several holidays, and during most of them, some or all of the distribution centers were closed; this substantially reduced the field data collection that could be accomplished.

Travel to many of the distribution sites was time consuming, since the roads were in poor condition, boats were required to arrive at the sites, and/or arrangements for transportation were incomplete, necessitating negotiations with local personnel. Assistance from some of the provincial offices alleviated some of the transportation difficulties but the process did use some of the time that might have allowed more interviews in the local institutions.

Outbreaks of meningitis and conjunctivitis had begun some months before the team's arrival and these diseases were still prevalent in many of the sample areas. To reduce the spread of these, schools were closed for a period between a weekend and a holiday. Additionally, some of the day care centers, especially those in the Panama City and Colon areas, were closed to minimize the possibilities of contagion. (30, 72, 77, see also appendix C.) Each of the problems caused some reduction in the final samples of institutions.

The distribution lists from the organizations collaborating with the two voluntary agencies listed 2678 distribution centers. Additionally, some of these served as storage/distribution points for other institutions, making the number of recipient centers even greater. Schools generally provided commodities to the day care centers, and larger hospitals/health centers often provided that service to smaller health posts and some other facilities. Sometimes, the extra institutions were not listed but were included under a single center.

The problems of time, travel and the number of distribution centers made a large, completely random sample impossible. A purposive sampling plan was therefore employed that would provide representative institutions within the criteria specified by the evaluation team. This naturally placed some important limitations on the generalizations that could be drawn from the data but the purposive sample furnished valuable insights into the operations of the Food for Peace program in Panama.

Every type of institution distributing Food for Peace commodities was sampled. (Table 1) Those types with few cases were over represented in the sample, in comparison to the others, since the varied considerably. The number of school feeding programs

studied was very small in relation to the total but their utilization of the Food for Peace commodities tended to be quite uniform, therefore reducing the number that was needed to establish representativeness. Within the general category of health facilities, the several kinds of service organizations were included: hospitals, integrated systems, health centers and health posts. Two day care center organizations existed, those that were independently operated and those that were in connection with schools. Because of the meningitis outbreak, most of the independent centers in the canal corridor were closed during the evaluation; thus, only two of those listed in the day care center sample were independently operated. Despite the variations described, the general representativeness of the sample was maintained.

Table 1: Authorized Institutions and Samples by Type of Institution and Voluntary Agency

Type of Institution	Caritas		CARE		Total	
	Listed	Sample	Listed	Sample	Listed	Sample
Schools	3*	2	2211	45	2214	47
Health Facilities		1**	209	37	209	38
Day Care Centers	5*	2	210	28	215	30
Homes for Minors	13	8	0	0	13	8
Homes for Elderly	11	6	0	0	11	6
Infant Feeding	2*	1	8	1	10	2
Adult Indian	2*	1	0	0	2	1
Food for Work	3*	2	1	1	4	3
Totals	39	23	2639	112	2678	155

\* Separate listings for Indian programs were given; in this table, they are placed into their generic types.

\*\* This site was normally CARE but temporarily was dispensing from Caritas.

Food for Peace programs were operated in all nine provinces and in the Comarca of San Blas. Eight of the provinces and the Comarca were included in the sample. The team judged the conditions and institutions to be similar in the two provinces in which travel time was great - Bocas del Toro and Darien - thus the latter was chosen for the sample. In the country as a whole, 63% of the districts within the provinces was comprised in the sample.

#### Instrumentation

The draft questionnaires designed in the United States were

reviewed item by item and revised as needed to make them conform to the operations of the programs in Panama, utilize the terminology employed in them, and accommodate the data needs for understanding Food for Peace in Panama. All the members of the team, from the US and from Panama, participated in that refining process. Seven separate data collection instruments were designed. The items were made quantifiable when possible. Open ended questions were added to ensure comprehension of the numerical responses. (The data collection instruments are included in Appendix A.)

Two questionnaires were developed to obtain general information from each of the sample sites: a full site instrument for those in which the personnel were available, and a brief site questionnaire when time was restricted or only some members of the institutional staff were encountered. The essential items concerning the operation of the center were included in both instruments; the more detailed full site questionnaire added more information than that required for the completion of the brief site instrument. The full site questionnaire was administered in 58 sites and the brief in 74. In three cases, the program was not in operation at the time of the study, and their internal reports, plus open ended interviews, were employed to gather the information. The total number of sites from which information was gathered, then, was 135.

The study of the management of the Food for Peace commodities included an inspection of the storage facilities at the central warehouse in Panama, three regional warehouses, and 85 local sites. Some institutions did not store the commodities they used but were serviced through others. In a few cases, the storage facilities could not be examined because the person in charge could not be located at the time of the visit. The final number of inspection reports completed was 83; a different format was utilized in the case of the central storage in the City of Panama.

Weights and heights were collected on 592 children on whom measurements at a six month interval were available. Of these, 469 had usable weight data but only about a third of them had height measurements at both periods. Too, some were older at the first weighing than the growth surveillance systems accounted for, thus eliminating them from the study. Weight data were found in some schools but in none were there two measurements. Thus, the growth data include only those children recorded in health facilities and in infant feeding programs. Obvious errors in the recorded birth dates also caused some reduction in the total usable information. The 469 finally included in this sample, however, were sufficient to establish some trends within the institutions they represented.

A beneficiary (adult participant) form was also designed. That interview form obtained information on the amount, kind, and utilization of the commodities distributed to them; data on family size and ages of children; twenty-four hour recall of the foods

consumed by the family; as well as general information about health. A total of 128 forms was completed, primarily from women who were participants because they were pregnant or lactating, or because they had a child or children enrolled in the program. Nearly 80% was from health facilities, primarily hospital operated programs, and the remainder from institutions for the elderly and for infant feeding. An opinionnaire was prepared to gather some judgments about the programs and the Food for Peace commodities from both the professionals involved in them and the participants. A five point Likert type scale was employed to enable quantification of the opinions; open ended questions accompanied each scale to obtain the reasons for the ratings. Many of the replies to these questions also provided greater specification to the ratings. The final part of the opinionnaire sought additional information from the respondents about some possible alternatives within the programs and/or the commodities furnished by Food for Peace. Of the 476 completed instruments, only five were eliminated from the processing because of inadequate identifying information, leaving 471 in the study. These included: 29 national professionals, 36 provincial professionals, 296 local professionals, and 110 participants.

A market survey form was also prepared to allow for some estimates on the prices of foods utilized by the participant families and data on their incomes. The information was not as helpful as it has been in some other cases. First, in some areas the participants purchased their supplies from many sources rather than a few, making adequate coverage very difficult and sometimes impossible. Second, in other areas so few sources of supply exist that a considerable amount of exchange of products is the rule rather than the exception. Quantifying these bartering experiences was impossible within the time allotted. Finally, the apparent costs varied so widely within areas and between areas that definitive costs could not be calculated. Consequently, only general information was used from the market survey forms.

Few difficulties were experienced with the items in the questionnaires and the other data collection instruments. One question in the opinionnaire was thought to be posed inadequately but the final judgment was that many of the interviewees did not know the answer, no matter how it was phrased. When data on participants were collected from two different sources in a single site, the numbers did not always agree. In those cases, the team members attempted to verify which was correct; when that did not resolve the issue, the numbers given by the person most directly responsible for the program operation were utilized. Too, as would be expected in a large scale study, a few items were left blank; the actual number of responses was used in the calculations, obviating the problem. With these few exceptions, the instruments functioned properly in the field and the data were unusually accurate and complete.

All the interviews were conducted in Spanish except for those

administered to Kuna Indians. In that case, a translator studied the instruments involved, formulated the items into Kuna, and relayed the responses to the researcher in Spanish. Spot checks on the information so provided were made with professionals in the community and the replies were deemed to be correct.

## Data Analysis

As instruments were completed in the field, each interviewer reviewed the items before submitting them to the subteam leader. That person then checked them again and entered the appropriate information on a compilation form. The instruments and the compilation forms were then turned in to the team leader for entry into the final monitoring system. This procedure reduced the item elimination to a minimum, never exceeding one-half percent.

An identification code was assigned to each instrument, ensuring that data processing via province, district, community and institution could be effected if needed. Further, the type of institution, kind of program, source of the commodities, and position of the respondent were included on every instrument, allowing for greater specification within the analyses in case differences were encountered according to these variables.

The tabulations of the quantifiable replies were begun in Panama and completed in San Francisco. For most of these items, the analyses involved only descriptive statistics and those were calculated in California. Subsequently, tables were drawn up when sufficient differences were found in the results; when the data were very uniform, the information was incorporated into the narrative descriptions.

The scaled ratings from the opinionnaires, because of the large number of instruments and the complexity of the several variables that could differentiate among the replies, were coded for computerization via the procedures for the *Statistical Package for the Social Sciences* (56), forwarded to the Arlington, Virginia, Office of Development Associates, and the analyses were performed through the computer facilities there. The data printouts were then sent to California and the tables designed in that office.

The growth monitoring data were processed in the San Francisco office. All weights in pounds were converted to kilograms; heights in inches were changed to centimeters. Subsequently, the changes in weight and height over the six month interval were calculated. The age at first weighing was determined and each child was then placed in the appropriate degree of malnutrition category, by sex, via the Ministry of Health adapted version of the Gomez (61) standards by age groups. Additionally, each was categorized by the Catholic Relief Services "Growth Surveillance System" (11), an adaptation of the earlier Harvard standards (78). Three growth

monitoring tables (weight for age) were elaborated. Height for age was not calculated because the number of children with two measurements was too small to ensure that trends would emanate from them.

All of the instruments contained items that called for descriptions of the programs. While some of these could be quantified, many were useful primarily because they furnished the contextual information required. Each of these was reviewed by the writer assigned to that topic and discussed with the appropriate specialists. The information was described narratively or used in substantiation of other items.

Extensive interviews were also conducted with many national and international professionals in the several fields related to the management and utilization of the Food for Peace products. Both numerical and general information data were thus obtained and were employed throughout the study report. Similarly, many publications were reviewed as found pertinent to the evaluation. While the citations in the narrative and the bibliography indicate the scope and utility of this review, special note of the assistance furnished from previous studies of nutrition, foods, and health must be made. The data they included enabled many of the retrospective aspects to the present study.

#### LIMITATIONS TO THE EVALUATION

Several limitations to the present evaluation of the Food for Peace program in Panama were included in the descriptions of the design elements. The most important was the travel and holidays that curtailed the time available. The purposive sampling alleviated some of the problems caused by this factor. The knowledge and experience of the Panamanian team members greatly enhanced the representativeness of the institutions finally chosen for the study. The loss of the Bocas del Toro institutions was regretted and despite the expected similarity to those in Darien Province, none of the information contained in this report should be inferred to include that area.

A very large proportion of the Food for Peace commodities is distributed through the school feeding program. The absence of two-measurement growth data on school children prevented the calculation of any trends within that important segment of the program population. The Ministry of Health, in conjunction with the Ministry of Education, is initiating a program to collect weight and height data in the schools. Future studies will be able to utilize that information.

Some of the health facilities served a large geographic territory. While some data could be collected at the distribution center, others could not be obtained from the outlying service area.

Some overrepresentation of the communities in which the distribution centers were located thus occurred. The examination of the data available on residents of the other communities, and the discussions with the professionals at the centers, suggested that the differences were not great. Nevertheless, the problem doubtlessly reduced the specificity of the data in some cases.

The design of the evaluation intentionally sought representativeness so that trends could be established and some factors described specifically. The quality of the participatory design and data collection team members lends a great deal of credence to the information obtained. Despite the limitations, and in consonance with them, the study is presented with confidence.

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## CHAPTER II: PANAMA

The Republic of Panama, located geographically between the continents of North and South America, has been a strategic link in the transportation, economics, and politics of the many nations in the hemisphere, and with the construction of the Panama Canal, with the world. To its native Indian population, historical events have added substantial numbers of Spanish and Jamaicans, and lesser inputs from many ethnic and national groups, making up the present varied citizenry of the Republic.

Business, trade, shipping, agriculture, and lumbering have provided a somewhat stronger economy than some Latin American countries. Economic development has not been uniform across the nation, however, and some segments of the population have benefitted less than others. The United Nations, the United States of America, and many other nations have offered assistance to the needy in Panama for some years. Food for Peace Title II commodities have been distributed for about twenty years. The Panamanian context for the contributions from the United States and other nations and organizations, together with the efforts of the Government of Panama, help explain the rationale for the present Food for Peace program and the plans for the future.

### HISTORICAL BRIEF

Panama was first sighted by Columbus in 1501. In memory of this event, the city of Colon (formerly the town of Aspinwall) was named after this intrepid explorer. Twelve years later, Vasco Nuñez de Balboa crossed the area and "discovered" the Pacific Ocean. The establishment in 1519 by Spain of what has come to be known in recent times as the old City of Panama on the Pacific coast, and the consequent development of the ports of Colon and Balboa on the Atlantic and Pacific seabords respectively, made Panama an important link in the Spanish colonial empire. (47, 95, 100)

The dispatch of Spanish expeditions to Peru and Central America in colonial times made the old Panama City a major commercial vestibule for gold and silver from the South American colonies to Spain. The Gold Rush of 1849 in California added impetus to commercial growth in the isthmus. In the 1850s, thousands of "Yankees" had sailed from Atlantic ports for Colon, then made their way back by mules and boats across the isthmian jungles to Panama City to embark for California. By 1855, American financiers had completed a railway connecting Colon and Panama City. (75)

In 1821, what is now Panama achieved independence from Spain

and joined the Confederation of Gran Colombia. From 1880 to 1900, the French tried unsuccessfully to build a canal through the country. When the United States offered to build the canal, the treaty was rejected by Gran Colombia. In 1903, Panama proclaimed its independence from Gran Colombia in a largely bloodless revolt. A US-Panama treaty in that year (Hay-Bunau-Varilla Treaty) enabled the United States to start construction of the canal, which was completed in 1914. Under the provisions of the treaty, the United States retained the rights and authority over the territory called the Panama Canal Zone. A new Panama Canal Agreement, which went into force on October 1, 1979, later superseded the old arrangements. Under the new treaty provisions, the United States has responsibility for the operation of the Canal until the year 2000, but gave up the government of the Canal Zone as a separate territorial entity. The US will continue to have access to and the rights to use the land and water areas and facilities necessary for the operation and maintenance of the canal during the remainder of the century. During the basic treaty period, Panamanians are participating in the canal's operation at all levels in preparation for Panama's assumption of complete responsibility. Under the terms of a neutrality treaty, Panama and the United States will maintain indefinitely the permanent neutrality of the canal. (75, 95, 97, 100)

Political developments in Panama in the 1960s and 1970s provide a background for the new canal treaties. During the period, a relatively small elite group came to dominate Panamanian political, social, and economic life until the last term of President Arnulfo Arias Madrid, which began on October 1, 1968. Ten days later, the National Guard, led by its commander, Brigadier General Omar Torrijos Herrera, overthrew President Arias and established a provisional Junta government. Under this Junta structure, Demetrio Lakas and Arturo Sucre were appointed as president and vice president respectively in 1969. In October 1972, following elections in August, the constitutional government was restored. This body approved a revision of the 1946 Constitution, elected Lakas and Sucre to their respective positions, and also vested temporary extraordinary powers on General Torrijos for a six-year period. These powers expired on October 11, 1978, and a new National Assembly elected Dr. Aristides Royo as president. General Torrijos continued his former position as Commander of the National Guard but retained an important role in the decision making process. Since the death of General Torrijos in a plane crash in 1981, the burdens of government have rested with President Royo and Vice President Ricardo de la Espriella together with members of the current cabinet. (73, 95, 100)

#### GEOGRAPHY

Article III of Panama's National Constitution of 1972 restates and legally defines the territorial boundaries of the country.

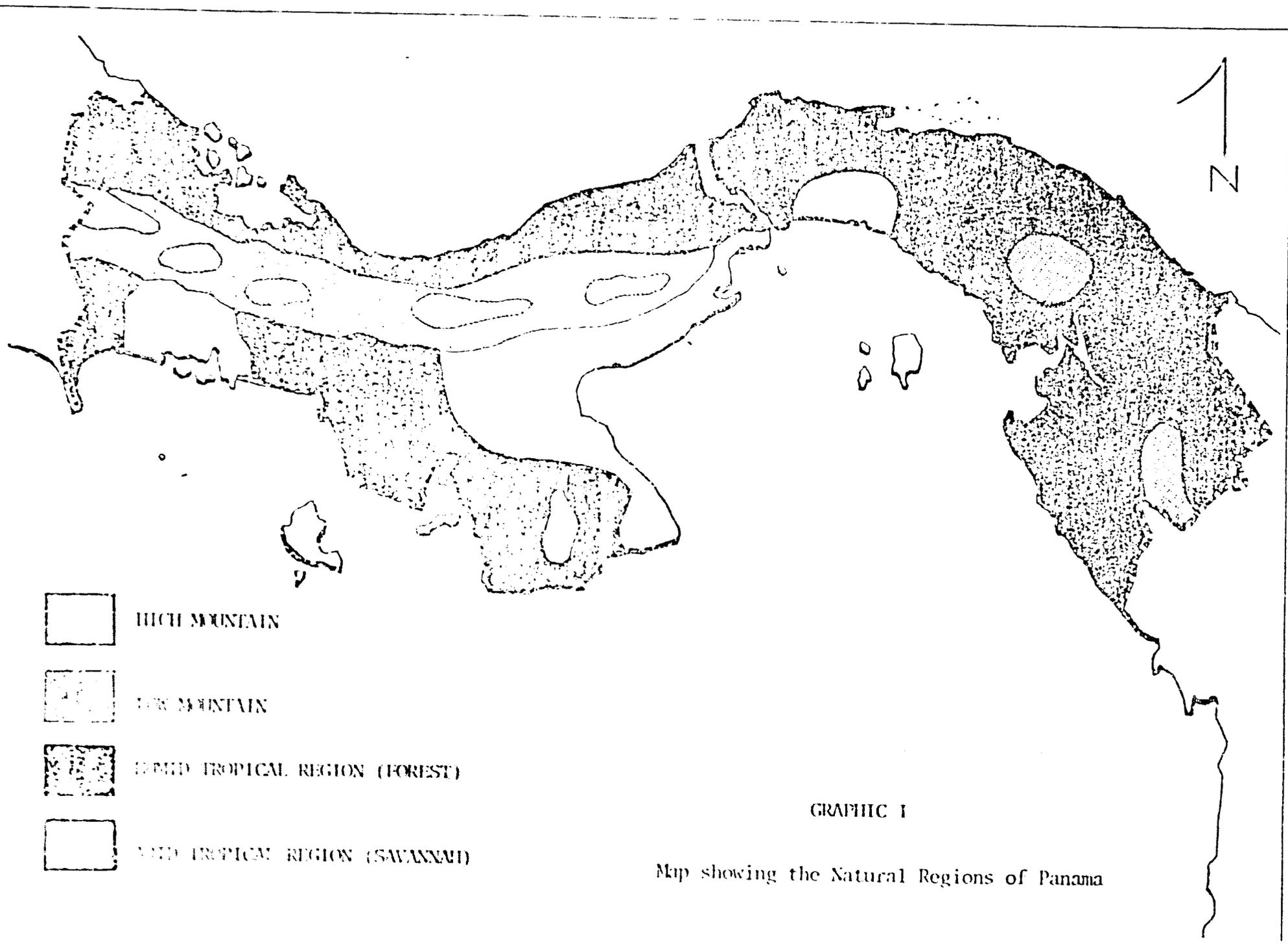
Geographically, the Republic of Panama occupies the narrow serpentine strip of land at the southern end of the isthmus bridging North and South America. It lies inside the tropical zone between 7° and 9° 30' north latitude and 77° and 83° west longitude. The country has a land area of some 29,762 square miles and is bounded on the west by Costa Rica, on the east by Colombia, on the north by the Caribbean Sea, and on the south by the Pacific Ocean. Its Caribbean coastline measures about 477 miles and its Pacific coastline stretches to some 767 miles. (24, 47, 100)

Panama's topography is distinguished by extinct volcanoes, forming high mountains, hill country, and valleys. Two mountain ranges form the backbone of the country's terrain, with peaks towering mostly to about 7,000 feet; the highest point is 11,070 feet. In addition to the mountains and hills, the country's natural regions include two other well defined areas. One is the Atlantic Watershed, which is covered by tropical rain forests where seasonal rainfall is usually heavy. The other is the Pacific Watershed, with distinct dry and rainy seasons, whose narrow valleys and coastal plains receive less rainfall and therefore are generally arid. Graphic I shows the distribution of these topographic features. (25)

Two seasons characterize the year round tropical climate of Panama. The dry season runs generally from December through April and the rainy season from May to November. Rains are heaviest from September to November. The annual average rainfall around Panama City on the Pacific side is 70 inches. Around Colon, on the Atlantic side, the annual average rainfall is 128 inches; temperatures and humidity vary slightly with the two seasons. In the rainy months, the average relative humidity is 85%; during the dry season, it is 75%. The average annual temperature in the country is around 80°F, with an average maximum of 87°F, and an average minimum of 73°F. Year round breezes provide some cooling relief from the heat. Hundreds of islands, both on the Pacific and the Atlantic sides, numerous bays, gulfs, and rivers add significant features to the geography.

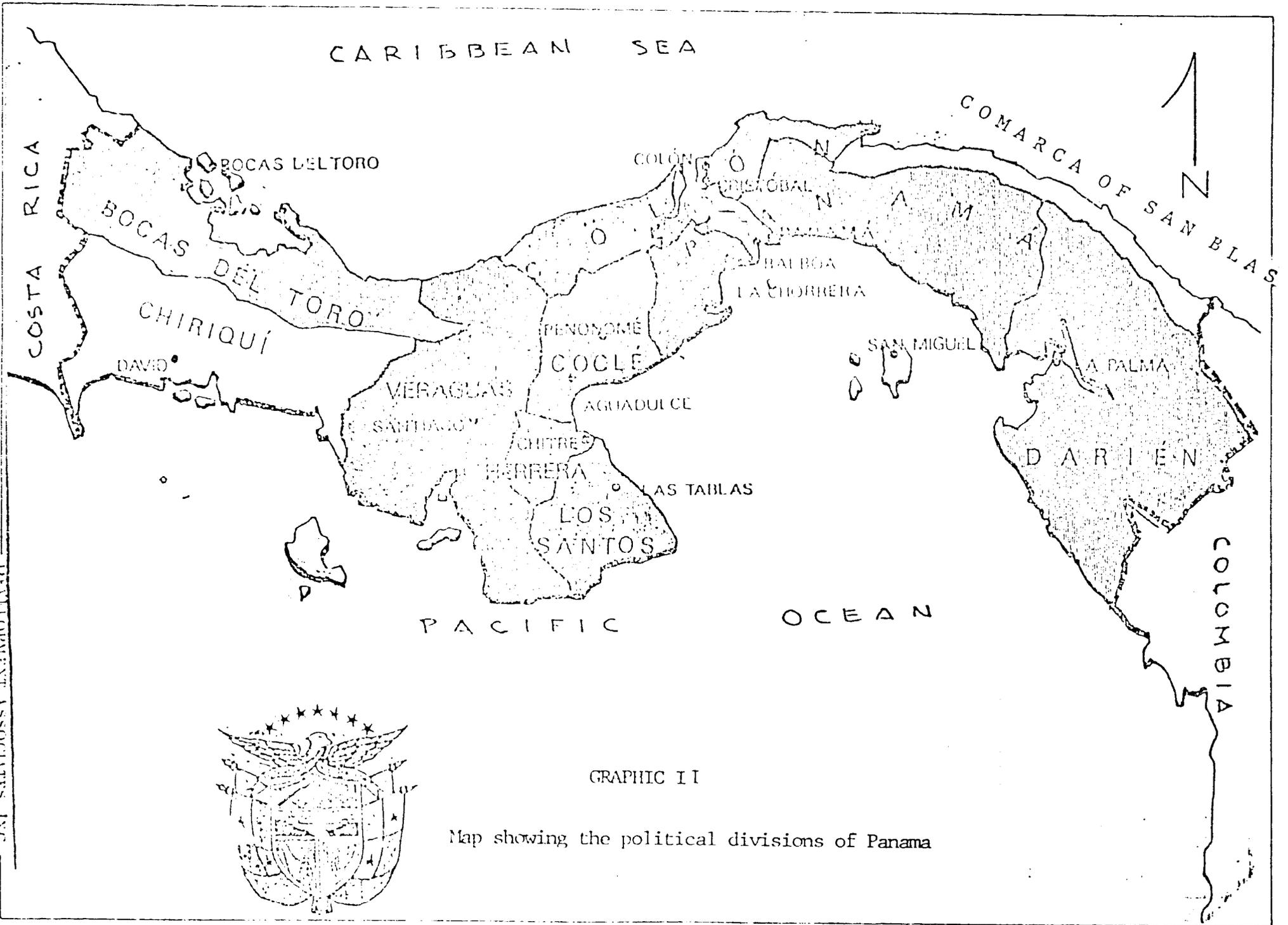
Panama is divided into nine provinces and 65 districts. In addition, there is one special district set aside for the Kuna Indians. The nine provinces and their respective capitals are:

<u>Province</u>	<u>Capital</u>
Panama	Panama
Colon	Colon
Veraguas	Santiago
Los Santos	Las Tablas
Cocle	Penonome
Herrera	Chitre
Chiriqui	David
Bocas del Toro	Bocas del Toro
Darien	La Palma



GRAPHIC I

Map showing the Natural Regions of Panama



GRAPHIC I I

Map showing the political divisions of Panama

The territory of San Blas is a special political district which occupies mainly the coastal area and many islands in the north-eastern part of the country. Its capital is El Porvenir, an island toward the eastern tip of the territory. Graphic II shows these subdivisions and their respective locations. (25)

A superimposition of Graphic I (topographic map) on Graphic II would show that the high mountain areas are mostly in the western provinces of Chiriqui, Veraguas, Cocle, and eastern parts of Panama and Darien provinces. Dense tropical forests cover Bocas del Toro, west Chiriqui, north Panama and Darien, and a portion of the central provinces of Veraguas and Los Santos. The drier plains occupy pocket areas in Chiriqui, Veraguas, Herrera, Los Santos, Cocle, and Panama, where the national capital is located.

### PEOPLE

The revised figures of the 1980 census listed Panama with 1,830,175 inhabitants. That population represented a 28.2% increase over 1970, but estimates placed much of that rise in the first part of the decade, and the annual increase for the past three years was considered to be about 2.5%. The total annual rise had been above 3% during the previous decades, but that included both natural growth and immigration. (See Graphic III) (58, 59, 100)

The population density was approximately 66 per square mile, but the inhabitants were unevenly distributed across the nation. Nearly 57% lived in the urban centers, most of those in the Colon and Panama City metropolitan areas. The Province of Panama accounted for 45.4% of the country's people. That province also had the highest increase in population, 44%, between 1970 and 1980. Population distribution by province is shown in Table 2.

Table 2: 1980 Population and Percentage Increase over 1970 by Province (and the Comarca of San Blas)

Province	Population 1980	% Increase over 1970
Bocas del Toro	53,579	23.1
Cocle	140,320	18.9
Colon	136,539	23.9
Chiriqui	287,801	21.9
Darien	26,497	16.8
Herrera	81,866	12.8
Los Santos	70,200	3.0
Panama	830,278	44.0
Veraguas	173,195	14.1
Comarca de San Blas*	29,900	-

\* The population of San Blas is usually included with the Province of Colon; the figure given here was taken from Medina (54); the 1970 population was given as 16,944.

### Graphic III

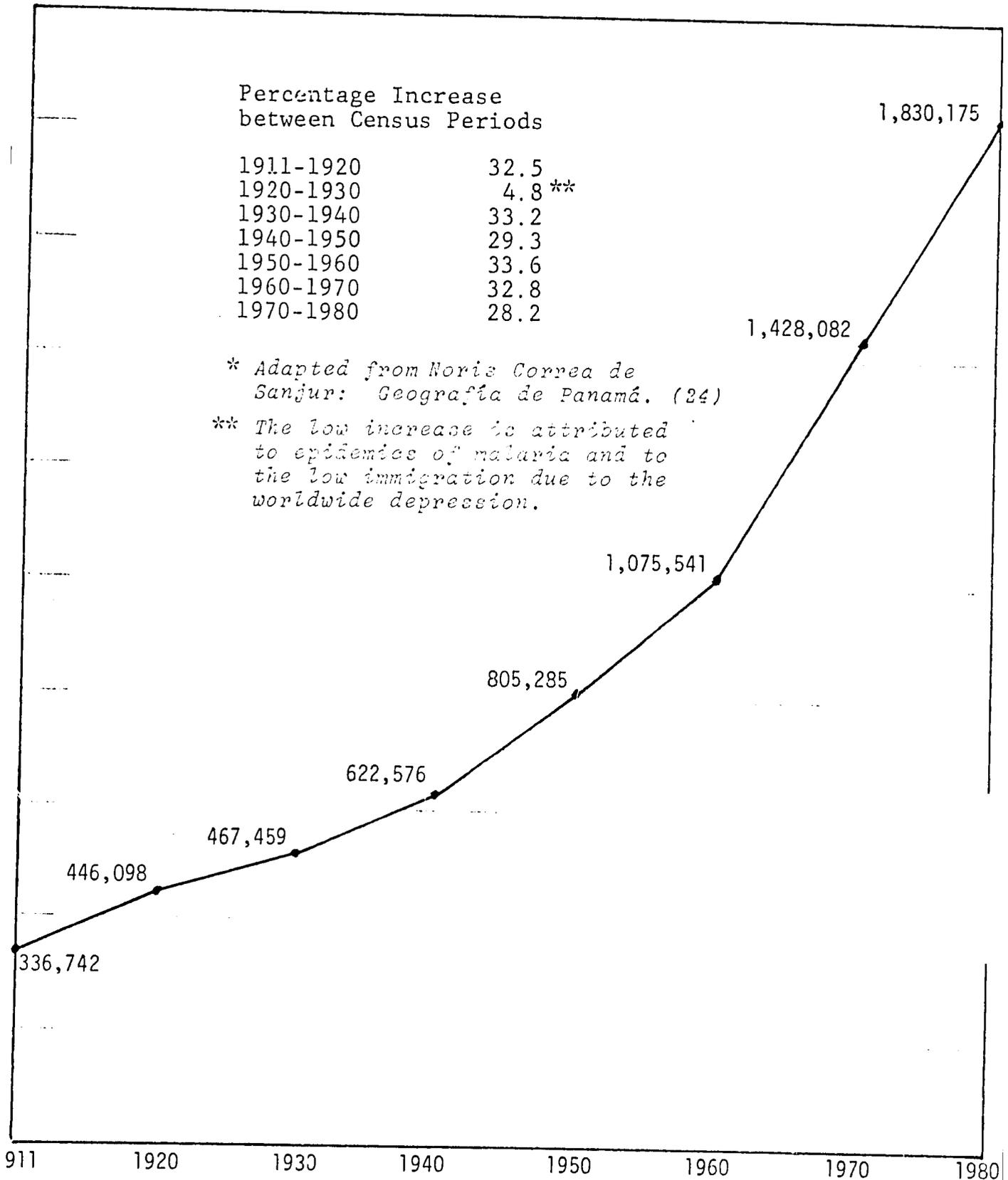
Population and Increases in Panama from 1911 to 1980\*

Percentage Increase  
between Census Periods

1911-1920	32.5
1920-1930	4.8 **
1930-1940	33.2
1940-1950	29.3
1950-1960	33.6
1960-1970	32.8
1970-1980	28.2

\* Adapted from Noris Correa de Sanjur: *Geografía de Panamá*. (24)

\*\* The low increase is attributed to epidemics of malaria and to the low immigration due to the worldwide depression.



With the construction of the Pan American Highway into Darien Province, a considerable population shift has occurred from Los Santos to the areas along the highway. Immigrants from Colombia and from the other Panamanian provinces are also moving into this region as timber companies clear the land. The movement from the rural provinces to the urban areas, especially Panama City and environs, was reported to be continuing at about the same rate as during the past few years.

The age distribution of the Panamanian population is heavily toward youth but the percentage of older persons has increased markedly during the past two decades. The major groupings for 1980 were:

0 - 14 years	43.4%
15 - 59 years	51.0%
60 + years	5.6%

The 51% in the working age group, 15-59, makes up a higher proportion of the total than is found in many Latin American nations. (4)

The population is commonly said to be 70% Mestizo (Spanish-Indian), 14% West Indian (primarily descendants of workers from Jamaica, Trinidad, and Martinique who came for the construction of the railroads and the canal), 10% Caucasian, and 6% Indian. The latter ethnic group is made up of Kunas, Guaymias, and Chokoes, but Nonameños (the Smithsonian lists Noanamé and Nonamá as synonyms 107) from Colombia have entered Darien Province in sizeable numbers in recent years.

Spanish is the dominant and official language of Panama but many people speak English as well. The languages of the four Indian groups are spoken among those peoples.

Almost 93% of the population is Roman Catholic and 6% is listed as Protestant. The remaining 1% is made up mostly of animist, Buddhist, and Bahai.

The culture and customs are considered to be Caribbean Spanish, maintaining much from Spain but at the same time accommodating and modifying them through local development. The addition of the West Indian traditions has substantially influenced the culture. Each of the Indian groups has kept much of its culture, notably the Kuna in San Blas, with their colorful costumes of the women and the communal government that still holds sway over the villages and islands where they reside.

The metropolitan areas, particularly Panama City, are very modern in many aspects. High rise buildings, heavy traffic, the full range of services, and the cosmopolitan atmosphere contrast sharply with the more simple life in most of rural Panama. Although the effects differ from place to place, rapid change has left no area untouched. (4, 48, 91)

## ECONOMY

Panama's internal economy is conditioned by its geographical features. Only 24% of the land area is agricultural; 20% is exploitable forest, and 56% covers other forests, urban areas, and waste. The principal natural resource products (except mining) of the country, by province, are (24, 100):

<u>Panama</u>	<u>Chiriqui</u>	<u>Los Santos</u>	<u>Cocle</u>	<u>San Blas</u>
Lumber	Beans	Rice	Beans	Plantains
Vegetables	Legumes	Corn	Corn	Bananas
Fruit	Coffee	Beans	Rice	Copra
Coffee	Potatoes	Tobacco	Pineapple	Lumber
Corn	Bananas	Coffee	Vegetables	Corn
Rice	Andes beans	Pineapple	Salt	Yuca*
Green veg.	Citrus	Tapioca	Sugar cane	Fish
Bananas	Strawberries	Vegetables	Coffee	
Tapioca	Timber	Sugar cane	Fruit	
Citrus	Tobacco	Name*		
Coconut	Sugar cane	Otoe*	<u>Herrera</u>	
Tobacco	Flowers	Lumber	Rice	
Sugar cane	Tapioca	Peanuts	Corn	
Yuca*	Fruit	Bananas	Beans	
Otoe*			Vegetables	
Name*	<u>Veraguas</u>	<u>Darien</u>	Pineapple	
	Rice	Lumber	Name*	
<u>Colon</u>	Corn	Bananas	Yuca*	
Citrus	Beans	Green veg.	Tobacco	
Palm oil	Sugar cane	Coffee		
Copra	Poultry	Corn	<u>Bocas del Toro</u>	
Cacao	Coffee	Rice	Bananas	
Lumber	Tomatoes	Sugarcane	Cacao	
Coffee	Lumber	Copra	Timber	
Sugar cane	Tapioca	Fish	Fruit	
Beans	Mangoes	Yuca*	Coffee	
Corn	Tobacco		Sugar cane	
Rice	Yuca*		Yuca*	
Name*				

\* Yuca, Name and Otoe are root crops used approximately like potatoes.

Over one third of Panama's population is engaged in subsistence agriculture and has but little contact with the money economy of the country. Fisheries (particularly shrimp production), cattle raising, and forestry constitute other sources of livelihood for the people, especially in the interior and coastal areas. Mining activities include exploitation of some mineral resources such as salt, copper, gold, iron, manganese, bauxite, zinc, tin, and cobalt.

Agriculture, commerce, and industry form the major sectors of Panama's economy. The agricultural sector, however, roughly accounts for only 14.2% of the gross domestic product, which at current prices amounted to \$2.25 billion in 1977. Industry accounts for about 16.8% of the GDP, mostly made up of food processing, metal products, construction materials, petroleum products, refined sugar, clothing, furniture, and tourism. The country's exports in 1978, at F. O. B. prices amount to \$292 million, with the following major composition of products in percentages: bananas - 24%, refined petroleum - 25%, sugar - 8%, and shrimp - 11%. Other exports in small amounts include coffee, cacao, fish meal, and meat. Imports in that year amount to \$889 million, propelled largely by crude oil - 34%, manufactured goods - 27%, and food - 9%. (51, 100)

Two principal economic regions could easily be identified in Panama's economy. One is the canal area, which includes the cities of Panama and Colon and their immediate environs, where commerce, industry, and services form the major economic activities. The other is the interior of the country, where agriculture is the principal source of activity, together with incipient industry and active internal trade and commerce. (24, 51, 95, 100)

Commerce and service activities relating to the canal and Panama's growing role as a portal to the world trade form the backbone of the country's economy. In the last 50 years, the demand for goods and general services, stimulated by the operation of the Panama Canal and the presence of US military forces and civilians involved in its defense and operation, has been the major force in development. In the terminal cities of Colon and Panama City (including Balboa) can be found a highly developed service centered, commercially oriented urban economy employing a large number of laborers and service personnel. The Colon Free Zone (the world's largest after Hong Kong) has increasingly contributed to Panama's growth. (94, 95, 100)

Mixed trends characterized the economy during 1950 to 1968. On one hand the subsistence agricultural sector remained largely impoverished while an export oriented, urban focused economy (with prosperous banana enclaves) boomed. The annual growth during the period registered 7%, due largely to increased tonnage passing through the canal and participation of Panamanian businesses in canal company activities. The improvement of the Inter-American highway, which served to link more closely and expand domestic markets, as well as the imposition of import quotas which stimulated the growth of import substitution industries, also contributed to progress. By the late 1960s, it was reported that the Panama City - Colon metropolitan corridor was generating 70% of the national income (81% of manufacturing, 83% of commerce, and 78% of other services). (51, 91) The report especially noted very little intervention by Panama's government during the 1950s and 1960s. State owned enterprises included only the Free Zone, two commercial banks and one agricultural bank. The government

also invested relatively little in infrastructure. Except for the highways, most of the investments were made in the metropolitan areas. The advent of a new government in 1968 was accompanied by a change for more government intervention. Public investment increased significantly in infrastructure, health, and educational services, and a land reform emphasizing collective farms (asentamientos) was initiated. The government also acquired some production activities (sugar, cement, bananas) and utilities.

Several cumulative economic problems, however, began to crop up during the period, owing mainly to limited domestic markets, fewer and fewer import substitution industries, and absence of an export strategy, culminating in a recession from 1974 to 1978. The annual growth rate of manufacturing declined from 12% in 1968 to 4% in 1974. Export and local crop production declined due to immoderate weather as well as economic uncertainties.

The 1974-78 recession was contemporaneous with a weakening of world demand for Panamanian goods and services, resulting from the oil price increases in the world markets. By 1974, canal tonnage had levelled out, import substitution had become more difficult and two important sectors, construction and commerce, were overextended. This combination of events led to a decline in the growth rate and private investment.

The economy improved in 1979 with a real growth rate of 7%. The economic recovery appears to be continuing. Although agricultural production is still in the doldrums, most indicators - trade, manufacturing, and construction - are showing signs of broad recovery. (91)

The outlook is reported as "Guardedly optimistic" for the 1980s. The government prepared a national development plan for 1981-1985 with four major objectives:

1. Development of the country's resources.
2. Reduction of dependence on imported oil.
3. Increase in food production.
4. Reduction of the rate of unemployment.

Modernization, as well as appropriate maintenance of the canal, is scheduled and some portions are underway. Greater efficiency of canal operations is viewed as a high priority.

Continued domestic and foreign investments are deemed important to reaching the goals set for 1985. Similarly, grants-in-aid, especially those from the United Nations and the United States, are seen as important during this transition period, since the assumption of the services/products provided by these and some other organizations would seriously reduce the governmental investment in long term benefits to the economy. (91, 95, 100, 105)

## EDUCATION

During the 1960s and early 1970s, the Government of Panama assigned a high priority to the improvement and expansion of the educational system. The budgets of the Ministry of Education were far larger than those of any other ministry. Enrollments increased rapidly with the construction of more schools, especially in the rural areas. The trend has continued (Table 3). For example, in 1965 there were 203,429 students in primary schools but that figure had risen to 357,753 in 1977. During that same period, secondary students jumped from 54,000 to 137,958. The attendance in post secondary education rose more rapidly than the rate of growth of the population. (105)

Table 3: 1977 School Urban, Rural, and Total Enrollment in Panama by Type and Level (65):

Type/Level	Urban	Rural	Total
Kindergarten	11,756	1,421	13,177
Elementary	146,520	211,233	357,753
Secondary	129,632	7,426	137,058
Post Secondary	28,461		28,461
(University)	(27,820)		(27,820)
(Non-University)	( 641)		( 641)
Supplementary	6,239		6,239
Special	4,022		4,022
Literacy and Adult Education	6,168	8,305	14,473
<b>Totals</b>	<b>332,798</b>	<b>228,385</b>	<b>561,183</b>

The growth of elementary, secondary, and university education has continued upward since the 1977 statistics, although at a somewhat lower rate except in the rural areas, where school construction and the increased number of schools offering grades 7 - 9 augmented the rise. Some 76% of the children of the elementary age group was reported attending school in 1979; 70% of those that had completed elementary school was enrolled in secondary schools. (57, 91)

Illiteracy has declined in Panama from 26% in 1970 to 18% in 1980\*. The highest levels of illiteracy are registered among the 40 years

\*Illiteracy was defined differently in various publications; one (39) listed 48% with less than four years of school as illiterate in 1970.

and over age group. Rural areas contained a very high proportion of the nation's illiterates, even among the 15-39 year ages. The literacy classes have increased, however, and the number of illiterates is expected to have decreased from the earlier figures.

The school year generally runs from April through December but modifications are allowed for planting and harvesting seasons in the rural areas. Despite the great increase in school construction, the system has had to make more effective use of the educational facilities by assigning the children to shifts. Many schools have two groups, morning and afternoon, and some conduct an evening group as well. All shifts encompass five hours for any group. In some areas, of course, only one shift is needed.

The Ministry of Education is responsible for establishing a uniform system for both private and public education. Standardized curricula and texts are employed in this effort. Additionally, national and provincial inspectors supervise the instruction. Similarly, teacher training curricula must meet the national standards. Both normal schools and universities furnish qualified teachers and the Institute for the Formation and Utilization of Human Resources conducts additional training and seminars. In earlier decades, it was difficult to place teachers in isolated areas but the present supply is great enough so that even those positions can be filled. Upgrading and advancement seminars and courses are offered to continue the improvement of the nation's education.

## HEALTH

Major improvements in health services in Panama have been registered in recent years. While the metropolitan areas have enjoyed very high quality health care, the extension of it to rural areas, especially during the last decade, has been admirable. The cooperative efforts of the Government of Panama and USAID/Panama have produced newly constructed hospitals, health centers, and health posts in hundreds of small towns and villages. An important thrust in both rural areas and rapidly growing, poorer additions to the cities has been the provision of sanitation facilities and potable water supplies.

Two other developments are expected to have substantial overall health impact: a rapid communications/transportation system between isolated facilities and the major hospitals in Panama City, and the integration of agricultural, health, educational, and other services into a unitary approach to solving nutritional and other health problems. Neither was widespread in 1981 but plans for their extension into many areas of the nation suggested early realization.

In terms of generally applied public health indicators, Panama

is in a relatively better position, compared to the other eighteen Latin American countries. In 1970, it ranked fifth in life expectancy (65 years) and sixth in fewest number of persons per hospital bed (approximately 300/1). It also reported the second lowest infant mortality rate (40.5/1000). (98) In 1977, hospital beds numbered 386 per 100,000 (about 259 persons per bed) (48); in 1978, the infant mortality rate was reduced to 24.4/1000. (58, 62) The ratio of the number of inhabitants per doctor and per nurse was more favorable than in many developing countries. The combined efforts of the Ministry of Health, the Pan American Health Organization, and USAID/Panama had virtually eliminated malaria except for some recent outbreaks, principally among the newly immigrated Colombians in Darien Province.

One of the effects of improved health care and conditions in Panama has been increasing net population growth rates. The rate of more than 3% per year recorded between 1950 and 1970 was reduced to 2.8% in the 1970s and was reported to have been at 2.5% since 1978 (Graphic III). The latter figure would still bring about a doubling of the population if maintained during the next thirty years, although that would be less than the rate between 1950 and 1980 (128% net increase). The national government, in cooperation with USAID/Panama, had instituted a substantial family planning program and was providing the necessary products in most locations throughout the nation.

The most frequently reported diseases, especially among the young, were respiratory and intestinal disorders. Parasitosis and enteritis remain the causes of more deaths in children under one year of age than any others, and are frequent debilitating conditions in association with other diseases in older children and even adults. The interaction between intestinal disorders and malnutrition, reported in more than half the children under five, exacerbates both conditions. The leading causes for deaths of all ages are presented in Table 4. (62)

The differences between Panama's rural and urban areas in relation to health conditions have been noted during the course of this and other evaluations. From discussions with Panamanian health colleagues, it was apparent that there are significant differences in the levels of parasitic infestations with the urban areas being less afflicted, primarily due to the accessibility of clean water, sanitation facilities, and health services in general. Only half of the rural people has access to potable water systems, and only 15% of them has home connections to a water supply. While 90% of the urban dwellers has access to a sewer system, rural dwellers either have no sewerage service or a minimal one consisting of latrines. As stated earlier, two of the leading causes of death in Panama, affecting many children, are parasitosis and enteritis, which are directly related to the presence of contaminated food and water. Table 5 summarizes the data on infant mortality in the country.

Table 4: Mortality Rates in Panama according to Leading Medical Cause by Province, 1978

Cause	Rate per 100,000	Total Cases	Cases by Province								
			Bocas del Toro	Cocle	Colon	Chiriqui	Darien	Herre-ra	Los Santos	Pan-ama	Vera-guas
Accidents, suicides and homicide	49.7	907	39	57	91	139	8	38	40	380	115
Malignant tumors, etc.	45.0	821	9	30	108	111	2	42	28	433	58
Ill defined symptoms and morbidity	44.6	815	36	120	73	115	21	69	66	127	188
All other sicknesses	41.5	758	26	58	64	126	2	33	38	329	82
Ischemic heart disease	41.2	752	5	31	168	79	1	23	32	393	20
Cerebrovascular diseases	32.0	584	9	46	72	75	5	46	51	238	42
Respiratory diseases including influenza, pneumonia, bronchitis, etc.	27.6	504	20	49	69	71	4	26	15	181	69
Enteritis, Diarrhea, etc.	16.5	301	28	18	55	87	3	6	3	58	43
Birth injuries and other related to Toxemia, Anoxia including children up to 1 yr. old	15.0	274	4	13	19	50	2	6	7	159	14
All other infectious parasitic diseases	11.2	204	14	10	16	33	3	9	3	71	45

Table 5: Infant Mortality Rate in Panama by Area and Province 1974-78 \*

Year	Total	Area		Province									City	
		Urban	Rural	Bocas del Toro	Cocle	Colon	Chiriqui	Darien	Herrera	Los Santos	Panama	Vera-guas	Panama	Colon
1974	31.5	25.0	37.7	30.3	33.0	37.6	37.9	34.6	31.8	12.7	25.2	45.0	25.6	33.1
1975	31.0	28.1	33.7	32.5	37.4	42.2	33.6	28.0	31.8	24.3	25.6	34.2	22.3	42.8
1976	36.8	35.7	37.9	47.0	39.7	62.3**	43.3	37.9	28.5	20.7	31.1	29.0	30.0	73.7**
1977	27.9	25.8	29.8	38.9	33.2	33.5	28.5	22.2	25.9	24.5	25.7	24.7	24.5	35.0
1978	24.4	22.3	26.2	29.2	24.4	28.0	27.0	18.2	23.7	12.8	24.3	19.9	23.0	23.0

\*Rates shown are per 1000 live births. \*\*Increase in rate produced by a larger number of deaths due to diarrheal diseases, septicemia and birth injuries, etc. (58,62)

Given the marked differences between health conditions in rural and urban areas in Panama, the government had developed policies and programs which eventually should provide services to the rural population on a more equitable basis. The Ministry of Health's plans call for an extension of medical care and preventive efforts to a larger proportion of the population. Emphasis has been placed on provision of potable water services and on maternal and child health activities to reduce the high incidence of gastroenteritis, childhood diseases, malnutrition and the complications of pregnancy and childbirth. Targets were set for the delivery of health services in the rural and urban areas. A program to provide wells and other water sources to urban and rural areas has been initiated.

The various national health plans drawn up since 1962 have emphasized the decentralization of health service delivery. The focus is on regional planning and administration. There is the expressed desire for the involvement and participation of local communities in the provision of health services. A keystone of national health planning is the process of integration of the Ministry of Health structure with the very extensive facilities, personnel and funding base of the Social Security network. While the process has not yet been completed, there has been some success achieved in improving the coordination and rationalization of the resources of these two health networks. This is being achieved through the establishment of Integrated Health Systems in a number of regions within Panama.

The present health policy statement of the government incorporates integrated planning and service delivery at the regional level. The policy also calls for disease prevention activities, provides for the restoration and maintenance of health facilities and requires an upgrading and expansion of health manpower resources. It also assigns health resources in such a way as to provide minimum basic and integrated health services to "marginal" population. The participation of communities in health programs is achieved through the establishment of Health Committees, made up of local citizens who study the health and nutrition needs of their communities, help to stimulate environmental improvements, and direct resources to local health programs.

The objectives of this government policy are to guarantee the quality and efficiency of medical care, to decrease environmental risks, to reduce the incidence of morbidity and mortality, especially of mothers and children, and to achieve a unitary system of providing health services.

A special note should be made of the progress being made in assuring an effective, accessible and national program of family planning, largely achieved through a vigorous effort of the national government, which has been supported with resources from USAID/Panama. What originated as a low profile, privately stimulated effort prior to 1970 has developed into an official

nationwide service program. All public health centers now offer family planning services. Training in family planning has been extended even to the health assistants who perform at the community level. Plans for the extension of this program in Panama, with the continued support of USAID/Panama, include improved information, education and communication activities, with training for and supervision of family planning personnel. A more effective logistic support system is also envisioned.

#### RELATED FOOD AND NUTRITION PROJECTS

In response to the need for active intervention to ameliorate the threat of widespread malnutrition, the active cooperation of a number of government agencies has been enlisted. The Ministries of Health, Education, Labor and Social Welfare, and Agricultural Development have food and nutrition programs within their jurisdiction. In many instances, programs receive the cooperation of several ministries. Although a program may be listed under a particular agency, it is understood that the efforts of other governmental and international entities are involved and contribute to the success of the work. (Details on malnutrition studies are reported in the nutrition section of the chapter on impacts.)

##### Ministry of Health

The Ministry of Health, through its Office of Nutrition, operates four general programs:

- Supplemental Feeding
- Iodization of Salt and Fortification of Sugar with Vitamin A
- Food and Small Animal Production
- Nutrition in Health and Institutional Dietetics

There is also a special effort program to assist families at high nutritional risk.

The Ministry of Health is an active cooperator in the US Food for Peace program. Working in conjunction with CARE, the Red Cross, and in a few cases with Caritas, officials of the ministry are allocated food commodity rations from the PVO-contacted warehouse, transport or arrange to transport them to the distribution centers, and their own personnel carry out the distribution of commodities at the local level. In addition to the costs incurred through the use of personnel time, local storage and transportation, the Government of Panama also reimburses the voluntary agencies for most of the costs involved in central receiving and warehousing, making a

sizeable contribution to this US/Panama Food for Peace effort. In addition to the PL 480 commodities, the voluntary agencies also distribute foods donated from other sources, and some of these, too, are utilized in the general health program.

The distribution of the Food for Peace commodities to isolated coastal communities is facilitated by the help of the quarantine patrol boats of the Ministry of Health. During their periodic trips along the coast and among the islands, they transport the foods to the island communities and villages to which roads have not yet penetrated. These also carry doctors, nurses, and other health personnel who work in the villages as the trip progresses, thus the distribution of the foods can be carried out under the supervision of authorized personnel.

Closely aligned to this general Supplementary Feeding program is that designated for the high risk families. In its first phase, the program distributes foods and at the same time carries on intensive nutrition education. In the second phase, the foods and nutrition education are accompanied by activities to increase food production and community organization in order to alleviate the need for the special intervention in the future. In the initial supplementary feeding, each family member receives a daily ration of 75 grams of rice, 25 grams of beans, 20 grams of dried milk, and 30 grams of sugar. Children under three years of age receive Nutrebien, a mixture of rice flour, dried milk, sugar, and vitamin supplements.

The Office of Nutrition conducts supervision and periodic quality controls at factories that iodize salt to assure that safe levels are being maintained. It also supervises the addition of Vitamin A to sugar and is conducting economic and feasibility studies on that supplementation.

The Food and Small Animal Production Program seeks to increase the availability of grains, tubers, vegetables, and meat at the community level. A total of 3,150 families has been incorporated into the program activities, which include community organization in addition to the development of gardens, poultry raising, fish production, apiculture, and the raising of pigs and goats. Demonstration gardens at health clinics are also contemplated.

Nutrition in Health and Institutional Dietetics gives direct attention to patients who need dietary intervention. Nutrition education is provided for communities, students, and professionals. The objectives are to decrease the mortality due to nutritional diseases and to improve the quality of nutrition education within the health sector.

The impact of these activities was reported by Medrano (53,54) as:

1. A favorable change in the nutritional status of

the population under five years of age residing in Veraguas from 25% with second and third degree malnutrition\* in 1974, to 20% in 1979.

2. An increase in the percentage of children who measured within the normal range of height for age from 16% in 1974, to 27.3% in 1979.
3. A reduction in the frequency of simple goiter from 16% in 1970, to 6% in 1975.

A large stratified random sample of children, utilizing weight-height-age, is being studied by the Office of Nutrition. Preliminary results were published in 1980 and preparations for the second round of measurements were underway in late 1981. The study is a cooperative effort of several ministries, partially supported by USAID/Panama, and with technical assistance from the Institute of Nutrition for Central America and Panama. The Ministry of Health expects the research to produce both more generalizable, and at the same time geographically specific, information on the nutritional status and changes over the period. (Further details on this study and others in Panama are included in the chapter on impacts.)

#### Ministry of Education

The Ministry of Education distributes a large portion of the USAID/Panama Food for Peace Title II commodities to kindergarten through sixth grade pupils and some preschool children through the auspices of CARE. Its records show that the first consignment (under a different name) arrived in 1953. While it was not clear whether the foods have arrived consistently since that date, it appeared likely that some contributions from the people of the United States have been involved over the 27 year period.

Under the present arrangement with CARE, the Ministry of Education prepares the beneficiary and commodity distribution lists for all recipient schools. The lists are reviewed and approved by CARE. The Ministry of Education then withdraws the approved commodity rations at the CARE-contracted central warehouse. The National Guard collaborates with the Ministry of Education in this school feeding effort by transporting the food commodities to provincial storage facilities and in most cases, directly to schools. At the schools, the administration is responsible for the receipt, storage, preparation and consumption of the commodities by the authorized program recipients.

The Ministry of Education also feeds some preschool children

\* The relationship between degrees of malnutrition and percentiles is explained in the impact chapter; Tables (32) listed second degree as below the 75th percentile, but some modifications have used below the 80th percentile.

through its schools, particularly in areas where other distribution programs do not operate or where a day care center has no cooking facilities. In some cases the children come just for the supplementary feeding while in others they are enrolled in a nursery program. The provision of these services is seen as an efficient utilization of resources when multiple programs and/or facilities do not exist.

The Office of Nutrition maintains the records and conducts periodic inspections of the provincial warehouses and samples of the schools receiving the products. Additionally, each province has one or more inspectors who carry out more detailed inspections of the kitchens, storage, and the utilization of the Food for Peace commodities in the schools. The combined contributions of the Ministry of Education and the National Guard in the Food for Peace program are substantial: personnel time, vehicles, fuel and general management. While no monetary value was available on those contributions, they represented a sizeable investment by the Government of Panama.

Under a recent agreement between the Ministry of Education, CARE, and USAID/Panama, the number of recipients of Food for Peace commodities is being reduced annually, with the eliminated students being fed through Ministry of Education funds. While the phase over is discussed in more detail in a later section, the goals of the phase over were being met for the first two years of that plan. (22)

In addition to the distribution of the Food for Peace commodities the Ministry of Education maintains a school feeding program for junior high students (grades 7, 8, 9). Panamanian products are purchased for use in these schools and they are prepared as a meal in most sites. In some primary schools, the ministry also provides the local foods for the malnourished children so that they receive the Food for Peace supplement plus the full lunch. This is particularly important when the malnourishment includes calorie deficiency.

A school garden program is also operated by the Ministry of Education, often in cooperation with the local Ministry of Agricultural Development technicians. Some schools have agronomy teachers on the faculty and in those cases, that person had the primary responsibility for the gardens. Students learn about garden cultivation, utilization of the foods produced and often contribute some labor to the effort. Besides the gardens, some schools are producing milk goats, rabbits, chickens, and bees. The foods grown are used in the school lunch program of the community, either as supplements to the Food for Peace commodities or in substitution for them.

The Panamanian textbooks for grades one through six contain appropriate amounts and levels of information on nutrition and health. These are used in every school as a part of the regular

instructional program. Further, in grades five and six, the girls receive instruction on home life, which incorporates a substantial amount on foods and their preparation for better health. This instruction continues in the later grades, and many schools contained a kitchen in which the food preparation could be practiced.

#### Ministry of Labor and Social Welfare

This ministry, primarily working through Caritas, utilized some Food for Peace Title II commodities. Its major program was day care centers located in all nine provinces and the comarca. The foods were cooked and fed to preschool children within the centers. Of the 232 centers, 168 are operated in community centers; the remaining 64 are managed through the cooperation of the Red Cross, municipalities, the Roman Catholic church, and some agencies with children who live on the premises. In all cases, the day care centers are supervised by personnel from the ministry's Office of the Child and Family, in addition to the supervision conducted by Caritas and the other entities involved.

The Ministry of Labor and Social Welfare also supervises infant feeding centers, where children are brought in to receive the food supplements but are not enrolled in day care programs. Further, they also have jurisdiction over homes for minors, the elderly, and some special Indian programs.

In 1981, the Ministry of Labor and Social Welfare also carried out a Food for Work project under a pilot program to improve the living conditions of single women parents and their children. They are trained in small groups to earn a living, manage their resources wisely and learn about nutrition, food preparation, child care, and family planning. Food for Peace products were used to help them feed their families while in training and to improve the nutrition of the family since all of them were at extremely low income levels. The project is being continued into 1982.

Several special Indian projects are encompassed within the Ministry of Labor and Social Welfare offerings. All seek to improve the nutrition of the participants through the use of Food for Peace products. In addition, projects attempt to increase the local production of food and better utilization of those available. A vocational school for Choko Indian adolescents, operated cooperatively with the Ministry of Education, the Institute for the Formation and Utilization of Human Resources and Caritas. Food for Peace is utilized for the meals for the residential students.

In almost all of these programs, some monetary subvention from the Ministry of Labor and Social Welfare is involved. A specific quantity per person was the most common, but staff members' salaries were generally paid by that institution also. In most

instances, the local institutions have the responsibility of retrieving the Food for Peace commodities from the central warehouse. The staff also managed the storage, preparation, and feeding of the foods, adding further contributions to the entire effort. No monetary value was recorded for these contributions and those of the ministry, but they were great enough to consider the programs as mutual projects of USAID/Panama Food for Peace, the Ministry of Labor and Social Welfare, Caritas, and the local organizations.

The local organizations were also charged with conducting nutrition education, food preparation demonstrations, and family orientation seminars. In the day care centers, the mothers were required to come in for lectures and other educational programs. This was also true at the infant feeding centers. Minors, in addition to the education received during their school classes, were taught about nutrition, health, food preparation, and family living within the residential program. Gardening was reported as important to the formation of the children; in some, raising farm animals was also practiced.

#### Ministry of Public Works

In 1980, the Community Action Office of the Ministry of Public Works initiated a small pilot Food for Work project. Members of a community constructed an access road into their area, using picks and shovels only, but with technical advice from the ministry. Food for Peace products were issued from the CARE supplies and very small amounts were used to stimulate workers' interest and help improve the nutrition of their families. The Ministry of Public Works received the commodities from the central warehouse, transported them to the community and supervised their distribution. The community women carried out the rebagging, distribution and responsibility of obtaining receipts and maintaining the records. The Ministry of Public Works expects to submit a project proposal for regularizing this type of program and extending it to other communities in the future. (60)

#### Ministry of Agricultural Development

Although the ministry does not itself distribute any Food for Peace commodities, it cooperates with several of the other agencies, providing technical assistance to food production projects. Advice on soil preparation, cultivation, insect infestations, and harvesting were commonly reported. The provision of seeds was noted in several cases. Most of the assistance was given through the provincial agronomists, since Panama does not now have an agricultural extension service.

## National Guard

The contribution of the National Guard to the distribution of the Food for Peace commodities within the Ministry of Education program has already been noted. It should be pointed out, too, that the local offices of the National Guard assist schools, health centers, and other entities, when possible, with local transportation and other services. Although mostly a reiteration, the importance of this help to the local and provincial Ministry of Education and other organizations must be noted.

## CHAPTER III: ASSISTANCE TO PANAMA

The assistance to Panama comes from several international and bilateral sources and includes long and short term loans, technical help in a number of fields, scholarships, and direct grants. The United Nations agencies and entities of the Organization of American States make sizeable contributions through their cooperative agreements. The United States conducts the largest monetary and commodity bilateral agreements with Panama but assistance also was tendered by Japan, West Germany, Israel, Yugoslavia, the People's Republic of China, Italy, Canada, Venezuela, France, and Spain.

### US ASSISTANCE

The United States of America and the Republic of Panama have carried out many bilateral programs through the years. The major categories for the present period include improvements in the infrastructure, modernization of government services, and the improvement of health conditions. The latter involved construction of health facilities, increased agricultural technology to augment production, family planning, and the reduction of malnutrition through the Food for Peace program. (84, 91, 94, 96, 99, 101, 102)

#### US Food for Peace Program

The AID mission's Food for Peace (PL 480 Title II) program in Panama serves as an important supplementary source of nutritious foods for the people of Panama. The causes of malnutrition in Panama are complex and are based on economic and social factors which include the inability of a large number of families to purchase a variety of higher protein nutritive foods. At the root of the problem is the failure of Panamanian agriculture production to keep up with the growing population. Panama's production of basic foodstuffs has declined in recent years due principally to a lack of modern agricultural technology and a prevalence of poor agricultural soils. AID reports that Panama must import 30% of its annual bean consumption, up to 25% of corn, and 30% of its milk. (85, 91, 93)

There is a continuing and costly requirement for the import of basic foods to meet national requirements. Such food imports are costly to the economy in terms of foreign exchange and particularly to poor families whose income is curtailed through unemployment and underemployment. The food production equation is also affected by the need to supply increasingly larger quantities of basic foods as Panama's population continues to grow at an annual rate of from 2.5% to 3.0%. The role of the US government in supplying

food under PL 480 Title II is expected to be temporary but serves as a vital stopgap while problems of agricultural productivity and food distribution are resolved.

For more than twenty years AID has supplied a significant amount of Title II PL 480 food through private voluntary organizations (CARE and Caritas, a local affiliate of Catholic Relief Services) in an effort to meet the food deficits of Panama.

The present program administered by CARE reaches approximately 115,000 beneficiaries in maternal and child health services through the Ministry of Education. The current FY 1981 authorized adjusted total commodity requirements for CARE is 3,924 metric tons, with a total value of over \$ 2.4 million. (92)

In contrast, the Caritas administered program is very modest, consisting of just over 100 metric tons of food with a monetary value of \$ 45,000. Caritas provides food commodities to approximately 1600 beneficiaries, located primarily in institutional settings: homes for minor children and old people, and centers for Indians with special requirements for food support. The Food for Peace commodities represent approximately one fourth of the total USAID/Panama funding, as planned for fiscal year 1982, and is a significant development resource provided to these two voluntary organizations. (91, 92, 101)

In more recent years, there has been a gradual decline in the amount of Food for Peace allocated to Panama. As an example, for the Caritas operations since 1978, the number of beneficiaries has been reduced from approximately 12,000 to the present programmed level of 1,600. The nature of the Caritas program has changed from a mixture of Maternal and Child Health, Social Welfare, and Food for Work activities to a focus on the last two. These reductions have been achieved partly through an expansion of local agricultural production projects stimulated by Caritas, which have reduced the level of assistance required by the communities from PL 480 commodities. Gradual reduction of the CARE effort under Food for Peace is predicted as the Ministry of Education succeeds in increasing its budget allocation for child feeding at an intended annual increase of 10,000 children per year, although CARE has proposed increasing its maternal and child health assistance to replace the school feeding. (13, 18, 22)

USAID's current allocation of food is composed of non-fat dried milk, soy corn milk, soy fortified rolled oats, and vegetable oil for both voluntary organizations. In addition, Caritas receives an allotment of soy fortified wheat flour and soy fortified cornmeal for its institutional feeding programs. (13, 22, 86)

The Food for Peace allocation is thus a significant resource for the government of Panama in its endeavor to meet the current protein needs of the targeted beneficiaries, while attempting to resolve severe problems of agricultural productivity. Although

there are minor breakthroughs in increasing local production of basic foods, time will be needed before Panama develops the level of food sufficiency which would obviate the need for continued support from the US government.

Monitoring and reporting requirements at the USAID mission level are accomplished through the staff of the Human Resources Division. This staff has a full time person whose role is to maintain liaison with the government ministries involved in the feeding programs, to monitor the status of management and distribution of commodities, to review and react to the reports on operations submitted by the voluntary agencies to USAID, to provide technical assistance to solving operational problems through direct contact with voluntary and government staff members, and to submit required reports to the AID/Washington Food for Peace office. The USAID staff also reviews and submits the Annual Estimated Requirements and program plans of CRS/Caritas and CARE. Apparently, judging from the experience gained by the evaluation team in working closely with Panamanian government and voluntary agency staffs, the USAID staff has maintained productive relationships with their counterparts. The management of the office, the accessibility of reports and program data, and general evidence of liaison and communication with Panamanian colleagues indicate that those efforts are well organized. Frequent monitoring of the field sites is an important function of USAID but due to staff changes, few visits had been conducted during the past year. Some monitoring should be independent and unannounced; other visits can be done with the voluntary agency and ministry personnel so that observations and technical guidance can be shared among all the agencies participating in the feeding effort.

There was considerable evidence of site visits by the ministry and voluntary agency personnel. It appeared, however, that with the very large number of institutions to be seen and the several other supervisory tasks that had to be carried out by the field personnel, some important aspects were not investigated or that the observed conditions had not been shared among those responsible. Similarly, the personnel in many centers were eager to discuss their operations with supervisory personnel so that they could help resolve problems. Too, although some of the conditions appeared to have been communicated to one agency, the others involved did not always know about them. Some mechanism for sharing the inspection information seemed in order, since even with many staff members making visits, it would take a very long time to cover all the local institutions distributing the Food for Peace commodities.

#### US Technical Assistance

The USAID mission's strategy for development assistance in Panama is designed to alleviate two major economic problems: unemployment, primarily in urban centers, and low agricultural productivity.

For these two areas of emphasis, the AID mission has requested nearly \$ 7 million for a portfolio of projects which include activities in agricultural technology development, fish production, cooperatives, workforce development, employment training for women, and alternative energy sources for rural areas. (91, 94, 99, 101)

To help improve the economic base needed to generate new employment opportunities, USAID plans to assist in the creation of a Panamanian government analysis unit which will study opportunities for expansion of domestic markets, import substitution, production of new products for export, and the creation of more labor intensive production technologies. To help small business improve its profitability, USAID will help to create a model supervised credit system to increase production and expand employment. The job training and placement services of the Panamanian government will be modernized under a new bilateral agreement.

To increase food production, USAID plans to emphasize assistance to small farmers through a combination of private and public sector activities. One thrust will be the strengthening of the governments's efforts to deliver services to small farmers, including technical assistance and credit. Another will seek to develop and improve agricultural technology and to disseminate information through systems which include cooperatives and agrilusiones. Small farmers will also benefit from improved access to marketing, processing, and transportation of agricultural products.

A major United States and Panama effort in the past several years has been family planning education and the provision of the attendant products. Seminars and other training exercises are included in the bilateral agreement, primarily for the Ministry of Health personnel in the field. Posters, leaflets, and other printed material are produced in this work. The family planning products are made available through the Ministry of Health facilities and through private businesses, especially pharmacies. Unofficial statements by Panamanian authorities credited some of the reduction of the population growth in recent years to this joint planning program.

In addition to these areas of emphasis, USAID plans to support activities in housing, nutrition and energy. The housing projects include \$ 75 million in housing investment guarantees over a five year period to build and improve homes with consequent implications for employment generation. The nutrition component is the possibility of a followup to the country wide nutrition survey of 1980, which requires more careful analysis. To assist in the development of renewable, environmentally sound energy sources, USAID is helping to complete an alternative energy master plan and will help finance modest demonstrations of micro-hydroelectric, bio-gas, solar, and wood fueled energy systems. The mission is also considering a possible future loan in the energy field. (91, 98, 101)

## ASSISTANCE FROM OTHER SOURCES

Aside from the assistance provided by the United States, there are a multitude of United Nations and other multilateral and bilateral agreements that furnish technical cooperation services to the Government of Panama. For 1980, the technical cooperation activities amounted to approximately US\$ 11.5 million from all external sources. Capital assistance from USAID, the World Bank, and the Inter-American Development Bank added another US\$ 79.5 million in the same year. (82)

Technical cooperation activities were concentrated in five major areas: development policy and planning; natural resources - agriculture, forestry, and fisheries; health; and social security and other social services. There were also project activities of significant size in transportation and telecommunications, population, and education sectors. The major technical cooperation inputs came from Canada, in health and social services; the People's Republic of China, in agricultural development; and Israel, in education. Japan, Germany, Italy, France, and Spain also assisted in these same areas.

Among the nineteen multilateral organizations with projects in Panama, those which made significant contributions were the World Health Organization, the Organization of American States, the United Nations Development Program, and the United Nations Fund for Population Activities, which accounted for nearly half of the \$ 11.5 million in technical cooperation granted to Panama in 1980. The Inter-American Development Bank (IDB) was the leading contributor of capital to the development programs in Panama. IDB in 1980 disbursed over US\$ 49 million, principally for highway construction including the Pan American Highway, agricultural credit, hydroelectric power, and industrial credit programs. USAID disbursed US\$ 10 million primarily for municipal development, rural centers, and rural roads. The World Bank disbursed more than US\$ 20 million in loans for private investment development, agricultural development, hydroelectric systems, and water supplies. (See Table 6 for the United Nations inputs and Table 7 for those through bilateral agreements.)

An important effort of the United Nations Development Program is the incorporation of World Food Program commodities into the Ministry of Agricultural Development reforestation projects. The commodities are provided to those who work in the projects and their dependents as a supplement to the wages paid by the Government of Panama. The rapid depletion of lumber products in some areas of the nation is of concern for the future of that industry and the impoverishment of the soils occasioned by the logging operations. The program provides for crop cultivation between the trees while they are small, and their elimination later; the crops help alleviate food shortages while at the same time enhancing reforestation. Although the United Nations program was

Table 6: Summary of the International Technical Cooperation Received by Panama in 1980 (in millions of US dollars)

SECTORS	SOURCE								Total	
	UN Development		All Other UN		Bilateral Programs		Others			
	\$	%	\$	%	\$	%	\$	%	\$	%
General development	534	36	60	1	262	7	390	25	1,246	11
Policy and planning										
Natural resources	209	14	1,976	43	55	1	26	1	2,266	20
Agriculture, Silviculture and fishing	93	6	307	7	640	17	525	33	1,565	14
Industry	8	-	48	1	-	-	56	3	112	1
Transportation and telecommunication	324	22	316	7	14	-	-	-	654	6
International commerce and finance	110	7	-	-	-	-	5	-	115	1
Population	-	-	386	8	167	4	-	-	553	5
Health	-	-	1,326	29	23	-	15	-	1,364	12
Education	-	-	-	-	103	3	443	28	546	5
Employment	226	15	-	-	6	-	44	2	276	2
Humanitarian and emergency aid	-	-	68	1	-	-	-	-	68	-
Social Security and other social services	-	-	130	3	2,438	66	-	-	2,568	22
Culture	-	-	-	-	5	-	144	8	149	1
Science and technology	-	-	6	-	-	-	10	-	16	-
TOTAL	1,504	100%	4,623	100%	3,713	100%	1,658	100%	11,498	100%
Percentage of the Total	13%		41%		32%		14%		100%	

Table 7: Summary of Bilateral Cooperation: by Country, 1980 (in millions of US dollars)

Sectors	USAID	Italy	Japan	Germany	Rep. China	France	Israel	Yugoslavia	Canada	Spain	Venezuela	USA CARE	Total
General development policy and planning	255	7	*	-	-	-	-	-	-	-	-	-	262
Natural resources	46	9	*	*	-	-	-	-	-	-	-	-	55
Agriculture, silviculture and fishing	-	11	-	*	615	*	14	*	-	-	-	-	640
Industry	-	-	-	-	-	-	-	-	-	-	-	-	-
Transportation and telecommunication	-	-	*	*	-	-	14	-	-	-	-	-	14
International commerce and finance	-	-	*	-	-	-	-	-	-	-	-	-	-
Population	167	-	-	-	-	-	-	-	-	-	-	-	167
Health	-	-	*	-	-	-	14	-	9	-	-	-	23
Education	-	7	*	-	-	*	96	*	-	-	-	-	103
Employment	-	-	-	-	-	*	-	-	6	*	*	-	6
Humanitarian and emergency aid	-	-	-	-	-	-	-	-	-	-	-	-	-
Social Security and other social services	154	-	*	-	-	-	-	-	25	-	-	2,259	2,438
Culture	-	5	-	-	-	*	-	-	-	-	-	-	5
Science and Technology	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	622	39	*	*	615	*	138	*	40	*	*	2,259	3,713
Percentage	17%	1%	*	*	16%	*	4%	*	1%	*	*	61%	100%

\*Information not available

somewhat under its goals for the first phase of the work, it was expected that readjustments in the procedures would bring the project up to full operating capacity in 1982. The implications of the program for human, agricultural, and especially forestry development are an important adjunct to the Government of Panama's economic improvement.

#### IMPLICATIONS OF THE ASSISTANCE TO PANAMA

Several nations and international organizations have entered into agreements with the Government of Panama to promote development in many sectors of the country's life and economics. A combination of loans, technical assistance, and commodities characterizes the principal efforts. The increased attention to more effective and alternative uses of Panama's natural resources denoted the government's interest in the improvement of its economic position. The several humanitarian and human resource utilization projects demonstrated the balance between both natural and human resources.

The US Food for Peace program, the largest within the humanitarian grants, supplies a substantial assistance to the nutritional improvement efforts of the Ministry of Education, the Ministry of Health, and some special projects of the Ministry of Labor and Social Welfare, under the aegis of CARE and CRS/Caritas. The voluntary agencies and USAID/Panama are charged with monitoring the management and utilization of the Food for Peace commodities. Through agreements with the ministries, they also participate in the monitoring process. While all these entities had conducted monitoring, the enormous number of local institutions involved in the distribution made close scrutiny difficult. Nevertheless, the evaluation team recommended that:

*Scheduled, rotating monitoring be conducted by the several agencies so that over a period of time, all the local institutions involved are visited and that inspection reports be written and available for inspection.*

In addition to the discovery of possible problems, such monitoring has the advantage of improving planning for the utilization of the Food for Peace commodities, other foods that may be furnished, and operational facilities of the institutions. Important, too, is that the personnel in the local institutions have the opportunity to discuss their strengths and weaknesses with staff members from the ministries, the voluntary agencies, and USAID/Panama. Further, it seemed evident that there were communication gaps among the monitoring agencies since some institutions complained that they had informed the appropriate

authorities of problems but that they had not been resolved. The team therefore also recommended that:

*A mechanism for sharing the results of the different agencies' monitoring visits and reviewing them so that the resources of the agencies can be combined to help as efficiently as possible should be devised. \**

The United Nations World Food Program, after studying the conditions of Panama, had decided to place its greatest emphasis on using its commodities to promote development. The evaluation team found these efforts highly commendable as viewed in light of the future of the Republic of Panama.

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\* A committee to serve just this purpose was formed following the evaluation.

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## CHAPTER IV: MANAGEMENT OF COMMODITIES

The movement and management of commodities under the Food for Peace program in Panama is covered by the rules and regulations promulgated pursuant to US Public Law 480. These guidelines are contained in a USAID handbook which is updated periodically (87). The USAID Director and the US Embassy in Panama serve as monitoring agencies and liaison between local operations and the Food for Peace Office in AID/Washington.

Two voluntary organizations, CARE (Cooperative for American Relief Everywhere) and Catholic Relief Services (CRS), sponsor the Food for Peace program in Panama. Both have their headquarters in New York. As a voluntary organization which has for twenty years or more served as a food distributing agency, CARE has a permanent office in Panama which devotes part of its time to PL 480 Title II activities. CARE/Panama is headed by a United States citizen assisted by a support staff of nine Panamanian nationals. The Catholic Relief Services, an arm of the United States Catholic Conference, operates through Caritas and for many years also has operated a Title II program in Panama. CRS personnel involved in the effort consist of a director, an office field representative, and a secretary headquartered in Costa Rica. They operate through Caritas/Panama, a counterpart agency, headed by a national director, assisted by an office manager, a nutrition coordinator, a development fund coordinator, and a secretary. (13, 22, 86, 90)

Both CARE and Caritas directly manage the central receipt of Food for Peace commodities in accordance with approved projects and provide administrative support to their Government of Panama counterparts in carrying out the tasks of local distribution, storage, and accountability. The counterparts in the Panamanian government include the Ministries of Education, Health, Labor and Social Welfare, and Public Works (for a pilot project). (See Table 1 in Chapter 1 for the number and type of institutions served by the voluntary agencies.)

### CENTRAL OPERATIONS

Planning and programming of the local food programs follow set procedures. In coordination with local agencies, each of the voluntary agencies first prepares a plan of operations and an Annual Estimate of Requirements (AER). These estimates and plans are reviewed by their respective parent headquarters in New York and in turn are submitted to the country director at USAID/Panama and the American Embassy. If acceptable, the documents are sent to Food for Peace staff at AID/Washington. Upon approval of the plans and the AERs, the voluntary agencies are notified. All concerned are provided with copies of the plans and accompanying AERs and duly informed of actions taken on them. (13, 22, 92, Appendix D)

## Shipping Procedures

Under established administrative procedures, each year after the AERs have been approved, a quarterly call forward of commodity requirements is made by the voluntary agencies. These, too, must be approved. The documents covering shipment and receipt of food commodities include:

- . Notice of Commodity Availability
- . Pro Forma Invoice
- . Bill of Lading
- . Letter Requesting Exoneration
- . Customs Declaration and Permit
- . Cargo Condition Survey Report
- . Entry Form
- . Certificate of Deposit
- . Arrival Report Record
- . Monthly Inventory Report
- . Physical Count
- . Monthly Commodity Status Report
- . Monthly Recipient Status Report
- . Monthly Commodity Loss Status Report
- . Loss Advice, Claim Form
- . Warehouse Issue Order
- . Quarterly Program Supply Report
- . Registry of Distribution and Control of Goods

Sample copies of some of these documents are attached in Appendix B.

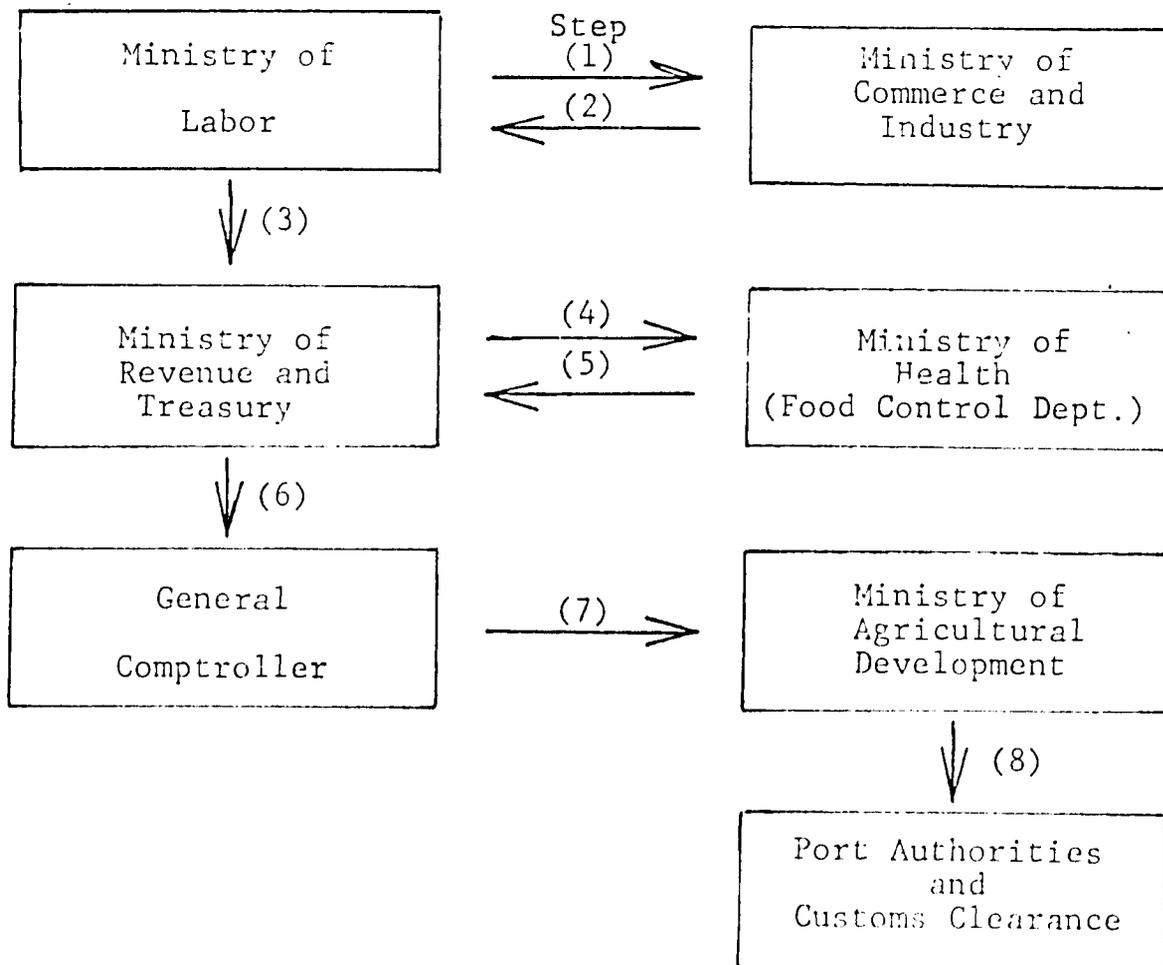
Upon receipt of a Notice of Commodity Availability from the US Department of Agriculture (which corresponds to the earlier call forward issued for a given shipment), the New York offices of the voluntary agencies notify their respective agencies in Panama through a Pro Forma Invoice confirming the shipping request and designating the carrier ship and port of loading. The shipping company then sends a copy of the Bill of Lading confirming the quantity and types of commodities to be shipped, the name of the vessel, the port of discharge, and the vessel's estimated arrival date. The commodities are usually off-loaded at the ports of Balboa or Cristobal. CARE or Caritas can then begin to plan for the process of customs clearing and receiving the commodities through a central receiving warehouse, and subsequent distribution to authorized program recipients through host country counterpart agencies.

## Port Clearance and Duty Exoneration

The clearance of commodity shipment through government channels to obtain the exoneration of customs duties is initiated by the voluntary agencies by letter to the respective receiving ministry. This ministry then obtains the appropriate documentation from the various other agencies in the government such as the Ministries of Revenue and Treasury, Commerce and Industry, Agricultural Development, and the General Comptroller.

Caritas described the exoneration procedure as indicated on the diagram in Graphic IV. The process starts with the reproduction in two copies of each of the shipping documents and submission of them with a letter to the Ministry of Labor soliciting exoneration. The procedure involves eight steps (16):

Graphic IV: Customs Procedures for Food for Peace Commodities



At the end of the process, which may take seven to ten days after arrival of the food in port, the voluntary agency receives a customs permit which is presented for clearance. While awaiting clearance, the commodities remain in the central warehouses of Terminales Panama. After a period of five days, a daily fee is charged based on the volume of commodities being held.

As may be observed, the exoneration process is crucial to the expeditious release of commodities. To avoid unnecessary delay at the port and possible additional cost for storage, damage, and loss of commodities, it would seem profitable for the voluntary agencies to determine how to reduce the time required for clearance of commodities through official channels. It is recommended that representatives of the various agencies meet together to determine whether a more streamlined process is possible.

#### DELIVERY TO CENTRAL WAREHOUSE

The cleared shipment is next delivered by Terminales Panama in its own trucks to a private warehouse, Custodia Panama (located in Panama City), which is used both by CARE and Caritas for central storage of their commodities. When the goods are received by Custodia Panama, its staff inspects and prepares an Exception Report, which details any damaged goods or shortages noted. At this point of delivery to Custodia Panama, CARE employs an Inspector-Surveyor to certify the amounts and the condition of the commodities received. Caritas uses its own staff for this function due to its more modest warehousing requirements.

The CARE Inspector-Surveyor, Pacific Ford, an agent of Lloyd's of London and the American Institute of Marine Underwriters, meets with the Custodia Panama warehouse staff and confirms the physical inventory received from the shipping agent, noting differences (overages or shortages) between the bill of lading and actual receipt. This certification, known as the Cargo Condition Survey Report, may later be used by CARE to recover the value of commodities not received from the shipper. Custodia Panama then enters the amounts of the new shipment by commodity into its inventory record, using an Entry Form. (See Appendix B.)

A Certificate of Deposit is sent by Custodia Panama to CARE, which specifies the amounts and types of commodities received and the number of bags or other unit of volume or weight missing, broken, or otherwise defective. Custodia Panama consolidates the partial and damaged bags, repairs them, and charges CARE or Caritas a small fee for these services.

#### Inventory Control

Both CARE and Caritas record the receipt of commodities into their

physical inventory books, which must correspond to the warehouse records of inventory plus the new shipment received. Several reports are prepared which confirm the inventories on hand. These are typified by the CARE Arrival Reports Record, Monthly Inventory Report, and Monthly Commodity Status Report to USAID/Panama and CARE/New York at the end of each month. The latter reports are filed separately for the programs of the two ministries in the Panamanian government. In addition, CARE and Custodia Panama together prepare a physical count at the warehouse each month which lists the total amount of each commodity on hand. Losses due to pilferage or damages were not considered of major importance by those interviewed by the team. One sample analyzed revealed a loss due to "disappearance" of less than one-third of one percent. This loss was registered as a claim against the shippers which would be settled through the insurance process. Some samples of documents used to record claims for losses sustained during shipment and receipt operations are contained in Appendix B. The inventory control procedures just described generally apply also to Caritas, whose modest program does not require the frequency in physical inventory and reporting as is the case of CARE.

#### Central Storage Conditions

The storage conditions in Custodia Panama were generally satisfactory and the commodities destined for CARE and Caritas at the time of the evaluation team's inspection were observed to be in good condition. Some, however, had to be rebagged due to damage of the sacks in shipment or off-loading. It was suggested by the warehouse custodian that it would greatly improve the condition of goods received if they were packed in more rugged containers. This would alleviate some of the leakage. Samples of damaged containers, particularly those goods which had begun to arrive for CARE, were shown to support the suggestion. Seven hundred bags out of several hundred thousand had had to be repackaged and consolidated due to damages incurred during handling aboard ship, at dockside, or during delivery to Custodia Panama in recent months. The custodian complained about the difficulties in handling, transporting, and storing damaged and leaking cartons. Repacking and extra handling costs were beginning to be excessive according to the custodian, resulting in additional warehouse charges.

To cross check this collective perception, the evaluation team focused on the separate roles of CARE/Panama, CRS/Caritas and governmental agencies involved in the program. This was carried out through visits to headquarters and main offices where documents and records were examined and where specific management topics were discussed with key personnel. The sessions were very productive and useful.

## CARE

CARE/Panama provides support for the Maternal and Child Health (MCH) program of the Ministry of Health, and the School Feeding Program of the Ministry of Education.\* As stated earlier, it provides food support through these two ministries for the following categories of beneficiaries for FY 1982: (22)

<u>Category</u>	<u>No. of Beneficiaries</u>
MCH/Mothers	20,000
MCH/Children	40,000
School Feeding	<u>55,000</u>
Total	115,000

Approximately \$ 3.5 million is expected to encompass the several activities connected with the Food for Peace program administered by CARE; \$ 2.5 million of that amount involves the commodities and their shipment from the United States. The several agencies of the Government of Panama, plus some small contributions from the school feeding program, make up the remaining one million. The outlays by CARE are reimbursed entirely by either the Government of Panama or the US Government. (For details, see Table 8.)

CARE has reached an understanding with the Ministry of Education (MOE) by which there will be a gradual phase-in of MOE support for the school feeding program. This phase-in, which began with fiscal year 1981, will maintain school feeding assistance for 75,000 recipients from low income families, accomplished through increasing MOE support as PL 480 Title II commodity inputs are reduced. In the administrative side, the MOE's School Nutrition and Commodity Distribution unit will assume complete responsibility for school feeding activities as CARE's administrative inputs are reduced. The consequent changes in resources are depicted in Table 9.

The implementation of the phase-in plan for school feeding will substantially reduce the US investment in that program each year. CARE has proposed augmenting the MCH program with the commodities released from school feeding.

### CARE shipments in FY 1981

A summary of shipments received by CARE in FY 1981 is presented

*\* In addition to its Food for Peace operations, CARE/Panama actively assists the Ministry of Education in the construction and furnishing of school kitchens and classrooms. More than 940 school kitchens and 290 classrooms have been completed under these programs with financing from CARE's private donor sources.*

Table 8: FY 82 CARE Food for Peace Program Budget by Source of Funding (in \$US)

Budget Category	Govt. of US	Govt. of Panama	CARE	Recipients
Value of commodities donated under PL 480	1,783,360			
Min. Educ. financing of local food purchase		200,000		
<u>Administrative Costs</u>				
a. CARE personnel and operations			196,000 *	
b. Ministry of Health Internal administrative costs		220,000		
c. Min. Educ. internal administrative costs		170,000		
<u>Transportation Costs</u>				
a. Prepaid PL 480 commodity ocean freight cost			713,695 **	
b. National Guard commodity handling & transportation costs		180,000		
Contribution from recipients for school feeding				80,000
<b>GRAND TOTAL</b> \$3,543,055	1,783,360	770,000	909,695	80,000

\* To be reimbursed by Govt. of Panama; total ODP cost: 966,000  
 \*\* To be reimbursed by Govt. of US; total US cost: 2,427,000

Table 9: USAID/CARE and Ministry of Education Phase-in Plan for School Feeding Programs, FY 82 through FY 84

FY	Recipients			Financial Inputs (\$US)		
	MOE	PL 480	Total	Recipients*	MOE	Total
81	10,000	65,000	75,000	60,000	100,000	160,000
82	20,000	55,000	75,000	80,000	200,000	280,000
83	30,000	45,000	75,000	100,000	300,000	400,000
84	40,000	35,000	75,000	110,000	400,000	510,000

\*School feeding recipients contribute approximately \$.25 per month when possible.

in Table 10. Additionally, a comparison between the amounts of commodities approved in the FY 1981 Annual Estimate of Requirements (AER) and actually received during the fiscal year is included. (92)

Table 10: FY 1981 Shipments to CARE/Panama by Commodity. (in Pounds Net)

Arrival Number	NFDM	SFRO	CSM	Veg. Oil
141	183,900			
142				15,986
143				
144	116,900			
145	1,201,100			
146				240,009
147			499,800	
148		478,750		
150				60,014
151				129,961
152	67,100			
153	187,650			
154	444,150			
155			201,700	
156			100,600	
157		240,000		
158		120,400		
159		60,000		
160		240,000		
162			301,700	
163			179,750	
164			20,000	
165				97,482
166				84,500
167	116,000			
168		389,300		
169	399,150			
170				181,012
171		90,000		
172	842,000			
173			200,000	
174		480,000		
Total lbs. received	3,557,950	2,098,450	1,503,550	724,464
Total lbs. authorized	3,242,800	2,090,000	1,507,000	792,000
Difference : received - authorized	+ 315,150	+ 8,450	- 3,450	- 67,636

There was a high correlation between authorized food shipments and the Annual Estimate of Requirements data. Differences, especially for the authorized amount of vegetable oil and that received, were easily covered by inventory on hand or the amounts received immediately subsequent to the end of the fiscal year. In the case of vegetable oil, it is noted that in November 1981, an additional shipment of oil totaling 181,982 lbs. was received by CARE, which more than restored the 67,636 deficit noted at the end of FY 1981 list of shipments. It was reported that the inventory on hand at the beginning of FY 1981 was sufficient to cover requirements for this commodity.

### CARE distribution Operations

The Food for Peace commodities managed by CARE are distributed throughout the nation via Panamanian government channels. By agreement with CARE, the Ministries of Health and Education provide the necessary warehousing, local storage and handling, and transportation costs for the distribution operations, once the commodities are received from CARE at the central receiving warehouse. From the Annual Implementation Plan, which is revised quarterly and sent to USAID/Panama, cooperating ministries, and CARE/New York, a plan of operations is made which schedules the program activities, goals, institutions, and numbers of beneficiaries for each of the feeding programs. This plan also helps to check the distribution schedule so that accurate and timely issuance of commodities may be sustained. When a receiving ministry sends a letter of request to CARE for an allotment of food for one of its participating regional warehouses (for example), CARE issues a Warehouse Issue Order which Custodia Panama honors by release of the commodities to the requesting institution. Upon withdrawal of the commodities from the warehouse, both CARE and Custodia Panama enter the amounts into their inventory records. Commodities are then moved under the responsibility of the corresponding ministry to its regional, provincial, or local storage facility. A receipt is obtained and copies filed by Custodia Panama and CARE for use in supporting subsequent inventory reports. A procedure advises AID in writing of any loss, damage, or misuse of commodities which occur during program operations. Procedures also exist for filing claims with the shippers and for notification of cooperating ministries of losses or damages which occur after the goods leave the Custodia Panama and as noted during field inspections by the voluntary agency staff.

### Transportation

There were differences noted in the extent to which the two ministries, Health and Education, were able to exploit the available resources of the National Guard in the distribution of the commodities. For some traditional but unexplained reason, the National Guard transports virtually all of the Ministry of Education

commodities from Custodia Panama to regional storage facilities and most recipient schools. By preference, the Ministry of Health receives only occasional assistance from the National Guard and therefore pays commercial carriers to make deliveries. As a consequence, the Ministry of Health is behind in its schedule because of delays in receiving funding authorization for transportation costs.

### Scope of CARE Operations

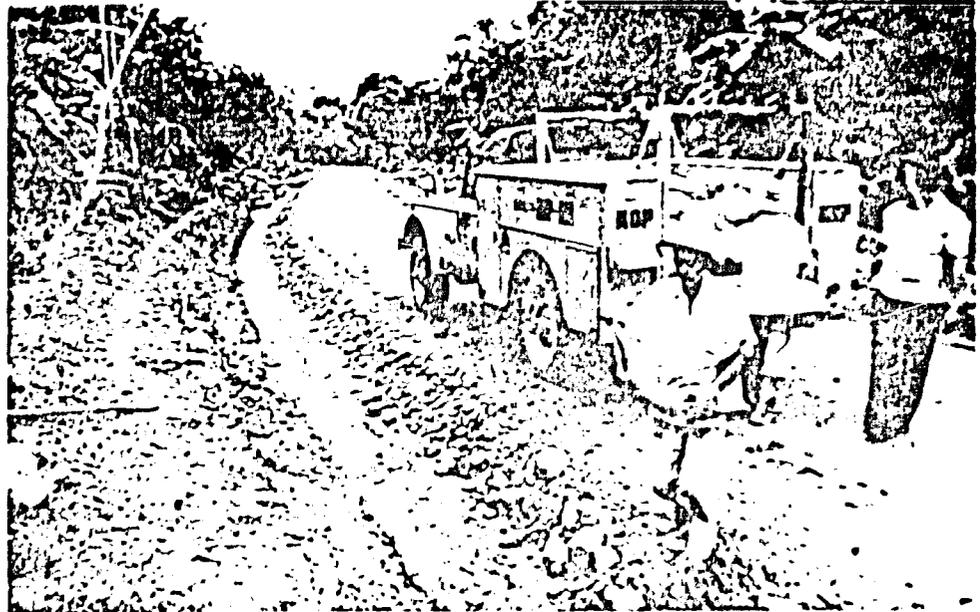
Food for Peace gives support to 209 health centers, posts, and hospitals through the Ministry of Health. The beneficiaries in these locations are pregnant and lactating mothers, their preschool children and certain other children designated as malnourished and in need of special nutrition support. Through the Ministry of Education, food commodities supplied by CARE, of United States origin, are currently reaching 2211 schools and 210 day care centers and preschool feeding centers, some of which are located at schools and others which have an independent location.

CARE was associated with one Food for Work project; it furnished a small amount of its commodity assignments for a pilot project conducted by the Community Action office of the Ministry of Public Works and guided by two USAID specialists in civil engineering. The pilot originally intended to work with three communities to obtain the cooperation of those communities in building access roads. Due to several problems, the project was reduced to one community. All of the work was done by the men of the town, using only picks and shovels to construct the road, but with the expert assistance of engineers from USAID/Panama and the Ministry of Public Works. The commodities were transported to the site by the ministry and there the women rebagged the foods, distributed them, and kept the accounting of all that was dispensed (each man working on the project and his dependents received a small allotment). Additionally, nutrition and health education was provided by a home economics teacher from a nearby school and a nurse from a neighboring health center. The Ministry of Public Works documented the project extensively, furnishing detailed descriptions of the conduct of the project, the work itself, the auxiliary activities conducted, and the accounting for the commodities. The Community Action office has been raised to a ministerial dependency, enhancing its communications among the several dependencies of that ministry. The office plans to request a further allotment of the Food for Peace commodities in the near future. (Graphic V presents two photographs taken during the project operations.) (60)

The CARE offices are located in a convenient area of the City of Panama, accessible to the ministries with which the feeding program is linked, and to the USAID mission. The office appeared to be smoothly organized and effective in its management operations. All records, reports, and documents were readily available. The staff was well prepared and responsive for the briefing sessions which

Graphic V: Photographs of the Food for Work Pilot Project on  
Access Roads of the Ministry of Public Works

Community members  
unloading Food for  
Peace commodities  
from a Ministry  
of Public Works  
vehicle



Community members  
constructing the  
access road with  
picks and shovels



they offered the evaluation team.

### Supervision

During 1981, CARE staff members made 265 inspection visits to PL 480 commodity distribution centers, giving preference to areas experiencing operational problems. CARE expressed concern that at times the ministries sometimes failed to respond in timely fashion to problem areas such as inadequate storage, revealed by field inspections. How to resolve the need for closer coordination in this area was not clear. To threaten to close down a particular operation was not viewed as productive. This is an area which should be reviewed between CARE and counterpart staff in the ministries. More frequent coordinating and program operation review sessions would be useful, with an agenda of issues circulated prior to such meetings so that specific problems may be analyzed and definitive action taken to resolve weak areas of operation.

### CRS/CARITAS

CRS/Caritas works in coordination with the Archdioceses of Panama and Cocolé, and the Dioceses of Chitre, Veraguas, Chiriquí, and Colón, each of which has a director and a nutrition promoter. A retired nurse in the special territory of San Blas also assists in the effort. The food program is administered by Caritas with the economic aid and cooperation of the Ministry of Labor and Social Welfare through its National Office for the Child and the Family, and the Department of Family Orientation. Other cooperating agencies are the Ministries of Health and of Agricultural Development.

Financial resources for the operation of the CRS/Caritas programs utilizing Food for Peace commodities derived from the organization itself and a \$33,000 subvention from the Government of Panama to defray shipping costs and warehousing. The major managerial resources at the national, regional, and local levels come from Caritas. The US director and her staff (located in Costa Rica) provide backup and technical services to the program. For example, a CRS technician in cooperatives was helping the population of Ailigandi in San Blas with their organization for agricultural production when the evaluation team was there. The Caritas Service Bureau offers technical, legal, administrative, and training services and assistance to the groups with which it works. (13, 18, 96)

### Beneficiaries

Over the years, there has been a reduction in the number of

beneficiaries under the CRS/Caritas Title II program, due to emphasis in local production to support its nutrition activities. The services provided by the Caritas bureau to foment community development and nutrition education appeared to have generated successes in some beneficiary institutions, to the point where they have since become relatively viable in meeting the need formerly filled by the PL 480 program. In FY 1981 and FY 1982, the efforts of CRS/Caritas to supply nutritious food supplements using Food for Peace commodities, had been programmed to concentrate in three types of institutions: the homes for the aged, homes for minors, and Indian programs. Apparently these institutions were found to have little possibility of being able to implement sufficient production activities to feed their participants. These were insufficiently funded by the government and other institutions to meet their rising costs. (18)

The number of Title II beneficiaries in the eleven homes for the aged was reported as 1,020 in 1981. Some were permanent residents of senior citizens' homes, had no income, and in general could not care for themselves. The residents who were still physically able tended the gardens or barnyard animals around the homes. Some programs for the elderly provided the major meal of the day to seniors who still lived at home. Homes for minors included 610 children between 5 and 14 years of age (mainly at the younger age) at Boy's Town, two residence schools for Indian and rural youth, and eleven other homes for minors. (13, 18, 96)

#### Commodity Control and Distribution

As previously stated, CRS/Caritas follows a procedure similar to that of CARE in commodity control, albeit not as involved as that of the latter since its program is small. The assumption of physical possession of commodities upon their arrival at Custodia Panama is accomplished by inventory control and warehouse issue orders. Losses, if any, are recorded and claims reports are made as necessary. Upon official receipt, the goods are entered into inventory and transported without unnecessary delay to regional diocesan warehouses by Caritas/Panama in coordination with recipient institutions, supplemented by commercial carriers when necessary. On occasion, delays in delivery from Custodia Panama may be incurred due to the necessity of rebagging damaged goods.

The distribution of commodities from the diocesan warehouses is based on a Commodity Recipients and Allocation List and is accomplished by delivery receipts. Each recipient generally maintains a storage for goods received and submits monthly food status reports showing amounts consumed or losses incurred during the period. A quarterly Program Supply Report is maintained by CRS/Caritas at its central headquarters in the capital, summarizing balances on hand, amounts received during the quarter, and distribution data.

The evaluation team found the above control procedures generally adequate and being followed. Occasionally, delays in the physical possession of commodities at the Custodia Panama have been incurred due partly to the late receipt of Bills of Lading and to the exoneration procedures required for clearing the goods at the port. Some delays were also observed in the distribution of goods to recipients. However, these were minor problems due mainly to reasons beyond Caritas' control. (16)

#### Review of FY 1981 Shipments

To track down the actual flow of commodities from the US to Panama, through CRS/Caritas, figures and information were gathered from all the sources available. Table 11 shows the data on approved and authorized shipments for FY 1981. (15, 92)

Table 11: Authorized Shipments for FY 1981 through CRS/Caritas

Recipient Category	No. of Recipients	Commodity (in thousands of Kgs)				
		SFCM	CSM	Wheat Flour	Milk	Oil
Homes for aged*	1,020	22.0	22.0	11.0	-	5.5
Homes for minors*	610	13.2	13.2	6.6	13.2	3.3
Total	1,630	35.2	35.2	17.6	13.2	8.8
		Commodity Total: 110 metric tons (\$45,000)				

*\*Indian and infant feeding programs were combined with these categories in this table.*

CRS/Caritas' accounting system utilizes the pound as a weight measure for the commodities and its books record the authorized shipments for FY 1981 as follows (15):

<u>Commodities</u>	<u>Pounds</u>
SFCM	77,000
CSM	77,000
Wheat Flour	39,600
Milk	28,600
Oil	19,800

These amounts correspond to the kilograms and metric tons utilized in the several tables.

Table 12 presents the amounts actually received by quarter during FY 1981, as reported by CRS/Caritas (15).

Table 12: CRS/Caritas Receipts of Food for Peace Commodities in FY 1981

FY 1981	Commodities (in lbs.)				
	SFC	CSM	Wheat Flour	Milk	Oil
1st Quarter	55,000	70,000	10,000	13,900	4,000.0
2nd Quarter	20,000	20,000	10,000	7,000	4,989.6
3rd Quarter	20,000	30,000	15,000	8,000	4,990.0
4th Quarter	8,000	-	10,000	-	4,990.0
Totals	103,000	120,000	45,000	28,900	18,979.6

As may be noted, the amounts actually received during the period, except for oil, were greater than the authorized for FY 1981. The excesses were delayed shipments of authorized commodities for the last quarter of the previous fiscal year. It was explained that on occasion the delays occur due to shipping problems, late receipt of Bills of Lading, and also to exoneration procedures required to clear the goods from the port.

A further examination of the program supply reports showed that only very minor losses occurred during the period. Table 13 lists these losses by commodities and by quarter period. In each case port losses were pursued through established claim procedures.

Table 13: CRS/Caritas Commodity Losses during FY 1981

Qrtr.	Distribution	Commodities (in lbs.)				
		SFC	CSM	Wheat Flour	Milk	Oil
1st	Port Losses	100	-	-	20	-
	Internal Losses	150	250	-	100	-
2nd	Port Losses	-	-	-	3,400	7.7
	Internal Losses	100	150	50	-	-
3rd	Port Losses	300	-	-	-	46.2
	Internal Losses	-	100	50	50	-
4th	Port Losses	-	-	-	-	184.8
	Internal Losses	200	-	-	-	-
Totals		850	500	100	3,570	138.7

Internal losses were explained as due mainly to leaks in containers, rebagging, and some decaying of commodities, all of which could be expected in normal operations. The losses were in reality very negligible when seen in kilograms or metric tons and in proportion to the total bulk authorized.

At the time the evaluation team visited Custodia Panama on November 12, some commodity shipments for CRS/Caritas were still in storage, together with those of CARE. In general, there was a satisfactory fulfillment of commodity needs throughout FY 1981. The same amounts and types of commodities for CRS/Caritas in FY 1981 are expected to be received for the new fiscal year. (13, 86)

Caritas had not yet issued its first quarter 1982 call forward at the time of the evaluation. The reason stated was that there were some commodities on hand and the new amounts were not yet needed. The delay, however, caused some difficulties for USAID/Panama and Food for Peace/Washington. The call forward was achieved in November.

### Supervision

The supervision and monitoring of the CRS/Caritas program are carried out by the central staff and the regional diocesan directors. In these tasks, the nutrition coordinator acts as a field inspector and directly oversees the program. Regional and local seminars, with the assistance of GOP Ministries of Labor and Social Welfare, Agricultural Development, Health, Education, and other local agencies enhance the supervisory and monitoring effort.

Supervision of the program during FY 1981 was carried out by inspection, informal talks, and seminars. The incidence of such activities by quarter period during the year is shown in Table 14.

In addition to those listed in Table 14, the nutrition specialist made many visits to the sites, specifically helping with nutrition assessment and food preparation. Her activities in San Blas were a major portion of this work.

From all the observations made by the evaluation team at the time of the visit, CRS/Caritas appeared to be exercising adequate management and supervision for its Title II program. No problem of any significance was brought to the attention of the team nor had the team found any worth noting, except for a very poor storage area shared by CARE and Caritas in one site. The findings confirm the general conclusion that the procedures for commodity receipt, port clearance, pickup, and in-country transport and distribution of commodities to delivery points are being carried out satisfactorily with only minimal difficulty and delay in certain instances.

Table 14: CRS/Caritas Supervisory Activities: FY 1981

Quarter Period	Supervisory Activities	Province			
		Colon	Veraguas	Chiriqui	Panama/Cocle
1st Quarter	Inspection	-	16	6	25
	Informal Talks	1	24	4	16
	Seminar	-	1	-	-
2nd Quarter	Inspection	-	10	8	32
	Informal Talks	1	8	2	16
	Seminar	-	-	-	-
3rd Quarter	Inspection	-	6	9	24
	Informal Talks	3	-	1	18
	Seminar	-	-	-	-
4th Quarter	Inspection	-	6	3	19
	Informal Talks	-	4	1	12
	Seminar	-	-	-	-

### Program Plans

It would be germane to conclude this portion of the study with "current thoughts" of CRS/Caritas Panama on the Title II PL 480 Food for Peace program as gathered during the interviews with central staff. (18) According to the program director, the need to establish a food program as it existed in prior years has been the subject of serious concern in recent meetings with members of the communities involved in CRS/Caritas socioeconomic development projects. Since FY 1977, the number of beneficiaries has been reduced from about 12,000 in principally Food for Work and Maternal/Child Health programs to the current level of 1,600 beneficiaries primarily in social welfare. This reduction of program levels was based on the conclusion that communities participating in the PL 480 program had begun local agricultural production to the point where PL 480 assistance was no longer necessary. Notwithstanding this trend, however, experiences with the former beneficiaries indicate that their incomes have remained low and their purchasing power has been reduced as prices of foods have increased by some 25% - 35% in 1981 alone. In addition to the continued rural problems, there also exists a number of institutions with very limited government subsidies and community contributions in cash and in kind. These include kindergartens,

retirement homes, orphanages, hospitals, and refugee settlements on fixed or no income and no other operational support. Field visits, according to the director, have confirmed these realities, and discussions with community and institutional representatives have intensified concerns on the necessity of increased Title II PL 480 shipments. The following program areas and levels for FY 1983 are envisaged:

. Food for Work:

As collaborators with ongoing socio-economic development projects, participating members would receive food commodities in exchange for work done for the benefit of the community. This would involve 960 families in 70 projects (about 5,280 beneficiaries) in five provinces and San Blas.

. Preschool Feeding:

This would benefit 1,050 children in 50 kindergarten centers in three provinces.

. Other Child Feeding:

This would benefit 894 children in 20 orphanages in six provinces and San Blas.

. Other:

This would include social welfare programs benefiting 1,054 persons in 33 retirement homes, homes for the handicapped and mentally ill, refugee settlements, and hospitals in five provinces.

It was understood that further studies will be made carefully of these plans and that a presentation would be made to USAID/Panama in due course. CRS/Caritas has successfully conducted a number of Food for Work/Development projects in the past. The organization specifically aims at self help activities, that is, those that will develop the ability of a community to feed itself more appropriately in amount and nutrition. In a 1980 communication, USAID/Panama reported that:

The Food for Peace commodities utilized in the CRS/Caritas projects in Panama have assisted the general development activities of that organization achieve a high degree of independence from outside sources. The commodities are used as a stimulus to improve agriculture, community gardens, and other income/food-producing activities. Indeed, they have been so successful that currently CRS/Caritas has phased out the use of the commodities in the several projects undertaken in the last few years. (96)

In reality, CRS/Caritas, in conjunction with the Institute for the Formation and Utilization of Human Resources, Kuna communities, some Protestant and Catholic organizations, and the Department of the Child and the Family of the Ministry of Labor and Social Welfare, continues to carry out several development activities even though they are not so labeled.

An important example of this developmental thrust is the training program for single women heads of households conducted by the Department of the Child and the Family, and in cooperation with the Food for Peace commodities via Caritas. These women are mostly with little or no formal schooling, have little or no income, and have families to support. The training has included vocational skills so they can go to work, nutrition education, family planning, and general management of their affairs. While the number trained so far has been small, further training groups will be helped by this effort.

The Embera School for Indians in the Province of Panama is another example. These male youths are residents in a vocational school that equips them to make a living, furthers their general academic skills, and trains them in managing their lives and families when they marry. Similarly, the homes for minors incorporate substantial amounts of vocational, nutritional, and life skills education into the residential plans; these are in conjunction with the students' attendance in the regular schools of their communities. Gardens and small animal care are also a part of the education of these low income youths. An industrial training school for adults, particularly Indians, also combines these skills into a vocational/life adaptation program.

CRS/Caritas also works closely with communities so that "trade-offs" occur among the several programs. For example, although no Food for Work commodities are allocated, the Ailigandi and Ustupo Kuna communities work closely with the CRS/Caritas personnel in the improvement of local food production. The Kuna communities pay the wages of young men who carry out the work of developing and caring for a communal garden, whose products are used to supplement the home food consumption of pregnant and lactating women, and preschool children. The Food for Peace commodities are also used with these latter programs, as well as for some tubercular and other ill patients, while the community gardens become sufficiently developed. At the same time, nutrition and health education programs are conducted for the mothers so that the products will be used in appropriate ways for the health of the community.

Even the homes for the elderly have some food production activities carried out by those who could assist. Small home gardens and some small animal raising were observed in all but one of the visited centers. Obviously these could not be extensive, given the physical condition of the residents, but they were making some attempt to help themselves.

CRS/Caritas and Food for Peace could then be said to serve two basic functions: humanitarian assistance to some persons who cannot adequately help themselves, and stimulation of developmental activities within the institutions where the beneficiaries are located. Their past interest and success in the latter venture led the team to feel confidence in future plans which that organization makes to further conduct such work.

#### DISTRIBUTION CENTER MANAGEMENT

The majority of the actual work related to the Food for Peace commodities is done by the personnel at the distribution centers. In some cases, this includes transporting the foods; in all cases, it involves storing the commodities, dividing them into the rations or portions for meals, and the accounting and reporting procedures required under the agreements with the government agencies and/or the voluntary agencies. Since all the distribution center personnel have other responsibilities, no estimate has been given for their contribution to the Food for Peace program; it is sizeable, however, and probably exceeds the central government personnel costs by a considerable amount.

Nearly all the distribution costs are incurred within Government of Panama programs. School directors, teachers, doctors, nurses, auxiliary health personnel, community officials, and church personnel devote varying amounts of time to the program. In addition, within the sample of institutions in this study, many local volunteers contribute time and work to help distribute the food, prepare the meals, and transport the commodities. This labor, too, is unaccounted within the costs generally portrayed as involved with the Food for Peace program.

Equally important, the distribution center personnel are answerable to the local population when difficulties arise with the arrival, conditions, and kinds of commodities intended for the program. While they can explain what occurred, they still bear the brunt of local criticism. The roles of the distribution center personnel, then, are crucial to the successful operation of the Food for Peace efforts to improve the nutrition of the populace. A substantial part of the evaluation was therefore directed toward this important part of the system. Their perceptions of the program and its operations are vital to the understanding of the conduct of the Food for Peace program in Panama.

#### Condition of the Commodities

Some cases of incidence of Food for Peace products unfit for human consumption were reported by respondents during the field work. Table 15 shows the percentages of sample institutions reporting loss, and their causes.

Table 15: Incidence of Food for Peace Products Unfit for Human Consumption and Causes

Time Period	Percentage of Incidence		
	Yes	No	No Reply
Last 12 months	17.2	79.6	3.2
Previously	41.9	22.6	35.5

Percentage of Losses caused by:			
Weevils	55.2	Wet	13.8
Unspecified Insects	6.9	Rodents	6.9
Sacks damaged	8.6	Unspecified	8.6

In the last twelve month period, 79.6% of the respondents reported that there were no incidences of unfit Food for Peace products. Only 17.2% experienced otherwise. For the previous period, 41.9% reported incidences compared to 22.6% who replied in the negative. Although 35.5% of the respondents made no reply, it can be seen that there has been a great improvement in the conditions of commodities received. Losses incurred were caused mainly by weevils and other insects, which accounted for about 62% of the total. In general, there was apparent satisfaction with the commodities being received. Losses were regarded as negligible and efforts were being exerted to reduce the causes. In the opinion of both the central and local personnel, the commodities arrive in Panama with the weevils or their eggs present. The origin could not be determined within the context of this study but further study is warranted.

#### Storage Conditions

The conditions for local storage of Food for Peace products were investigated in distribution sites throughout the country. The storage facilities were physically inspected by the team and rated good/fair/poor on each of seven factors. Table 16 shows the inspection ratings by number of storage units and equivalent percentages on each of the factors.

Storage places were usually adjacent to food distribution or preparation areas. The mean ratings, on the whole, indicated that local storage conditions were between good and fair, generally toward good except for the conditions referring to safety from rodents and insects, the mean ratings of which were only a little beyond fair. Poor conditions were observed in some storage units, ranging from 2% to 19% on the separate factors. These were mostly

Table 16: Inspection Ratings\* of Food for Peace Storage Conditions

Factor	Good		Fair		Poor		Not Rated	Mean Rating
	No.	%	No.	%	No.	%		
Construction	59	67.8	20	23.0	8	9.2	0	2.59
Space	58	66.7	23	26.9	5	5.7	1	2.62
Cleanliness	59	67.8	25	28.7	2	2.3	1	2.67
Ventilation	55	63.2	21	24.1	8	9.2	1	2.50
Safe/Robbery	51	58.6	28	32.2	7	8.1	1	2.51
Safe/Rodents	39	44.8	32	36.8	16	18.4	0	2.26
Safe/Insects	34	39.1	34	39.1	17	19.5	2	2.20
Inventory Ease	63	72.4	14	16.1	5	5.7	5	2.71

\*Good=3; fair=2; poor=1; cases without ratings were excluded from the calculation of the mean.

in the isolated and poverty areas and proportionately about the same for the two voluntary agencies. The administrators generally appeared concerned about their storage deficiencies and most were seeking ways to improve the conditions. Some construction work to improve facilities was actually seen in various places.

It must be noted that those conditions listed as poor were, in fact, unacceptable for food storage, especially those in which cleanliness, and safety from rodents and insects were concerned. In three places, the food stored there was unfit for human consumption. Inspections of these facilities must be made during supervisory visits to the institutions and remedies devised to correct the problems. The beneficiaries of the program should not be subjected to contaminated foods.

#### Interruptions and Operational Problems

There were many program interruptions during the last twelve months, ranging from a period of 1 to 2 weeks to 9 or more. These are indicated in Table 17.

Table 17: Frequencies of Program Interruption Periods during the Last Year

Weeks	No.	%	Weeks	No.	%
None	56	63.6	5-6	5	5.7
1-2	8	9.1	7-8	7	8.0
3-4	4	4.5	9+	8	9.1

Fifty-six programs, or 63.6% of the total visited, however, reported no interruptions at all. A high proportion of these was Ministry of Education and Ministry of Labor and Social Welfare institutions. Eight programs (9.1%) experienced 1-2 weeks of interruption and an equal number reported 9 or more weeks. Seven (8.0%) had 7-8 weeks interruption while five (5.7%) reported 5-6 weeks.

While the normal weight children would suffer little from interruptions, the severely malnourished would, of course, be retarded in their recovery, even when the interruption was relatively short. Longer periods would occasion extreme difficulties for malnourished children, pregnant and lactating women, and ill patients. The problems involved in these interruptions should be studied and resolved.

The reported reasons for these interruptions are detailed in Table 18. Lack of transport was the main cause, followed by no allotment. Transportation costs and insufficient staff accounted for the most of the other interruptions. Lost shipment and flood were very minor causes in their incidence, even though severe for the participants. Unknown reasons were reported by 17 programs. The interruptions and their causes were generally regarded by program managers, however, as "ordinary" in normal operations. They seemed to feel that these were largely unresolvable management problems. The great majority of the programs, 63.6%, had had no interruption problems.

Table 18: Frequencies of Reasons\* Reported for Program Interruptions

Reason	No.	%	Reason	No.	%
Lack of Transport	8	23.6	Insufficient Staff	2	5.9
Cost of Transport	2	5.9	Lost Shipment	1	2.9
No Allotment	3	8.8	Flood	1	2.9
Unknown	17	50.0			

\* Two managers gave two different reasons for two program interruptions.

Almost all the institutions monitored (82.4%) stated that they had experienced some type of operational problem. Many, as would be expected, reiterated the interruption problems within the operational context. Table 19 lists the frequencies of these operational problems. The first item in the table, transportation, involved two factors: transportation of the commodities to the site and transportation of them to other distribution centers. That is, while the foods were delivered directly to some centers, albeit tardily at times, there were also centers that had to go to some receiving point and somehow manage to haul the materials to the

Table 19: Frequencies of Operations Problems as Reported\* by Program Managers

Problem	%	Problem	%
Transportation	21.6	No report forms	4.0
Insufficient food	13.5	Lack of storage space/bags	4.0
Damaged/wet food	9.5	No gas for cooking	2.7
Lack of support staff	9.5	Money also needed	2.7
Weevils	6.8	Distribution not done	2.7
Inadequate site	5.4	None	17.6

\*Some managers reported more than one problem.

distribution points. Similarly, some facilities, especially hospitals and integrated health system facilities, often were responsible for transporting the commodities to surrounding villages. Some of these had vehicles but they lacked repairs, tires, and/or gasoline. Many others had no vehicles and were obliged to seek assistance from other agencies, the community, or pay commercial carriers. In one case, the villagers actually carried the sacks on their backs for more than four miles. Some of the local transportation problems, often in the most needy areas, are serious and warrant investigation. For example, the evaluation team documented one case in which the transportation cost of a cargo of 20 bags was more than a thousand dollars, a sum in excess of the value of the products contained in them.

The second most frequent operations problem listed by the managers was insufficient food. The 13.5%, however, is deceptive. Many had accommodated distribution or feeding over the past years to the amounts they received; most of these, especially among the schools, reported no problem related to the amount of food. The general school accommodation, reported in more detail in the nutritional impact section, was to provide a mid-morning snack consisting of a drink of boiled milk and either rolled oats or corn soy mix to each pupil. If attendance went higher, the amount given was reduced; if lower, the drink was increased. MCH programs simply reduced the ration or ceased handing it out when the commodities were gone.

In fact, the team found it impossible to accurately calculate the number of participants involved in the programs. A part of the problem was that many local sites maintained no actual numbers of the children fed; they gave estimates, or in the case of the schools, reported the daily attendance for a specific month. The second part of the problem was that the number of programmed participants reported by the site managers did not agree with the number of participants on the official distribution lists. The numbers on the central lists, the programmed participants, and the attendance

rarely coincided. Naturally, the attendance will vary from month to month because of weather, diseases, agricultural work, and other conditions in the lives of the participants. Nevertheless, this difference would be small when viewed across a year except in cases of epidemics or other extraordinary situations. Estimating a ten percent difference for normal changes, approximately a fourth of the sites in the sample showed consistency among the numbers in the lists, the programmed participants, and those attending. (Appendix E contains a comparison between the central lists, programmed participants, and actual attendance.)

Some center directors knew the number of beneficiaries in the central lists, but many others said that they did not. The directors were very interested in the lists that the team carried and expressed surprise at the variations with their own numbers.

Less than 10% of the centers in the sample distributed products to a number of participants smaller than that in the central lists. In all of these cases, the director said that the attendance had stayed more or less as that cited for a year or more. It appeared that some corrections in the central list would be sufficient to equalize the numbers.

The majority of the variations consisted of small numbers in the central lists and with much larger numbers of beneficiaries attending the programs. This situation was particularly common in many schools in which the supplementary feeding program had been reduced across the last few years and the personnel had accommodated the student portions to the amount received. Many cases in the table in Appendix E show the central list with 50 or 60 but with 300 to 650 pupils consuming the products. (The adjustments are described in a separate section.)

Some health centers also had many more participants in attendance than the number assigned in the central lists. Generally, these differences were not as great as in the schools, but in one case, a clinic tried to help 555 beneficiaries, all considered to be malnourished or at high risk, with products for 59 persons. Too, some day care centers had an insufficient quantity of products to give a full ration to the children; these disparities were usually less than those cited for the schools, but in some cases, substantial adjustments were required in the feeding ration.

The other operational problems reported by the distribution personnel included lack of support staff to handle the volume of work, an inadequate site for the distribution, lack of storage space and/or bags, and no gas for cooking. Too, a few knew they should be reporting every month and noted that they had no report forms. A few doctors noted that one of their problems was that sometimes the "distribution was not done", and they cited lack of a nutritionist, nurse, or helper, and holidays, as the reasons. Even estimating cautiously, the team would have to conclude that the school feeding program reaches at least twice the general figure used in the documents. The health programs would seem to be

probably 25% higher. The only group that approximated the official numbers was those institutions working through Caritas and the Ministry of Labor and Social Welfare. Their smaller numbers of participants made counting easier, but, in addition, they appeared to work quite closely within their allotments.

#### SATISFACTION WITH CENTER OPERATIONS

The program opinionnaires were administered to 471 persons, approximately evenly divided between professionals and adult participants. An important part of that instrument was the opinions held regarding center operations. (The opinionnaire is contained in Appendix A.) Since the problems varied in different parts of the country, sometimes by institution, and the perceptions were expected to differ by the type of respondent, the replies were analyzed by several variables to determine what differences existed in their opinions about program operations. Two sets of information are provided in Table 20: the distribution of the ratings given by the respondents, and the mean rating of all the interviewees within each category.

When examined as a group, the respondents in most provinces did not differ much in their ratings; Darien, however, had a mean much lower than the others and the percentage of persons indicating the two disagree ratings (20.1%) was substantially higher than for any other province. The respondents from the Comarca of San Blas were the other exception; they gave the highest possible rating, 5.0, with every one completely agreeing with the center operation.

The mean rating on center operations given by the national professionals was the lowest (4.03) of the interviewee groups and a higher percentage of them disagreed (17.8%). This was not unexpected since that group would be considering many centers, some of which would be much better operated than others. The participants' ratings were essentially like those of the local professionals; both groups appeared to have judged specific operations about alike.

Although not shown because of its complexity and the small amount of variance for most groupings, an important exception to these ratings by type of interviewee were the national health professionals. Their mean rating was almost exactly at 3.0, a composite "neither agree nor disagree" category, and many more of them disagreed with the operations of the centers than for any other group of national professionals. Their comments explained their lower ratings: "not reaching the malnourished", "improper distribution/feeding", "inadequate storage", and, of course, "transportation problems". A few were dissatisfied because of the incompleteness or inexactitude of the growth monitoring data; some felt that too much protein and too few calories were comprised in the rations.

Table 20: Summary of Percentages and Means of Interviewee Opinions on Program Operations by Province, Interviewee Type, Commodity Source, and Type of Institution

Variables	Percentage					Mean Rating
	Completely Disagree	Disagree	Neither	Agree	Completely Agree	
<b>Province*</b>						
Darier	4.2	16.7	25.0	41.7	12.5	3.42
Panama	4.0	7.9	9.5	18.3	60.2	4.23
Colon	0	0	0	33.3	66.7	4.67
Cocle	1.7	5.0	10.0	25.0	60.0	4.33
Herrera	0	5.0	10.0	20.0	65.0	4.45
Los Santos	0	11.8	11.8	23.5	52.9	4.18
Veraguas	2.5	1.3	3.8	17.7	74.7	4.61
Chiriqui	3.0	2.0	9.9	19.8	65.3	4.43
San Blas	0	0	0	0	100.0	5.00
<b>Interviewee Type</b>						
National Professional	3.5	13.3	10.0	23.3	50.0	4.03
Provincial Professional	0	2.8	19.4	22.2	55.6	4.31
Local Professional	2.7	4.4	8.1	21.3	63.5	4.39
Participant	2.8	4.7	6.6	17.9	67.9	4.43
<b>Commodity Source</b>						
CARE	3.1	5.6	10.4	22.9	58.0	4.27
Caritas	0	1.3	0	9.3	89.3	4.87
<b>Institution Type**</b>						
Education	1.5	2.0	6.6	25.9	64.0	4.49
Health	4.6	9.1	13.7	19.8	52.8	4.07
Homes for Minors	0	0	0	9.1	90.9	4.91
Homes for Elderly	0	0	0	9.1	90.9	4.91
Food for Work	0	0	0	25.0	75.0	4.75
Day Care Centers	0	0	25.0	25.0	50.0	4.25
Infant Feeding	0	11.1	0	0	88.9	4.67
Adult Indian	0	0	0	0	100.0	5.00
All Interviewees	2.6	4.9	8.7	20.7	63.1	4.37

NOTE: Completely disagree=1; disagree=2; neither=3; agree=4; completely agree=5 on all the opinion tables.

\*San Blas is a comarca (territory), not a province, but it has been included with that factor for convenience.

\*\*Several programs included Indian recipients, several of them exclusively; in the opinion tables, the Indian programs were subsumed within the generic program type where possible.

The mean ratings given by the respondents when they were grouped by the source of the commodities, that is, the voluntary agencies, were somewhat different, with those from Caritas higher than CARE and with very few in disagreement with those centers' operations. The smaller scope of those operations, allowing more familiarity with them, and the fewer perceived transportation problems, may have accounted for the differences.

Some of the differences already noted are further explicated in the last part of Table 20: the ratings of the interviewees by the type of institution with which they were affiliated. Health, with the greater transportation problems, received the lowest mean rating and the greatest percentage of disagreement (13.7%). The professionals and the participants in the Caritas affiliated programs were more favorably inclined, generally, than were those affiliated with health or education.

Despite these differences, it must be noted that in all but one case (the Darien respondents), more than half the interviewees completely agreed with the center operations. That is a considerable endorsement of the program operations as a whole. The evaluation team's observations substantially agreed with the opinions given by the interviewees; by and large, the operation of the centers was conducted well considering the conditions under which they managed the Food for Peace program. The concern and work by the local personnel is a major strength of the supplementary feeding program in Panama.

In the open ended question following the request for a rating of the center operations, some respondents merely expanded on their agreement/disagreement and others complained generally. About a fourth of the interviewees, however, gave suggestions for program improvement. The frequency of these suggestions is shown in Table 21.

Table 21: Frequency of Suggestions\* for Program Improvement

Suggestion	No.	%	Suggestion	No.	%
Nutrition/foods education	37	22.2	Improve storage	8	4.8
Improved site/equipment	16	9.6	Better packaging	12	7.2
Training needed for staff	2	1.2	Smaller packages	9	5.4
More supervision	32	19.2	Better transport system	28	16.7
More distribution centers	8	4.8	More frequent distribution	15	8.9

\*Some respondents gave more than one suggestion; the 471 respondents gave 167 suggestions.

The content of some of the suggestions was surprising in that it brought out some new areas for consideration. The need to provide education on nutrition and foods was the most frequent of all the suggestions. This coincides, too, with the plans of the Ministry of Health to conduct special training in those fields. More supervision was the second most common suggestion; while national and provincial professionals made up a large proportion of this group, others came from the local professionals and participants. Better transport system and improved site/equipment were expected from other portions of the survey. More frequent distribution was a suggestion often coupled with the comments on the transportation system. Some 22% of the suggestions had to do with the packaging of the commodities. A further suggestion, especially prevalent among women respondents, was smaller packaging.

Overall, the suggestions supplied by the interviewees showed a high degree of consideration about the program operations. They had thought about the centers and how they might be improved. Furthermore, as a generality, both the general explanations and the suggestions indicated that their ratings had not been given lightly; they were the result of careful thought.

#### SUMMARY AND IMPLICATIONS

The movement and management of Food for Peace commodities from the United States to Panama continue to be generally satisfactory. There were no major problems discovered in the shipment of authorized commodities. The procedures appeared to be adequate and well established concerning the arrival of shipments, their clearances, and their transportation to the central warehouse. Although the clearances have mostly been smooth, the exoneration procedures have begun to be somewhat cumbersome. Some instances of demurrage charges, due to these negotiations, have occurred.

*It would be useful to create a working committee to study how to streamline the procedures so that they do not exceed the five days allowable before demurrage is charged.*

Since the demurrage charges are eventually reimbursed by the Government of Panama, savings resulting from more rapid processing would accrue to that entity.

The central warehouse for the intermediate storage of Food for Peace commodities was found to be adequate. Storage conditions were satisfactory and the personnel maintained good relations with the voluntary agencies, and with the representatives of the institutions that go there to retrieve the foods. The warehouse personnel reported difficulties with the new packaging of the commodities and urged that the containers be strengthened.

*Food for Peace, in conjunction with the US Department of Agriculture, should study the losses entailed since the packaging strength was reduced and take appropriate action if needed.*

The governments of the United States and Panama, as well as the participants, would benefit if the packaging could be improved and the losses reduced. An alternative suggestion, now being utilized by the World Food Program, was:

*Ship the milk and grain products on pre-slung pallets or seagoing containers; those reduce the handling and exposure of the products.*

Some Food for Peace programs have also begun to utilize this procedure. Information on their experiences would be useful in determining the most efficient and cost effective procedures. While losses at the ports in Panama have been very low, should the conditions change, the pre-slung and seagoing containers are reported helpful in that regard as well. Similarly, rebagging damaged containers is a costly operation that thus might be reduced.

The examination of the monitoring functions of USAID/Panama, CARE, Caritas, and the cooperating agencies showed general attention to this important legal aspect but some improvement was indicated. While changes of personnel in USAID/Panama had caused part of the problem, too few supervisory visits were evident in the files.

*USAID/Panama should make a monitoring schedule and interview/inspect the local distribution centers both independently and in conjunction with personnel from the voluntary agencies and the cooperating institutions.\**

The number of local distribution centers is enormous, and assistance from other staff members will be needed if the Food for Peace monitor is to effectively view even a moderate sample of them. The number of institutions and the other supervisory duties assigned to the CARE inspectors also make their work very difficult. Although the CARE and the Caritas personnel showed evidence of many supervisory visits, the conditions of some of the storage facilities and record keeping suggested that either more were needed or that these need special attention during the monitoring.

*Special inspection procedures are needed for the examination of the commodity storage facilities to ensure adequate protection for the foods and for the health of the participants.\**

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\* See the Preface for an important progress note regarding this recommendation.

The central offices maintained excellent records and procedures for their part of the management functions. It was readily apparent, however, that such was not the case in many of the local distribution centers. Late reports, no reports, and lack of knowledge about reporting requirements were too common to assume that changes of personnel were responsible.

*Regularized reporting procedures, including inventories and distribution records, are recommended; training personnel for making these reports, and supervision to ensure their submission, would greatly reduce the disparity between the central office numbers and the local attendance.\**

The most pressing problem, by any standards, was that of the transportation of the products destined for Ministry of Health centers from the central or regional warehouses to the local institutions. Many shipments arrived late, commercial transportation was expensive, and some locales had no way to obtain the products.

*USAID/Panama, the appropriate agencies/ministries of the Government of Panama, and the voluntary agencies should study the present strengths and weaknesses of the internal transportation system and determine alternatives to improve its conduct.*

If transportation could be arranged such that the centers did not experience periods without commodities, a superior program for the malnourished could be sustained.

The study of the opinions of the professionals and participants in the Food for Peace feeding programs showed some differences by province, type of respondent, voluntary agency, and the type of institution distributing the commodities. In general, though, the differences resulted from the transportation, storage, and site problems; these tended to be more severe for the Ministry of Health facilities, especially those related to interruptions of distribution, occasioned primarily because of lack of transportation. Education, with fewer transportation problems, rated the center operations substantially higher; the smaller Caritas facilities, with somewhat greater ease of communication, rated them still higher. In general, however, the interviewees were quite positive about the center operations. The evaluation team cited the distribution center personnel as a major strength of the Food for Peace program in Panama.

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\* See the Preface for an important progress note regarding this recommendation.

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## CHAPTER V: PROGRAM IMPACTS

The United States Food for Peace program, together with an earlier title program, has operated in Panama since 1953. During at least the last twenty years, that assistance has furnished a considerable amount of nutritional supplementation to the targeted population, encompassing as many as 200,000 of the nation's school children and half that many preschool children at its peak. Although the present levels are much lower, Food for Peace continues as a major input toward resolving some of Panama's malnutrition problems. At the present time, the two governments expend about four million dollars in support of the program, not counting the costs of the local distribution personnel time in administering the commodity operations. Further, community and church volunteers contribute of their time and resources.

No complete evaluation of the impacts of the program had previously been conducted. The 1969 INCAP study (36), the national nutritional survey (66), an assessment of nutritional status in Veraguas (74), a three year study of one school in Veraguas (106), and a partial evaluation of the Caritas program (6, 7, 8, 9), all have important implications for determining supplemental feeding effects. None of these, however, directly relates the intake of the Food for Peace commodities to changes in child growth and health, nor do they supply information on the economic effects of the PL 480 Title II imports on the families and the total national food supplies.

The present evaluation was designed to furnish information on both the nutritional and economic impacts. The limitations of time and personnel did not allow a definitive answer on all the effects, but the evaluation attempted to provide some indications of impact. It also examined the sources of data, assessed some of their strengths and weaknesses, and suggested ways that future studies, internally by the voluntary agencies, and/or the government offices, could pursue impact information to improve their own program operations and the assistance the commodities could have on the malnourished of Panama. The incorporation of many officials of the agencies and the government into the design and conduct of the evaluation should provide some additional experience in producing such studies in the future.

### PREVIOUS NUTRITIONAL STUDIES

Many nutritional impact studies have been conducted in the developed and the developing countries. Some of these have been highly technical, usually on small populations, while others have sought guideline information that would contain salient indications to help further programmatic impact. All of the

research publications have stressed the difficulties inherent in measuring impact: limitations of the growth data; restrictions in assessing nutritional inputs; and problems in associating changes in growth to varying food intakes. (76, 78)

Studies of the utilization of the Food for Peace commodities have encountered all of these same problems, many of which are exacerbated because of the nature of that program, i.e., it is supplementary to the regular diets of the recipients and not a controlled input per se. The evaluations in Upper Volta (41) and Kenya (70) reported dietary intake variations. The evaluation in Ghana (46) experienced a further complication, that of another supplementary feeding program from the European Economic Community. A recent article on Food for Peace in India (76) found that even the combination of the local diets and the Title II products left a nutritional gap that probably obviated any meaningful measurement of impact.

Further, the scientific community is not in agreement on the measures that can best be applied to determine growth changes. Calculations of weight for age, height for age, weight for height, and others, have all been utilized with varying degrees of acceptance. Studies comparing more than one measure have also been conducted, and the differences in the incidence of malnutrition, as indicated by the several measures, have usually been substantial.

The problems of local field practitioners, examining children and recommending remediation for malnutrition, while at the same time carrying out all of their other duties, have an additional dimension to those of the scientists; they must accomplish the measurements in a short period of time and often with a minimum of equipment and training. Most organizations therefore have opted for simple procedures and one measurement, generally weight for age, and have expended their resources in obtaining accurate data. Even with that simplification, many problems remain that significantly limit the generalizations that can be made from these measurements. The Catholic Relief Services study of four African countries recounted many difficulties with its data. A study in Togo (80) experienced similar limitations. Some important publications on measurements (2, 20), and handbooks for practitioners (33, 81), have aided the efforts, but further improvement is still needed.

Even after the measurement problems have been adequately resolved, the interpretation of the results remains controversial. The percentile classifications of nutrition from calculations at Harvard (19), and modifications of them (79), have often been used. Those published by the US National Academy of Science, often called NCHS, are frequently cited and have been suggested by the World Health Organization (83). The Gomez (32) degrees of malnutrition, adapted from the Harvard standards and facilitated through the Nutrition Institute of Central America and

Panama (37), were used in the local Ministry of Health institutions in Panama for many years.

### Studies of Malnutrition in Panama

Several studies of the nutritional status of the children in Panama have been conducted through the years. Different measures were used, and they were interpreted from different standards, making longitudinal assessment problematical. Nevertheless, the studies did aid the planning of the country's health programs, and so served their purpose during the period they were in use.

The Nutrition Institute of Central America and Panama, in cooperation with the Ministry of Health of Panama, conducted a nutritional evaluation in 1967 (36). The study, which employed complex biochemical and anthropometric measures, detailed many of the nutrition problems. It also reported that 11.9% of the children under five years of age suffered from second or third degree of malnutrition, using the Gomez weight for age degree system. First degree was not included.

Parillon (65), in a later publication, cited a 1975 study of the nutritional situation in Panama that reported first, second, and third degrees according to the Gomez curves. First degree was listed as 46%, second degree as 18%, and third degree as 2%. The total malnourished was 66%, according to this document.

Various other studies have been made during the last three decades. The majority contained specific objectives or covered limited geographic areas, and are cited in other sections of this report. (52, 62, 74, 106) Despite the differences in methodology and scope, all studies encountered a high percentage of malnutrition in Panama.

### National Nutritional Survey

In 1980, the Government of Panama, with financial help from the Agency for International Development, implemented the first phase of a national survey of nutrition. Massive in scope, the survey reached 6,048 homes and 28,568 persons in a representative sample of 315 census segments. The second phase will be initiated in 1982. The study included data on the nutritional status of children, the dietary consumption, the state of the economy, hygiene and health, and other factors influencing the nutrition of the population.

The fieldwork, the transcription of data for computerization, and the analyses require a great deal of time, and for this

reason, the reports are published at periodic intervals. The preliminary report, that of 1980, cited, subject to subsequent revision, approximately 50% malnutrition, using weight for age according to the three degrees of the Gomez system. (66) This report was the only one available to the team at the time of the present evaluation.

Before the final publication of the evaluation of the Food for Peace program in Panama, the draft of a second report (108, 112) was submitted to the investigators. Since these data were the result of more recent analyses, it was decided, in collaboration with the Office of Food for Peace in Washington, DC, to include the new information in the present publication.

The new report contained different measures of growth to give a full view of the nutritional status of Panama. The authors noted that "...different combinations of these indicators were selected, utilizing as reference values those corresponding to the National Center for Health Statistics (NCHS) of the United States..." (108, unnumbered page 14)

Table 22 compares the prevalence of malnutrition according to the indicators and interpretations used, varying from 10.6% according to weight for height to 49.3% using the three Gomez degrees in combination. The most common measure, weight for age, showed a 30% prevalence of malnutrition using standard deviations from the mean. To explain this figure, a communication from the Office of Food for Peace (112) and the report (108) emphasized that:

...according to weight for age, 30% of those children under five years of age exhibit figures less than expected compared to the reference population. That is, at least 30% of the children under five years of age in Panama showed disturbances of growth (with a high probability of a history of malnutrition or present malnutrition).

It was noted in the publication that the change from the Gomez classification system to the NCHS (National Academy of Sciences) system is important for two reasons:

1. The Gomez classification system includes the proportion of children with low weight figures that would be expected in a normal population.
2. The Gomez classification system does not differentiate between actual alterations in weight and those which are due to a history of malnutrition, which are manifested through alterations of height.

Table 22: Distribution of 3,314 children less than five years of age and prevalence of malnutrition according to Weight/Height, Weight/Age, Height/Age, and the Gomez classifications.

Criteria*	Percentages			Prevalence of Malnutrition
	Indicator Values			
	Below -2 SDs from the mean	Between -1 and -2 SDs from the mean	Between the mean and -1 SDs	
Weight/Height	6.4	20.1	32.4	10.6
Expected Value	2.3	13.6	34.1	
Difference	4.1	6.5	0.0	
Weight/Age	15.8	30.1	28.1	30.0
Expected Value	2.3	13.6	34.1	
Difference	13.5	16.5	0.0	
Height/Age	22.0	26.3	26.1	32.4
Expected Value	2.3	13.6	34.1	
Difference	19.7	12.7	0.0	
Gomez Classifications				
1st degree . . . . .				37.7
2nd and 3rd Degrees . . . . .				11.6
1st, 2nd, and 3rd Degrees . . . . .				49.3

\* The percentage given for each measurement refers to the proportion of the total survey; expected value refers to a standard population; the difference figure represents the excess in the survey population over that expected in a standard population.

Nevertheless, the Gomez system has been in use for many years, and to help the local professionals, the results were presented in the survey using both systems.

The presentation of the population data according to the values obtained from the anthropometric measurements, differing according to standard deviations, offers useful figures for the future. It was stressed, however, that:

...we have adopted a very strict criterion, which identifies as malnourished children whose anthropometric measurements are under two standard deviations below the mean of the reference population. This procedure diminishes the probability of classifying normal children as malnourished.

It was also made clear that:

...it is important that this concept not be confused with that of prevalence, as prevalence refers to a population as a whole, and nutritional status refers specifically to each individual.

In some studies (26, 46, 76), high percentages of previous alterations were accompanied by a high frequency of malnutrition among children from one to two years of age. In the case of the National Survey in Panama, there was no significant difference between the 1 year age groups and those of 2-4 years. (Table 23) This supports the contention that malnutrition persists in specific children although the evidence, two measurements taken at intervals, will not be completed until the analysis of the data taken in 1982.

Table 23: Distribution of Children under 60 months of age, by age groups according to Weight/Age, and Standard Deviations with respect to the Mean of the reference population.\*

Age Groups	Value of the Weight/Age Indicator			
	Below -2 SDs		Between -2 & -1 SDs	
	No.	%	No.	%
Under 1 year	49	8.8	109	17.8
1 year	104	17.1	195	32.1
2-4 years	369	17.6	695	33.2
Total	522	15.8	999	30.1

\* Children of normal weight, according to the reference population, were eliminated from the table.

Neither were differences notable between the age groups according to the weight/height indicator (1.1%). Height/age resulted in 28.8% for the one year olds, and 24.0% for those between 2 and 4 years, a difference of 4.8%. This difference seems important, but is not supported by documentary evidence.

There were great differences in the frequency of -2 SD between the urban and rural populations by weight/age and height/age. Weight/height remained equal in frequency. Neither were there important differences as regard weight/height when urban and rural populations when divided into income brackets. Heights/age, nevertheless, showed enormous differences, with each income bracket for the rural populations more than double the percentage of the

urban populations. This difference was not explained, but it could be that the incidence of ethnic groups in the two areas and their physical characteristics complicated the comparisons. The relationship between level of income and frequency of malnutrition was generally inverse, as might be expected.

The 0 to 60 month age group varied greatly in the distribution of malnutrition, according to the new report (108, unnumbered p. 30), in the provinces. Once again the frequencies according to the different measurements were substantially different. The incidence of ethnic groups in the provinces probably influenced the differences in distribution in some cases.

6.1% of the children between ages of 5 and 9 years had a value less than -2 SD according to weight/height; more or less the same as the percentage of children less than 5 years of age. Utilizing height/age, approximately 24.8% of the children of these ages fell in the category of -2 SD, an increase of 2.8% over those under 5 years of age. (See Table 24)

The national survey also examined many other factors which can influence growth in a population: nutrient consumption, living conditions, sanitary facilities, and the use of family incomes. Nutrient consumption is presented in the next section, although the analysis has not been completed yet. Preliminary data on the other factors were included in the 1982 report, and are of (continued on next page)

great interest to understand the situation of the people. Subsequent analysis will search for statistical relationships between these conditions and the incidence of malnutrition in Panama.

Table 24: Distribution of Children of ages 5-6 and 7-9 according to the indicators Weight/Height and Height/Age with a value below -2 SD with respect to the reference population.

Age Groups	Indicators			
	Weight/Height		Height/Age	
	No.	%	No.	%
5-6 years	63	5.2	300	24.7
7-9 years	128	6.5	491	24.8

#### Studies of Nutritional Intake

Knowledge of the nature of malnutrition problems is essential to developing remediation measures. In 1967, the Institute of Nutrition of Central America and Panama (37) made a sample survey in Panama that studied in detail the consumption of foods, the nutritional content of the same, and the patterns of consumption in Panama. The authors concluded that 73% of the rural population consumed more than 100% of the recommended levels of calories and proteins. The focus of the study was the rural areas, so data on urban consumption were scarce.

Various other studies of reduced populations were made since the INCAP survey, and the results were similar. Part of the difficulties, it is clear, is that the data were presented in global form, without making a distinction between socioeconomic levels. To resolve some of these problems, the national survey of 1980 controlled, as much as possible, the variables that could influence nutrition.

The new figures stemming from the national survey also approached the USNAS recommendations, but upon calculating the consumption by province, important differences can be noted. (Table 25) In the thesis of Quevedo Samudio (109), "although it deals with only one part of the sample of the national survey, substantial variations can be distinguished, especially as regards the consumption of calories by the inhabitants of the Comarca of San Blas.

Table 25: Daily consumption\* of Calories and Protein per person in the provinces and in the Comarca of San Blas, and percentages of the recommended allowances.\*\*

Province/ Comarca	Calories		Protein	
	Average	Percentage of Recommended	Average	Percentage of Recommended
Bocas del Toro	2050	76	75	134
Cocle	2054	76	70	125
Colon	2130	79	71	127
Chiriqui	2072	77	63	113
Darien	2223	82	56	100
Herrera	2344	87	72	127
Los Santos	2577	95	90	161
Panama	2207	82	81	145
Veraguas	2117	84	69	123
San Blas	1535	57	58	104

\* Estimated by dividing the total family daily consumption by the number of family members.

\*\* USNAS Recommendations: Calories = 2700, proteins = 56.

Level of income and urban/rural did give explanatory differences to malnutrition as regards calories (the figures for consumption of proteins have not yet been released). Consumption of calories rose in direct proportion to income level. (Some examples are found in Table 26) Also, the division between the urban areas compared to rural ones showed differences, although not such marked ones as seen in income levels.

Table 26: Comparison of Calorie intake by area, urban/rural, and income level.

Income Level*	Panama & Colon		Cocle/Veraguas/Azuero		Chiriqui	
	Rural	Urban	Rural	Urban	Rural	Urban
5th	1025	1263	1190	1138	737	1129
25th	1798	1816	1640	2055	2001	1952
50th	2381	2199	2514	2594	2068	2638
75th	3089	3027	3168	2911	3135	3054
95th	4310	4408	4310	5847	4393	5917

\* The income levels are expressed in percentiles. (i.e., from the lowest income (1st percentile) to the highest (99th percentile))

The difference between rural and urban calorie intake is not totally consistent, but generally the population in the rural areas consumed fewer calories. What is consistent is the rise in calorie consumption in the higher income levels. The calorie intake in the fifth percentile of income in the urban area of Panama/Colon, for example, is only 29% of the calorie intake of the 95th percentile. Although the intake of proteins may be higher than the recommended levels, the difference when converted to calories is not enough to balance the diet. The result of this is malnutrition.

To summarize, when the new report, the thesis, and the data from the national survey of 1980 are taken together, they seem to present consistent data. Malnutrition still exists today, but not in the extreme grade suggested by some previous studies. Too, as might be expected, the survey showed a strong correlation between malnutrition and family income.

#### Supplementary Information on Consumption

The present evaluation also examined dietary patterns, but only of the recipients of Food for Peace products. Twenty-four hour recalls were utilized, but the quantity of each dish could not be determined. The result tended to support the suggested differentials by socioeconomic level and geographic distribution. Except for very minor quantities of meats as flavoring, the Veraguas participants listed: bread, rice, beans, coffee, and some fresh fruit. Those in Chiriqui reported some type of cereal preparation for breakfast, together with bread and coffee; rice was consumed at both lunch and dinner, usually with some additions of peas or beans; small amounts of meat were also included. The San Blas pattern was different in that the major food consumption was at noon and consisted usually of a soup made of fish, coconut milk, and plantains; chocolate and bread were eaten at breakfast; and no night meal other than chocolate or fruit was indicated. The observations of the team generally confirmed the recalls. Protein rich foods were scarce in the diets of Veraguas (and most of the provinces in the central part of the country); were slightly higher in Chiriqui due to a greater ingestion of peas and beans; in San Blas, protein from fish appeared to be greater than in the other areas but even the combination of fish with plantains did not appear to provide either enough calories or enough protein. Most of the Food for Peace beneficiaries were of fairly low incomes. Many appeared to be small and underweight in relation to the other people in the communities.

Income, of course, is not the only source of foods for a family. To probe the additions to the diet that home produced commodities might supply, the study collected information from the beneficiaries of the program on home production activities. Nearly

Table 27: Percentages of Food and Other Home Production Activities\* Reported by Interviewed Participants: by Worker

Activity	% Conducted by:					Total
	Father	Mother	Children	All	Others*	
Home Garden	17.3	7.9	5.5	13.4	5.5	48.8
Consume	15.7	6.3	4.7	10.2	3.2	40.2
Sell	1.6	1.6	0.8	3.2	2.3	8.6
Communal Garden	1.6	0	0.8	1.6	0.8	4.7
Consume	0.8	0	0.8	.8	0	2.3
Sell/consume	0.8	0	0	.8	0.8	2.4
Farm Crops	13.4	0.8	2.4	6.3	1.6	22.8
Consume	9.4	0.8	2.4	1.6	1.6	15.0
Sell/consume	4.0	0	0	4.7	0	7.8
Poultry	8.7	17.3	1.6	18.9	5.5	52.0
Consume	7.9	11.8	0.8	14.2	4.7	39.4
Sell/consume	0.8	5.5	0.8	4.7	0.8	12.6
Swine	5.5	3.9	1.6	1.6	0	12.6
Consume	3.9	3.1	1.6	0	0	8.7
Sell/consume	1.6	0.8	0	1.6	0	3.9
Cattle	0	0.8	0	0.8	0	1.6
Consume	0	0.8	0	0	0	0.8
Sell/consume	0	0	0	0.8	0	0.8
Honey: Sell/consume	0.8	0.8	0	0	0	1.6
Sugar: Sell/consume	1.6	0.8	0	0	0	2.4
Bread: Sell/consume	0	0.8	0	0	0	0.8
Pastry*: Sell/consume	0	0.8	0	0	0	0.8
Mola*: Sell/consume	0	6.3	0	0	0	6.3
None (percentage of all interviewed participants)						34.6

\*Notes: Some interviewees reported more than one activity. Others=other persons in the household except in communal gardens and farm plots in which other village residents were assigned the work. Pastry=hojaldra (hojaldre), a wheat flour puff pastry. Mola=an appliqued and embroidered panel attached to Kuna women's blouses.

35% of them reported that the family produced nothing. (Table 27) Almost 49%, however, had a home garden and they reported that they were mostly for the consumption of the family. The observations of those gardens often showed that they were quite small, sometimes a few plants placed here and there. Communal gardens were rare, but in one case a communal garden supplied a sizeable and increasing amount of food for the community; the school also had a garden in that same community, and that project, although relatively new, was expected to substantially increase the school lunch program for both the elementary and the junior high schools. Smaller, demonstration gardens also were observed, and others were planned. They would seem to provide a valuable addition to the future of food consumption in those areas. Few Food for Peace participants, even though rural, actually produced farm crops; the 23% with crops mostly ate from them and sold some, but others were for sale only.

More than half the beneficiaries in the study reported raising some poultry; most of it, chickens primarily, was reported for home consumption. Again, the observations of the team found these operations to be quite small, usually fewer than a dozen hens. Nevertheless, when consumed by the family, the meat and eggs were important to the diet. Swine were the next most important enterprise, and 12.6% indicated raising one or more. Most were for home consumption, but about a fourth of those with pigs regarded them as for sale only. Cattle were rarely found; the incidence occurred almost exclusively in the Province of Chiriqui. Half reported some consumption of the meat and/or the milk. A few other minor home production activities were reported and all of them were for both home consumption and for sale.

The interviewees often pointed out that the home produced items brought more on the market than they would supply as direct consumption. That is, the sale price would purchase a greater volume of food, usually cereals and root crops, than the higher protein foods such as eggs or meat would supply. Sometimes that alternative was forced on the families by their economic conditions. In others, however, it was evident from the discussions that the respondents were not aware of the greater nutritive value of what they produced.

In addition to food habits and availability of foods, malnutrition in young children has been associated with the supplies of milk and supplementary foods during infancy in many studies, typified by the evaluation of the Food for Peace program in Ghana (46). Early weaning from breast milk, insufficient formula supplements, and delayed solid food consumption contribute to an early onset of malnutrition. In Panama, the majority of children are weaned by the age of one year. (see Table 28) Bottle feeding tended to start late in most cases, not always coinciding with the weaning period; a fourth of the studied mothers reported that they did not use bottles or other milk/milk substitute supplements at any age. The use of supplementary solid foods, however, were begun quite early; two-thirds of

the mothers said they began that practice before the child was six months old, and another 30% by one year. If those supplements contained high protein levels, some of the difference in nutrition could have been provided; the reports almost always said they simply fed the infants some of what the family was eating.

Table 28: Reported periods of Breast Feeding, Formula/Bottle Usage,\* and Supplementary Feeding of Children

Months	Percentage Reporting		
	Breast Feeding (until)	Formula/Bottle (until)	Supplemental (begun at)
0-6	26.7	7.3	66.7
7-12	37.3	9.8	29.5
13-18	12.0	7.3	1.3
19-24	13.3	22.0	2.5
25-30	2.7	4.9	0
31-36	8.0	29.5	0
37 +	0	19.6	0

\*86.6% reported they never used formulas/bottles either as supplementary to or in substitution for breast feeding.

Table 29: Distribution of Family Size among Interviewed Program Participants

Members	No.	%	Members	No.	%
2	1	1.4	10	1	1.4
3	2	2.8	11	5	6.9
4	7	9.7	12	1	1.4
5	16	22.2	13	1	1.4
6	6	8.3	14	1	1.4
7	16	22.2	15	1	1.4
8	9	12.5	16	1	1.4
9	4	5.6			
			Mean	7.08	

A further factor with the participants in the supplementary feeding program was the number of members in the home. The mean was just over seven and 86% had more than four persons in the home. As shown in Table 29, a high proportion of the families was very large, reaching 16 members. The implications for nutrition, when

almost all of these were of very low income, are enormous. That, combined with relatively little home production of food for most families, could be expected to produce malnutrition.

Several members of these families could conceivably be earning an income, and that would reduce the probability of insufficient food. The reality, however, was that generally most of the family members were children. Not only that, but the children were quite young. The distribution of the children in the participants' families by age of the child is shown in Table 30. The mean age was just under six, as would be expected from the prevalence of mothers from the Maternal Child Health programs in the sample. Nevertheless, the mostly younger aged children living in the homes reinforced the data on the need for the supplementary feeding program. Panama has a young population, placing substantial burdens on those that are of an age to work; statistics that do not take these factors into account mask the degree of the assistance needed in some families.

Table 30: Distribution of Children by Age in the Participants' Homes\*

Years	No.	%	Years	No.	%
Less than 1	23	9.6	9	8	3.3
1	12	5.0	10	12	5.0
2	24	10.0	11	9	4.6
3	22	9.2	12	10	4.1
4	25	10.4	13**	4	1.7
5	25	10.4	14**	2	0.4
6	21	8.8	15**	5	2.1
7	15	6.3	16**	10	4.1
8	12	5.0			

Mean Age: 5.97

\* 'Home' often included more than one nuclear family.

\*\* Some respondents did not consider these ages as 'Children'.

The information collected about nutrition, the limited existence of gardens and small amount of raising of poultry and other animals, and the number and ages of the family members surveyed are in accord with the general opinion that the Food for Peace program beneficiaries have, in general, very few resources. Although in this evaluation exact calculation of the nutrient intake was not possible, there remains no doubt as to the poverty of the beneficiaries.

This information, in relation to the data collected during the national survey on the high incidence of malnutrition and the lowered intake of calories in the lower income levels (Table 26), leads to the conclusion that:

1. An extreme need exists in some of the population for the help that Food for Peace provides.
2. The scarcity of food and other resources is so serious in some families that the supplementary food programs should utilize the Food for Peace products almost exclusively in these families.
3. The programs should concentrate more resources on the home production of foods, and educating families so that a major part of the production should be destined for consumption in the home.

Unfortunately, the national survey data on the intake of protein according to the income level has not yet been made available. Considering the foods ingested by the sample in the evaluation, it seems that a pattern similar to that of calorie intake, in direct proportion to the level of income, will be discovered in the case of protein consumption. For these reasons, it is recommended that the present Food for Peace products continue in use until more evidence can be presented.

As noted earlier, the Food for Peace school feeding program administered through CARE and the Ministry of Education, has for many years constituted the major use of the commodities in Panama. In earlier years, the secondary school feeding was eliminated from the PL 480 program; currently, the rest of the program is in the second year of a phase-over from Food for Peace commodities to those provided by the Ministry of Education, which is expected to be complete by 1985. The change was reported to be taking two forms: converting whole schools to Ministry of Education foods; and reducing the Food for Peace commodity beneficiaries in others.

All of the evaluation sample schools utilizing Food for Peace products were elementary except for three junior high schools. As explained in the management section of this report, the official distribution list numbers of beneficiaries in the schools, the school programmed numbers, and those actually receiving the foods prepared from the products did not agree; in most cases, the numbers of beneficiaries were at least five times the distribution list figures. To compensate for these discrepancies, the schools employed several different methods of dividing up the commodities. The most common, by far, was to utilize the milk and one of the grain products to prepare a morning drink (usually termed "crema") for all the enrolled students, which amounted to a reduced ration size. Another measure was that of using the Food for Peace commodities in the program for only two or three days per week. In still others, the foods were distributed to everyone every day until the commodities were exhausted, and then switched to other foods or ceased the feeding program. In two of the schools, a fourth alternative was found: the

malnourished children were the only ones to receive the Food for Peace commodity preparations.

The limitations of time did not allow an examination of the potential impact via all the alternative methods. To help assess the most common, that of providing the morning snack to all the students, actual weights were taken in one of the sample schools and the amount each child receiving the preparation obtained, were compared with the Panama school feeding specifications. Since the specifications are per month, the calculations had to assume a 20 day school month and that the same number of students would attend and be fed every day. Table 31 compares the actual to the specified ration for that school and shows that considerably less was ingested by the students than that planned. Too, if there were fewer school days per month, which was the case during the period of evaluation, the intake per month would be still less.

Table 31: Amounts of Commodities Specified Compared with Amounts of Foods Consumed in a Sample School.

Commodity	Actual Consumption/ Student/month* (Kg.)	AER Specification/ Student/month (Kg.)
Oats	0.14 (Grades 1,2)	0.9
	0.22 (Grades 3-6)	
Milk	0.14 (Grades 1,2)	0.9
	0.22 (Grades 3-6)	

\* No information was available on the ration size consumed by preschoolers.

The discrepancies between the authorized recipients of Food for Peace commodities in the sample school, the school reported programmed number, and those actually attending and being fed were so great that it was expected that the interviewees would express considerable dissatisfaction with the program. Such was not the case. (See Table 32) Although nearly every school suffered from lack of foods for some period because the commodities had not been delivered, or insufficient food for distribution because of the variances in numbers, the local personnel were mostly in agreement with the quantity of PL 480 commodities received.

Several factors appeared to be involved. One was that the amount of foods sent to the schools had not changed much in the last few years. Another, expressed by many of the interviewees, was that the Food for Peace commodities were used for a snack only, and

Table 32: Summary of Percentages and Means of Interviewee Opinions on the Quantity of Food for Peace Commodities distributed: By Province, Interviewee Type, Commodity Source, and Type of Institution

Variables	Percentage					Mean Rating
	Completely Disagree	Disagree	Neither	Agree	Completely Agree	
<b>Province*</b>						
Darien	12.0	28.0	16.0	32.0	12.0	3.04
Panama	3.3	14.8	19.7	20.5	41.8	3.83
Colon	0	9.5	19.0	33.3	38.1	4.00
Cocle	8.5	20.3	8.5	20.3	42.4	3.68
Herrera	10.5	5.3	10.5	21.1	52.6	4.00
Los Santos	0	31.3	6.3	12.5	50.0	3.81
Veraguas	16.5	19.0	10.1	20.3	34.2	3.37
Chiriqui	21.3	3.2	17.0	22.3	36.2	3.49
San Blas	0	0	14.2	4.8	81.0	4.67
<b>Interviewee Type</b>						
National Professional	0	7.7	15.4	26.9	50.0	4.19
Provincial Professional	8.6	14.3	11.4	20.0	45.7	3.80
Local Professional	13.3	14.6	17.3	20.1	34.7	3.48
Participant	5.0	13.0	8.0	23.0	51.0	4.02
<b>Commodity Source</b>						
CARE	11.8	15.5	15.5	22.0	34.2	3.52
Caritas	2.7	4.8	10.7	12.0	70.7	4.44
<b>Institution Type**</b>						
Education	9.4	14.6	17.7	26.6	31.8	3.57
Health	13.8	16.9	14.3	17.5	37.6	3.48
Homes for Minors	0	6.1	6.1	15.2	72.7	4.55
Homes for Elderly	0	0	27.3	18.2	54.5	4.27
Food for Work	0	0	12.5	50.0	37.5	4.25
Day Care Centers	25.0	0	0	0	75.0	4.00
Infant Feeding	22.2	11.1	0	11.1	55.6	3.67
Adult Indian	0	0	0	0	100.0	5.00
All Interviewees	10.3	13.8	14.7	21.1	40.1	3.67

NOTE: Completely disagree=1; disagree=2; neither=3; agree=4; completely agree=5 on all the opinion tables.

\*San Blas is a comarca (territory), not a province, but it has been included with that factor for convenience.

\*\*Several programs included Indian recipients, several of them exclusively; in the opinion tables, the Indian programs were subsumed within the generic program type where possible.

that the malnourished received a lunch from the Ministry of Health and/or other sources; the concerns for the malnourished were being met and those at normal weight did not need as much supplementary feeding. Table 33 contains the suggestions from all the respondents, not just those from school feeding, but the few of that latter group whose comments fell into the "unspecified insufficient food" category.

Table 33: Frequency of Comments about the Quantity of Foods Given\*

Comment	No.	%
Unspecified insufficient food	83	70.3
Insufficient for malnourished children	17	14.5
Insufficient for low income families	11	9.3
Insufficient because of family shares allotment	7	5.9

\* Only 118 out of 471 interviewees commented negatively about the quantity of foods given.

These findings by the evaluation team are not greatly different from those reported in a 1979-1980 study in 15 schools in Veraguas (74). In the 11 schools in which PL 480 foods were used exclusively, the amount fed was less than the authorized ration, again because the distribution list number was considerably less than the number of children being fed. In most of the 11 schools the ration did not meet 33% of the daily nutritional recommendation for one meal. When age and sex were taken into account, the disparity was still greater. In this Veraguas study, 80.5% of the children were at normal weight/height levels, thus the reduction was of lesser import for that group. For the malnourished, however, the lowered ration would have greater impact.

In another study (106) conducted over a three year period ending in 1980, in which a school utilizing only the Ministry of Health foods was involved, the lunch provided the nutritive values for calories and protein recommended for the children. The products needed were supplied in the correct amounts, however, so that the school did not have to spread rations for a small number over a much greater school attendance.

The evaluation team inspected all of the kitchens, dining areas, and commodity storage rooms in the sample schools since the quantity of foods could be reduced by thefts or damage, and the health of the children could be affected by the sanitation practiced in the schools. As reported earlier in connection with Table 16, the school storage areas were generally clean and safe; few were in serious need of modification. The dining rooms, too, were almost always satisfactory, even when quite simple. The kitchens

did not present the same high degree of hygienic conditions; some of the cases were because the facilities were primitive and difficult to keep clean; some others had been neglected. It must be re-emphasized, however, that the vast majority of the food preparation and consumption areas were well organized and sanitation conditions satisfactory.

The facilities for the preparation of the commodities as food for the children varied from non-existent to quite sophisticated in the schools. Three schools possessed no cooking facilities, but all three were in newly settled areas in which the school populations have grown exponentially in the last two years. In all three, volunteer mothers carried the commodities home, cooked them, and then brought the food to the school. Stoves were present in all of the school kitchens, some burning charcoal, some gas, and a few used electricity. Those with gas stoves invariably complained about the lack of gas, its cost, or that the stoves did not function properly. Cooking utensils were in short supply in a few schools. Glasses were the most frequently used containers for distributing milk/grain product preparations; some schools furnished them and in others the children brought their own. Elementary schools with two shifts often experienced difficulty in washing the glasses between feeding the two shifts, and those lunch personnel usually complained that there were not enough for the two programs. Schools in which Ministry of Education products were served as a lunch had more problems with utensils, plates, and glasses, since the meals were more complicated and required more equipment. Again, schools with two shifts had special problems because of the necessity of feeding the drink, lunch for the malnourished, and then drink for the second shift, all in a very short period of time.

Another problem reported by some schools was the lack of a cook or helpers for the cook. In some cases, the school was able to pay the cook. In still others, the community was expected to contribute toward the payment or actually pay the cook. One-third of the schools, however, utilized volunteer mothers as the school cooks.

When a home economics teacher was assigned to a school, she was in charge of the feeding program. In all cases, she served as the general manager, and either supervised the food preparation or helped with it herself. The record keeping functions were usually shared by the home economics teacher and the school director or subdirector. The receipts of commodities were handled promptly, according to the interviewees, and their records clearly documented the amounts. Actual local school records on the participants in the Food for Peace program were seldom produced, primarily because they noted that all the children were receiving the foods and their attendance rolls therefore served as a recipient list. The actual number fed for any given day could be determined from the attendance reports, but no running total was prepared. The average monthly attendance reports, necessary for the Ministry of Education, were used to supply

the feeding figures requested for the evaluation.

As noted in an earlier section, the school texts included sections on health and nutrition for every grade in the elementary school. The material appeared to be adequate for the grade, and contained the essential information for improving nutrition in the homes. Too, the upper grades received instruction from the home economics teacher on further aspects of nutrition, foods preparation, and related health practices for the home and family.

Each province visited had one or more education inspectors whose duties included much of the management of the regional warehouses, distribution to the local schools, and supervisory visits to the feeding programs. In four cases, an inspector accompanied team members in the study and those officials were obviously well known to the local personnel. They appeared to have made frequent visits to most of the schools. All provinces were served by a nutrition inspector, including the Comarca of San Blas, where transportation difficulties made supervision less systematic.

Although some schools had weighed the children entering first grade for some years, systematic growth measurement was not common. A few had received scales through the Ministry of Education and had taken the beginning of school weights (heights also in some schools). The second measurement was due later in the school year for some and at the beginning of the next for others. No school had the weights available; all reported that they had sent them in to the Ministry of Education or the Ministry of Health. The Ministry of Health is currently working with education to provide the scales, train the teachers for the measurements, and set up a longitudinal system for the future.

Since in the Ghana evaluation (46) the teachers had reported reduced attendance when the foods were not issued, the school personnel were asked if that occurred in Panama. A very high proportion of the teachers stated that the presence or absence of the foods had no effect on attendance. Many did volunteer, however, that the children's attention span increased when the snack was distributed. They especially noted this for those children who come to school without breakfast. In a few schools, all in very low income areas, school personnel reported that when the foods were not available, attendance was considerably reduced, particularly for the children from homes experiencing extreme poverty.

Speaking in broad terms, the school feeding program was well organized and conducted, from the national to the local level. The program, of course, received transportation support by the National Guard, a very positive factor in the conduct of the program. The Ministry of Education has been able to meet its commitments under the phase-over from Food for Peace commodities and expects that it will be able to do so in the remaining years.

While nutritional impact could not be assessed because no growth measures were available, the opinions of the personnel were that the health of the children had been improved through the feeding program. There was no evidence to the contrary. It was possible that additional impact could have been attained for the malnourished children had the full ration been distributed. That possibility, even with the reduced amount of commodities designated for the Ministry of Education, could have been realized through targeting the foods for the malnourished children, but that had been done in only a few instances and did not appear likely to occur during the remainder of the Food for Peace school feeding program in Panama.

### Health Facilities

The Maternal Child Health component of the Ministry of Health operates primarily in hospitals, integrated health system facilities, health centers, and health posts. Some of these also operate mobile clinics that serve surrounding villages and rural areas. The component has the responsibility for the application of the ministry's norms on nutrition related activities and the growth surveillance of children. Its duties include:

1. Supervise and advise nursing personnel who carry out nutrition related activities.
2. Impart nutrition education to individuals and groups about such topics as the diet of pregnant and lactating women, diet therapy for the malnourished child, the importance of breast feeding, and feeding the ill child.
3. Make home visits to children under observation for illness or malnutrition.
4. Conduct nutritional rehabilitation.
5. Train personnel and mothers on the use of formulas for the treatment of malnourished children.

In addition, the Office of Nutrition is charged with the supervision of the food distribution program at the local level and monitors its conduct, giving instructions about the use of the Food for Peace commodities, and providing recipes for the use of the PL 480 foods and local products.

Most of the actual work included in the duties of the Office of Nutrition is actually carried out by the local health personnel since they are in direct contact with the potential beneficiaries. Weight and height measurements were recorded in some of the health

facilities, but during the evaluation, they were observed in action in only two centers.

The Ministry of Health growth monitoring charts (Appendix E) provided growth curves for boys and girls. These were seen in only three of the sample evaluation sites and only one chart was observed that had weights recorded on it. Health personnel reported that they did not hand these out to the mothers nor did they make much use of them in their discussions with the mothers of malnourished children. The Ministry of Health reported that it was in the process of preparing new charts for field use, and that these incorporated the US National Academy of Science (NCHS) standards. It was also reported that upon availability of these charts, local personnel would be trained in their use.

Most of the provinces had a nutritionist assigned and the local authorities reported that that person worked in conjunction with them, primarily in giving talks to groups of community people. While none was observed in action, those health personnel in areas without a nutritionist complained that they needed one, indicating a value for their services. They were not seen as supervisors by the health personnel. Supervisors as such were not reported by any of the local health authorities, but several sites indicated that they were at times visited by members of the central Ministry of Health staff.

Nutrition education in health facilities was rarely reported and often cited as needed. Aside from the previously noted talks by nutritionists and classes for mothers in the Caritas infant feeding programs, the only nutrition education in the health programs appeared to be brief talks with individual mothers when their children were ill and/or malnourished. No formal, scheduled sessions, beyond those mentioned, were ever reported.

Local personnel also reported work with the mothers in the rehabilitation of malnourished children. They used individual talks that included information on the appropriate foods, the amounts of them, and special sanitation practices in the preparation of the foods. Home visits to the seriously ill malnourished children were reported in all of the hospitals and integrated health system facilities but rarely from health posts. Training for the use of formulas and other supplements was said to be primarily on the basis of talks with the mothers since few centers had cooking facilities that lent themselves to demonstrations.

Mimeographed recipes for the utilization of the Food for Peace commodities and local products were provided to the health centers by the central office of nutrition. The document contained a great many recipes which appeared to be basic enough for most mothers who could read to follow. Only one mother directly mentioned following the instructions as the team inquired about

how the PL 480 foods were used in the home; others may have learned the preparations and felt no need to mention the recipes.

The Food for Peace commodities are targeted for pregnant and lactating women, preschool children, older children that are malnourished, and are also used for some ill patients in hospitals and out-patient care. The 1982 program listed 20,000 women and 40,000 children, an increase of 10,000 within both categories over 1981. Although the central distribution list figures for the local centers were generally closer to the number being served than was the case for school feeding, some were badly out of balance. (See the discussion in the management section.) Most centers had some more beneficiaries than was authorized; the newly settled areas in Darien had several times as many that were reported to need the food even though there only the malnourished and the ill received the commodities.

The standard ration listed on the Annual Estimates of Requirements and the program plans differed slightly between 1981 and 1982, with slight increase in all but the vegetable oil. (Table 34) The standard rations would have furnished the recommended supplements for both calories and proteins to mothers and children.

Table 34: Standard Rations for Food for Peace Commodities in the MCH Programs: FY 1981 and FY 1982 (in kilograms)

Commodity	1981	1982
Non-fat dried milk (NFDM)	2.20	2.27
Corn soy milk (CSM)	0.90	0.91
Soy fortified rolled oats (SFRO)	0.90	0.91
Vegetable oil	0.45	0.45

Transportation problems plagued the Ministry of Health programs and all of the sample sites had experienced periods of time without Food for Peace commodities. Since the National Guard did not regularly assist the health facilities delivery system, several different arrangements were used in the process. Some were hauled by local vehicles, commercial carriers, and other privately arranged means. The Ministry of Health's sanitation boats carried the commodities to isolated sea coast and island sites. Inland sites that were isolated or had road problems appeared to suffer more than others. Health officials expressed a great deal of dissatisfaction with the quantity of commodities distributed (Table 32), and much of that disagreement was said to be due to the interruptions of the program due to transportation. The costs of transportation had also risen so that those that had to depend on commercial carriers were hard

pressed to provide the needed funds. In one specific case, 16 sacks of milk and grain products, and 4 cartons of oil had cost \$1019 to deliver; the products were not worth that much. The site noted that it could no longer afford that investment in the program.

The health facilities, as with schools, used different methods of accommodating the amount of commodities received to the number of beneficiaries. Some issued the standard rations until no more remained; most reduced the ration size to be able to provide some supplement over a longer period of time. Many sites reported that they did not issue rations to normal weight mothers and children but rather reserved the amounts received for those most in need, that is, the malnourished. Even with that measure, some sites could not furnish the supplementary feeding to all those that needed it and for the entire year.

In most of the centers, each mother came for the commodities each month (in areas served by mobile clinics, the distribution was subject to the itinerary of that operation). Most of the centers stated that they encouraged the mothers to bring the pre-school children to those sessions so they could be measured and given any other service needed such as an examination, vaccination, and medications. The records rarely had a child registered every month; the centers reported that the children did not always accompany the mothers, that when food was not available they did not come, and that work duties sometimes prevented the mothers from attending.

The attendance system was described as following several steps. An identification card was provided which contained the name of the institution, number of the medical record, number and type of beneficiaries in the family, date of enrollment in the program, date of projected termination, and dates on which they received the food commodities. A duplicate of the card was to be kept in the health facility. The health care attendants noted that it was very difficult to get the mothers to bring the cards issued, and that in most cases, they simply relied on the one in the center for the records.

The record cards appeared to be in very short supply; some centers had had none for some time. When they were not present, many centers used plain ruled pads or cut cards from cartons. In some of the health facilities, the records were systematized and easy to consult. In others, finding the appropriate cards was a laborious task. In those that stored the cards according to the case number, finding the card was very difficult when the mother did not bring her duplicate and did not remember the number. Consequently, the attendant often made notes about that particular visit and tried to find the card later and add the information. The health centers with mobile clinics or that served several population centers usually organized the cards by the name of the community, which made location much easier.

Occasionally, a form provided by the Ministry of Health was also completed on the children in the program. (See the form in Appendix E) Unfortunately, that form did not contain a space for noting the issuance of rations, thus necessitating cross referencing or searching for information in more than one record. In fact, most centers that they did not attempt to keep both forms since they were very short of help for so much paper work. Too, many centers noted that when they had food, they gave out the standard ration, so it was unnecessary to keep records on the commodity distributions. Consequently, the exact amount of food distributed to any child was usually impossible to determine.

The Food for Peace commodities were the major components in the Ministry of Health food distribution program. Some clinics reported that they also at times received allotments of milk and/or formulas to supplement the feedings for the newborn. The hospitals sometimes had small funds from which they could purchase local products for use in feeding the bed patients but the personnel noted that the funds seldom were sufficient for the needs. Communities provided some assistance, usually through locally grown products, for the patients. In others, the families of the patients were expected to furnish the meals. Three clinics were planning demonstration gardens, and they expected that the produce from them would help substantially in providing a balanced diet to the patients as well as serving as stimuli for home garden cultivation. The demonstration gardens, although desired by the clinic staff, were said to be a problem; they needed assistance in working the soil, seeds, fertilizers, and technical assistance. They believed that community people would help with the actual work of cultivation.

The health center personnel, and especially the doctors, usually explained that some of the malnutrition cases they served should not have occurred. This was particularly common in the smaller towns and rural areas. They noted that there was land to produce nutritious foods and that they could be grown without much investment or effort. "Traditional food habits" of the people were cited as the primary reason why more food wasn't grown and consumed. Many felt that the people did not know about good nutrition, how to grow certain foods, or how to prepare them. Some of the older personnel who remembered when the agricultural extension service was active, believed that the government should again invest in those functions, even if they used another name for the organization. Home economists, if they would go directly into the homes and work with the women, were also suggested by several health workers.

The health professionals and the participants in the Maternal Child Health programs in the sample were in substantial agreement with the kinds of foods being distributed through the Food for Peace program. (Table 35) The few who disagreed or were uncertain normally explained their opinion by complaining that only CSM or fortified oats were supplied as the cereal component,

Table 35: Summary of Percentages and Means of Interviewee Opinions on the Selection of the Food for Peace Commodities: by Province, Type of Interviewee, Commodity Source, and Type of Institution

Variables	Percentage					Mean Rating
	Completely Disagree	Disagree	Neither	Agree	Completely Agree	
<b>Province*</b>						
Darien	4.0	8.0	4.0	48.0	36.0	4.04
Panama	4.0	4.0	10.4	16.8	64.8	4.34
Colon	0	0	14.3	28.6	57.1	4.43
Cocle	1.7	1.7	10.0	25.3	63.3	4.45
Herrera	0	5.0	5.0	15.0	75.0	4.60
Los Santos	0	0	5.9	29.4	64.7	4.59
Veraguas	1.3	3.8	1.3	24.1	69.6	4.57
Chiriqui	1.0	3.0	2.0	25.3	68.7	4.58
San Blas	0	0	0	0	100.0	5.00
<b>Interviewee Type</b>						
National Professional	10.3	0	20.7	24.1	44.8	3.93
Provincial Professional	0	5.6	5.6	22.2	66.7	4.50
Local Professional	1.4	4.4	5.7	24.7	63.9	4.45
Participant	1.9	0	2.9	16.2	79.0	4.70
<b>Commodity Source</b>						
CARE	1.3	3.8	6.6	23.0	65.2	4.47
Caritas	4.0	0	2.7	20.0	73.3	4.59
<b>Institution Type**</b>						
Education	2.0	5.6	5.1	26.0	61.2	4.39
Health	1.5	1.5	6.6	20.4	69.9	4.56
Homes for Minors	3.0	3.0	6.1	30.3	57.6	4.36
Homes for Elderly	0	0	0	9.1	90.9	4.91
Food for Work	0	0	25.0	12.5	62.5	4.38
Day Care Centers	0	0	0	0	100.0	5.00
Infant Feeding	11.1	0	11.1	22.2	55.6	4.11
Adult Indian	0	0	0	0	100.0	5.00
All Interviewees	1.9	3.2	6.0	22.5	66.4	4.48

NOTE: Completely disagree=1; disagree=2; neither=3; agree=4; completely agree=5 on all the opinion tables.

\*San Blas is a comarca (territory), not a province, but it has been included with that factor for convenience.

\*\*Several programs included Indian recipients, several of them exclusively; in the opinion tables, the Indian programs were subsumed within the generic program type where possible.

rather than both. The health officials in the more isolated areas, and those that had to make large investments in transportation, often expressed a need to have funds with to buy local products, which they saw as potentially improving the frequency of supply and lowered cost.

With the few described exceptions, both the participants and the health professionals in the local centers agreed (80%) with the kinds of foods that were being provided. The respondents from the national offices, however, were divided in their opinions; some suggested foods with more calories while some wanted foods with more protein. (Table 36) Most of the other suggestions had to do with more or less of one or more of the PL 480 products. It should be noted that the "more protein" or "more calories" argument was always stated by those in the national offices, never in the local health centers.

Table 36: Frequency of Suggestions on the Kind of Foods Distributed

Comment	No.	%		No.	%
Need more protein	6	7.0	More CSM	7	8.0
Need more calories	18	20.9	Less CSM	2	2.3
Need local foods	28	32.6	More oats	6	7.0
Need Incaporina	1	1.2	More oil	4	4.7
More milk	12	14.0	More corn meal	2	2.3

*Note: Only 36 persons out of 471 gave suggestions for changes.*

Another type of comment that was frequently evoked from the discussion of the Food for Peace program was the containers. As noted in the management section, there was a considerable dissatisfaction with the newer, weaker cereal sacks. Additionally, as with some schools, the personnel complained about the weight of the sacks when they had to carry them long distances or up stairs. They also pointed out the problems related to measuring the individual rations out of the large sacks when they had little equipment for weighing, no small sacks in which to place the rations, and little or no help for the process. In a few clinics, a small charge was made to the recipients to pay for small plastic sacks for the foods; in most, the mothers brought some kind of container. Volunteers helped with the distribution in a few places, relieving the health personnel of that duty.

Although mentioned in the earlier description of the health facilities program, it should be reiterated that a viable referral system was in operation to assist the smaller hospitals and the outlying centers. Severely malnourished children or patients sufficiently ill from any cause, could be sent to one of the major hospitals in a larger nearby city or to the capital facilities. Radios were used to communicate with better facilities

to obtain assistance when needed, even though the health personnel had to go to the central radio and telegraph office or ask help from the National Guard, the Aftosa Service, or one of the commercial airline offices. Small planes could also be requested to fly emergency cases to more complete medical facilities. Some delays were reported but the isolated health personnel were appreciative of the service.

This evaluation must also emphasize the hard work and dedication of the health professionals in most of the sites. The staffs in the more rural areas are small, are on call twenty-four hours a day, and sometimes have quite limited facilities in which to carry out their medical assistance. The work is difficult and life is not easy in many of the areas. A considerable sacrifice is demanded of the professionals who work there. Despite these burdens, the evaluation team found these people to have great concerns for their patients, to be helpful to the study, and to welcome the researchers to their communities. The health personnel are to be highly commended for their efforts; the evaluation team sympathized with them and understood the deficiencies encountered in the centers.

Similarly, the health program of USAID/Panama is commended. Many new health centers and posts, and one hospital, were seen in construction or just completed all across the country. Through the joint efforts of the mission, the Ministry of Health, and the communities, facilities had become available where they had not existed before or where older facilities no longer met the needs of the population. The evaluation team recognized that the staffing of the new centers, in conjunction with maintaining an adequate staff in older ones, required a large expenditure on the part of the ministry and it no doubt explained some of the other shortages or deficiencies. Also mentioned in another context, but an important part of the broader health care system, was the family planning efforts underway. USAID/Panama and the Government of Panama had greatly extended that service and the health professionals saw its addition as a vital link in the total health care program.

No general evaluation of the Ministry of Health Maternal Child Health program had been conducted previously. Some years ago, Caritas had also had a sizeable number of MCH beneficiaries, and had conducted an internal evaluation of that program (6, 7, 8, 9). Many of the findings in those reports closely approximated what the present evaluation found in the Maternal Child Health food distribution program:

- . Nutrition education was found to be scarce and not well organized.
- . Food was distributed to normal weight persons as well as to those that were malnourished.

Interruptions in the distribution program occurred due to transportation problems.

Growth monitoring was sporadic and incomplete.

That organization, too, found that some foods arrived to the centers damaged or with insects, principally weevils, which reduced the size of the rations. The situation had not changed much in the intervening time since that evaluation was conducted in 1977. The CARE/Ministry of Health food distribution program still, in 1981, experienced most of the same problems.

An additional dimension to the problems which confront the Maternal Child Health program is the observation (resulting from a seminar funded by USAID, with ample assistance from the health professionals in Panama, in November of 1980) of a decline in nursing or breast feeding of children. A significant note in regard to the implications of this growing problem is that USAID and the Government of Panama have become interested, and are developing a realistic appraisal of the operational problems of establishing some supportive services for women who breast feed, and to improve nutritional methods of women and children. These are areas in which more technical assistance by USAID to reinforce the Food for Peace distribution program should be explored. (107)

An important factor in the MCH/CARE program is the long collaboration between the two institutions. They maintain frequent communication between themselves, and also with the Office of Food for Peace in USAID/Panama. Special note should be taken of the cooperation between the three institutions in program planning and extension of health facilities to rural areas. Too, a new procedure provides for periodic meetings to examine the inspections of the facilities, to coordinate their efforts, and to ensure that each shares the information obtained by the others. This cooperation strengthens the program, in addition to facilitating the use of the institutions' resources.

#### Day Care and Infant Feeding Programs

The changing society in Panama had brought about many of the difficulties experienced by families in other countries. More married women find it necessary to work; additionally, there is an increasing number of single women heads of households. While in some areas the extended family is still strong, and some members are available to care for the children of working mothers, in others that tradition has weakened, making it difficult for women to carry out their home duties and at the same time, work for a living.

One of the responses in Panama, as in many other places, has been

the extension of the day care center programs. The Ministry of Labor and Social Welfare, through its Office of the Child and the Family, now supervises and supports the majority of these centers. The voluntary agency CARE has some programs which include day care centers. The majority of these centers admit three to five year olds, but of necessity, some admit younger or older children. Some of these centers included kindergartens when these were not available in the local schools.

In almost all of the centers, the Food for Peace commodities are cooked and then fed to the children on the site; in a few, the cooking is done at a school and taken to the day care center, but in most, a kitchen is included in the day care facilities. In a few cases, the mothers prepare the food in their houses and then take it to the centers.

The Ministry of Labor and Social Welfare programs also receive some monetary subvention from the government, a part of which is often used for products other than those of the Food for Peace; that is, they supplement the latter in programs that operate for an extended period each day.

The centers are run not just as nurseries, but as educational programs. The children are taught social skills, language improvement, and some basic things about personal hygiene. In all of the independent centers, that is, those that are not attached to schools, the mothers are also required to attend sessions in which they are taught about nutrition, hygiene, family planning, and general health care. That part of the program is seen as human development by the Ministry of Labor and Social Welfare.

The day care centers have not monitored growth in a formal way in the past. Referrals to health facilities are made when children are ill or malnourished, and the personnel there keep the records required by the Ministry of Health. The independent day care centers keep the monthly records specified by CARE; those attached to schools complete the Ministry of Education report.

Food for Peace products are also utilized in the infant feeding programs sponsored by Caritas. In those, the children come to the feeding centers to receive the cooked foods made from the commodities. They do not remain there for day care. In one, the foods were cooked on site; in the other, the stove no longer functioned and volunteer mothers cooked the commodities and brought them to the center for distribution. This same procedure was found in a program attached to a school, but in that case, the school had no cooking facilities, and the foods for both the school and the preschool children had to be prepared by the mothers in their homes.

The Caritas program insists on educational sessions for the

mothers in connection with the infant feeding programs. In one, the resident personnel provided the lectures on nutrition, health, and sanitation. In the other, a Ministry of Health community liaison conducted the sessions. In both the Caritas sponsored infant feeding programs, the work was coordinated with the local Ministry of Health program so that the children were not receiving additional rations through a Maternal Child Health program.

A major element in both the independent day care center and the infant feeding programs was the large amount of volunteer work carried on in connection with them. Fund raising activities to provide additional foods, equipment, and supplies were conducted by the communities. Demonstration and communal gardens were also found in conjunction with the programs. In one, a communal garden was taken care of by community members who were paid from the community government. The produce was utilized by the infant feeding program for a more substantial meal than just the supplement made from the Food for Peace commodities.

The combination of the human development components through the education given to the mothers, and the family/community development assistance that could emanate from the gardens, was seen by the team as a very positive factor. The programs were helping improve the immediate nutrition needs of the children and at the same time conducted activities that should decrease the amount of malnutrition in the future.

One of the internal evaluations conducted by Caritas (6) looked at the infant feeding and day care center programs in one section of the country. At that time, the study team concluded that:

- . The community participation was increasing and showed considerable evidence of aiding the development of the community.
- . The level of nutrition knowledge by some of the staff members was deficient and needed improvement.
- . The communities had increased their participation to the extent that they were paying most of the transportation costs for bringing the commodities to the centers.
- . The growth monitoring procedures had not been followed adequately, therefore, it was impossible to use them to measure the impact of the program.

The present evaluation found that both community participation and the nutrition education activities were at a relatively strong level considering the other programs in the country. The lack of growth monitoring records was still very evident, and should be remedied as soon as possible.

## Residential Feeding Programs

The residential programs partially supported by the Food for Peace commodities comprised several quite different operations: homes for the elderly, homes for minors, a vocational school, an industrial training school, and an orphanage. The commodities were furnished through Caritas; that agency, in addition to providing some of its own personnel resources, worked in conjunction with religious groups from Roman Catholic and other churches in Panama. The Office of the Child and the Family of the Ministry of Labor and Social Welfare, the Institute for the Formation and Utilization of Human Resources, and Caritas coordinate their resources to provide the necessary services. Most of the programs combined nutritional improvement or subsistence, self help, and developmental activities.

The homes for the elderly assisted only those who were destitute and whose families could not help them. One of the homes was for bed ridden patients who required almost twenty-four hour care. In that institution, no self help or developmental activities were possible. The participants in one did not actually live on the premises but at home, coming to the center for their only substantial meal each day. In the others, the patients were mostly ambulatory, and could help with the work of the home, the garden, and some simple small animal raising.

In all of the homes for minors and the elderly, the Ministry of Labor and Social Welfare provided a monetary subvention that partially paid the expenses and the personnel. The buildings, equipment, and some of the personnel time were furnished by various religious groups. Caritas supplied used clothing and some other help such as medicines. Contraband seized by government control agencies was distributed partially to these institutions, shoes and rice were in evidence from this source during the evaluation. Supervision and some technical assistance were given by the Ministry of Labor and Social Welfare, which also arranged for some of their medical care through the Ministry of Health.

Food for Peace products, through Caritas, were supplied through the humanitarian relief clauses of PL 480. Some self help was evident, but the program could not be said to be developmental. It could be argued that the Government of Panama should take total responsibility for these elderly citizens; the subventions allotted, however, were insufficient for the required care. Unless a more complete arrangement can be made with the government authorities, the very small Food for Peace investment (less than \$30,000) should remain as a part of its humanitarian relief activities.

Homes for minors, orphans, abused children, children of broken homes, and youngsters from homes so destitute they could not provide their care were viewed as a combination of humanitarian relief, self help, and development. A major aspect of each one

was that the children, while attending the local education facilities, also received additional instruction in vocational subjects, family life, health, and nutrition in the home. Further, each helped with the work in the home itself, helped make their own clothing, and participated in the raising of a garden and small animals. The combination was expected to help them become much more productive citizens than they otherwise would have the opportunity to become. While no study of the "graduates" was conducted, the successes of some of those that had gone on to secondary school and university, into good paying jobs, and who also helped other members of their families, were some testimony to the developmental aspect. Three elementary teachers in one town proudly declared themselves "graduates" of the local home for minors. They were also contributing to the future of the girls in the home by volunteering a great deal of their time to the activities of that agency.

The homes for minors were mostly administered by religious nun's groups, but one each was also managed by the Institute for the Formation and Utilization of Human Resources, another group from the Catholic Church; assistance was given by the Union Church, social security benefits, health care by local Ministry of Health facilities, contraband seized by the government agencies, and a subvention by the government. Caritas also supplied used clothing and some other supplied from its charity program. All of the homes for minors are supervised by the Office of the Child and the Family of the Ministry of Labor and Social Welfare.

The evaluation team was impressed by the combination of nutritional assistance through the Food for Peace commodities, the self help evidenced in the homes, the several sources of assistance, and the strong developmental activities. A vital part of the environment, happy and productively occupied children, was seen as a very positive aspect. Again, it could be argued that the government and/or the other organizations should be providing all the assistance, but at the time of the evaluation, it took the combination to make the work possible. The very tiny PL 480 investment was more than justified as a US contribution to future adults.

Most of the aspects of the Food for Peace participation in the vocational institution for Choko Indian adolescents will be covered in the section on food for work and development, since the primary component in that program was equipping these youngsters to take a productive part in their own economic life. Caritas, the Institute for the Formation and Utilization of Human Resources, the Ministry of Education, the Ministry of Health, and the Ministry of Labor and Social Welfare all combined their resources into the provision of the services and the supervision. Food for Peace was a relatively minor contributor to the program but that part was important since so many of these young people were malnourished; their optimum development required a high protein intervention if they were to realize their full potential. Self help, extra educational opportunities, and

strong development were characteristics of this program. The evaluation team was strongly in favor of continuing the PL 480 efforts in this endeavor.

The industrial program for adult Indians also received assistance from most of the same institutions listed for the vocational school. The participants remained in the residence a much shorter time, and there were limits to the industrial skills they could gain in the program because of their other obligations and their previous education and experience. Nevertheless, those who continued in the program had made progress and many had been placed in jobs subsequent to their training. The miniscule Food for Peace assistance was certainly justified from both the humanitarian and development standpoints.

No growth monitoring activities were undertaken in the residential programs. Almost all of them were said to have been malnourished when they became participants, and those that had been in the program for two or more years now were vastly improved. The storage of the Food for Peace commodities, the record keeping, and the reporting were as good or better than in the other PL 480 assisted programs. The combined value of the commodities and their transportation/administration costs were low in comparison to most of the others, since those were arranged for by the institutions. In many ways, especially from the self help and developmental aspects, most of them were more consonant with the present orientation of the Food for Peace program than were the major categories of assistance in Panama. Some officials had expressed doubt about the legality of their inclusion but since all the several types of recipients in these residential programs were also being helped in some ways through the regular Ministry of Health and Ministry of Education PL 480 assistance, no justification for their termination was seen.

#### INDICATIONS OF NUTRITIONAL IMPACT

The problems of determining nutritional impact of a program have already been described in the early sections of this chapter. They were all applicable in the present evaluation. Reiterating those most salient to the Food for Peace efforts in Panama is useful, not only in comprehending the limitations of the present effort, but also in giving some indications of work that should be done in the future:

- . Schools, most preschool programs, residential programs, and the development projects did not measure growth data or had just begun to do so.
- . Most health facilities conducted some growth monitoring, including weight and height.

- . Growth monitoring records in the health facilities were for other purposes, often poorly organized, and sometimes quite incomplete.
- . Growth monitoring data and Food for Peace commodity issuance were rarely coordinated.
- . The evaluation team could not measure growth; it depended upon collecting data existing in the centers.

Furthermore, the conditions of the food distributions, even had direct data on growth and commodity ingestion been available, were such that the effects of the commodities could not have been related directly to growth changes in most centers.

- . The commodities did not always arrive on time, causing interruptions in the provision of the supplementary foods.
- . The disparity between the authorized and real number of recipients was so great that centers issued rations only for short periods or reduced the size of the rations.
- . Damaged commodities through insects, container breakage, and rodents still further reduced the distributions in some cases.

Some programs also received other commodities from other sources; while these were relatively rare among the health facilities that provided most of the growth surveillance data, the addition of milk products and substitutes, sugar, and other local products in a few instances, and local contributions were sources of impact contaminations when they occurred.

Another element in the programs that has generally been found to reduce measurable gain data, was that in many of the programs, the children were already at normal weight when they began the utilization of Food for Peace commodities. Children at normal weights increase their gains little or none when supplementary feeding is given.

Equally important, when the Food for Peace commodities were taken home by the mothers, they were often used for other members of the family, not just the intended beneficiaries. Although a higher proportion of mothers in the Panama study reported utilizing the commodities only for the preschool children, the number spreading them over other children and even adults was sufficient to cause impact differences.

The present growth data, then, as stated in the limitations to this evaluation, do not pretend to infer that the Food for Peace commodities have or have not had the desired nutritional effects for which they were intended. They do provide some information that in conjunction with other data, would be helpful in assessing programmatic effects. The amount of data collected, much greater than expected from preliminary reports, also indicates that additional studies could, at relatively low expense, contribute to the knowledge of children's growth in Panama. Finally, with some further refinement of the record keeping procedures, the relationships between the utilization of the Food for Peace products and the children's growth could be ascertained much more exactly.

#### The Food for Peace Program and the Needy

While actual numbers of the malnourished in Panama were not discovered, some indications of the program coverage could be gleaned from the census figures and the reported percentages of malnourished children. The proportions varied from 40% to 67% for preschool children; about 360,000 would fall into the age bracket and if an intermediary figure of 50% malnourished were true, 180,000 preschool children would be malnourished. Since that number is much greater than the total beneficiaries in the PL 480 program, it would have to be concluded that not all of them are being served.

The opinions of the interviewees in the present study, detailed in Table 37, were not all in agreement on the proportion of the needy that were served. Surprisingly, some areas and programs were judged to be satisfying 80-100% of those that needed the supplementary feeding. Substantial percentages of respondents from Darien Province and those from the day care centers felt that the program was not reaching even half the intended beneficiaries. National and provincial professionals also tended to judge lower percentages served; interviewees related to health care programs also had a sizable percentage judging low coverage.

Respondents' suggestions on how to improve the participation of the program, in terms of what is needed, included a wide variety of replies. (Table 38) Apparently the perceived criterion needed in the program was that it should serve the low income families; almost 45% of those making suggestions included that information. Indications of some persons not receiving the help at the time of the survey were also given: elderly, adults, adolescents, tuberculosis patients, other ill persons. Only a very few thought that only the malnourished should be issued the rations.

Table 37: Summary of Distributions and Means of Interviewee Opinions about the Proportion of Needy Served by the Food for Peace Program: by Province, Type of Interviewee, Commodity Source, and Type of Institution

Variables	Percentage of Respondents					Mean Rating (See note)
	Respondent Estimates of Needy Served					
Province*	20%	40%	60%	80%	100%	
Darien	20.8	37.5	25.0	8.3	8.3	2.46
Panama	9.2	18.5	10.9	15.1	46.2	3.71
Colon	11.8	0	35.3	35.3	17.6	3.47
Cocle	10.5	17.5	7.0	24.6	40.4	3.67
Herrera	11.1	27.8	16.7	5.6	38.9	3.33
Los Santos	6.7	26.7	0	33.3	33.3	3.60
Veraguas	18.6	10.0	5.7	10.0	55.7	3.74
Chiriqui	20.7	8.7	6.5	21.7	42.4	3.57
San Blas	0	4.8	0	23.8	71.4	4.62
<b>Interviewee Type</b>						
National Professional	16.7	20.0	16.7	20.0	26.7	3.20
Provincial Professional	17.1	22.9	3.6	22.9	28.6	3.23
Local Professional	13.7	16.3	11.5	15.6	43.0	3.58
Participant	11.3	8.2	3.1	22.7	54.6	4.01
<b>Commodity Source</b>						
CARE	14.2	15.6	9.9	18.0	42.2	3.58
Caritas	10.0	11.7	8.3	18.3	51.7	3.90
<b>Institution Type**</b>						
Education	10.4	11.5	9.3	20.9	47.8	3.84
Health	17.7	18.8	10.9	15.6	37.0	3.35
Homes for Minors	9.1	22.7	4.5	13.6	50.0	3.73
Homes for Elderly	14.3	0	42.9	14.3	28.6	3.43
Food for Work	0	12.5	0	25.0	62.5	4.38
Day Care Centers	66.7	33.3	0	0	0	1.33
Infant Feeding	11.1	11.1	0	44.4	33.3	3.78
Adult Indian	0	10.0	0	0	90.0	4.70
All Interviewees	13.6	15.2	9.7	18.0	43.4	3.62

NOTE: 20% = 1; 40% = 2; 60% = 3; 80% = 4; 100% = 5, which are different from those on all the opinion tables.

\*San Blas is a comarca (territory), not a province, but it has been included with that factor for convenience.

\*\*Several programs included Indian recipients, several of them exclusively; in the opinion tables, the Indian programs were subsumed within the generic program type where possible.

Table 38 Frequency of Suggestions\* on Program Participation

Suggested Participants	No.	%
Whole community	5	3.2
For all low income	70	44.6
Only to malnourished	4	2.5
Elderly	7	4.5
Adults	11	7.0
Adolescents	22	14.0
TB patients	8	5.1
Other ill persons	11	7.0
As stimulus to health care	3	1.9
Require attendance	7	4.5
Not require attendance	5	3.2
Ensure only 1 ration/person	4	2.5

\* Only 157 of the 471 interviewees gave suggestions about program participation.

An important aspect of both the reviews of the programs as they are conducted and the opinions of the professionals on how they should be carried out, was that very few saw Food for Peace as principally for the malnourished. Program managers and national/regional officials were strongly of the opinion that prevention of malnutrition was a major criterion. Only in a few areas were there those who wanted targeting the distribution of the food to high risk and severely malnourished to be a part of the program operations. As mentioned, some did feel that the products should go to low income families, but even that was not necessarily intended to exclude others. Some attention to malnutrition and low income families was given in the voluntary agency plans, among other criteria.

#### Opinions on Nutritional Impact

While by no means an exact measurement, the opinions of the professionals who work with the beneficiaries have considerable merit. First, most of them saw the recipients at the beginning of the supplementary program and have continued to see them during its application. In many cases, they also have knowledge of the intervening variables present in the lives of the recipients. The program personnel have concrete information on the size of the rations and any instances of interruption or non-attendance. Their estimates, then, furnish useful information. (Table 39)

Relatively few program managers believed that the rations issued completely met the need of the participants. Almost half, however, estimated that the commodities "substantially" met the needs. In fact, in all the provinces except Chiriqui and the Comarca of San Blas, the combination of Substantially plus

Completely accounted for at least half the respondents. "Moderately" was the estimate in these two areas. Since these were all health professionals, the for the most part favorable opinion was a positive indication.

Table 39: Frequencies and Means by Province of Program Managers' Estimates of the Participant Needs met by the Food for Peace Products.

Province/ Comarca	Percentage					Mean Rating*
	Very Little	Somewhat	Moderately	Substantially	Completely	
Darien	0	20	20	40	20	3.6
Panama	0	0	40	60	0	3.6
Colon	0	0	20	80	0	3.8
Cocle	12	12	25	51	0	3.1
Herrera	0	0	50	50	0	3.5
Los Santos	0	0	0	75	25	4.2
Veraguas	0	20	20	40	20	3.6
Chiriqui	0	14	72	0	14	3.1
San Blas	0	25	50	25	0	3.0
Total	2	11	34	45	8	3.5

\* *Very little = 1; Somewhat = 2; Moderately = 3; Substantially = 4; Completely = 5.*

In fact, the standard ration in the Panama programs, when distributed in full, provided a high proportion of the calorie and protein needs of the recipients. (Table 40 contains the full ration contributions.) The high protein content of the commodities oversupplied the protein requirements of the children and added considerably to their calorie intake. (See also Appendix E)

Table 40: Contributions of the Full Standard Rations to Calorie and Protein Needs by Recipient Categories.

Recipient Category	% Calories	% Protein
Mothers:		
Trimester 1 of pregnancy	27.4	84
Trimesters 2,3 of pregnancy	25.1	63
Lactating	23.2	56
Children:		
6-8 months	62.2	210
9-11 months	58.6	189
1 year	52.5	158
2 years	44.7	135
3 years	38.9	126
4-6 years	34.5	115

*Note: The ration also furnishes 27.3% of the iron needed by mothers and 76.4% by children.*

The estimates of the program managers, taken in light of the amount of commodities received by the participants, was quite likely highly correlated with the potential contributions. Their substantial agreement with the kinds of foods distributed, shown in Table 35, was in keeping with their assessment of the contributions.

A very high proportion of the interviewees in the opinion study were agreed that the commodities had helped the health of the recipients. (Table 41) The only groups even expressing indecision were the national professionals, some of whom had earlier noted a need for more calories, and the homes for the elderly, some of whom had also suggested the elderly require less protein than do younger people. Most of the latter institution professionals judged the Food for Peace commodities in keeping with the needs of the elderly when viewed in the light of the other foods that could be obtained on a limited budget, primarily starchy foods. In summary, then, the interviewees, both the professionals and the participants, were in substantial agreement with the program offerings.

#### Nutritional Status of the Sample Children

The weights of the sample children collected during the evaluation were examined in two ways. First, using the Ministry of Health growth curve charts, the number of children in each category of the nutrition degrees, adapted from Gomez, were determined so they could be compared to the reported status in the publications. Second, their weight changes over a six month period were calculated by age group to assess the adequacy of the changes. (Table 42)

The percentage of normal weight children, using the Ministry of Health categories, was substantially higher than that expected from the publications, even though the large number attended by hospitals for illness or malnutrition might have given fewer normal weight children in the sample. Second and third degree children summed to less than 15%, which agrees almost exactly with the -2 SD from the median in the new report on the national survey. Even that amount was sufficient for remediation measures in the nation. Somewhat more boys than girls were in these two degrees.

Table 43 displays the mean six month gains of the sample children. Generally, the greatest gains were among those of 0-6 months of age, which is commonly found. Although the data are somewhat uneven, the third degree children tended to gain more than those in the other groups. That coincides with the Ghana findings. (46) The mean gains of the 0-6 month age group and the third degree children were about those proposed as adequate by Jelliffe (44). The others were below. A part of the differences may have been due to different population characteristics, since the Jelliffe

Table 41: Summary of Percentages and Means of Interviewee Opinions on whether the Food for Peace Commodities Have Helped the Health of the Participants: by Province, Type of Interviewee, Commodity Source, and Type of Institution

Variables	Percentage					Mean Rating
	Completely Disagree	Disagree	Neither	Agree	Completely Agree	
<b>Province*</b>						
Darien	0	0	4.2	20.8	75.0	4.71
Panama	0.8	0.8	5.7	13.0	79.7	4.70
Colon	0	0	5.0	5.0	90.0	4.85
Cocle	0	0	0	7.0	93.0	4.93
Herrera	0	0	0	10.0	90.0	4.90
Los Santos	0	0	0	11.8	88.2	4.88
Veraguas	0	0	1.3	13.9	84.8	4.84
Chiriqui	0	1.0	3.0	15.0	81.0	4.76
San Blas	0	0	4.8	4.8	90.5	4.86
<b>Interviewee Type</b>						
National Professional	0	0	13.8	20.7	65.5	4.52
Provincial Professional	0	0	2.8	13.9	83.3	4.81
Local Professional	0.3	0.7	2.7	13.3	82.9	4.78
Participant	0	0	1.0	6.9	92.2	4.91
<b>Commodity Source</b>						
CARE	0.5	0.5	3.1	13.4	82.7	4.78
Caritas	0	0	2.8	6.9	90.3	4.88
<b>Institution Type**</b>						
Education	0.5	0.5	2.6	17.3	79.1	4.74
Health	0	0.5	4.1	8.8	86.5	4.81
Homes for Minors	0	0	0	12.9	87.1	4.87
Homes for Elderly	0	0	10.0	0	90.0	4.80
Food for Work	0	0	0	12.5	87.5	4.88
Day Care Centers	0	0	0	0	100.0	5.00
Infant Feeding	0	0	0	11.1	88.9	4.89
Adult Indian	0	0	0	0	100.0	5.00
All Interviewees	0.2	0.4	3.0	12.4	83.9	4.79

NOTE: Completely disagree=1; disagree=2; neither=3; agree=4; completely agree=5 on all the opinion tables.

\*San Blas is a comarca (territory), not a province, but it has been included with that factor for convenience.

\*\*Several programs included Indian recipients, several of them exclusively; in the opinion tables, the Indian programs were subsumed within the generic program type where possible.

Table 42: Percentages of Sample Children by Age Group in the Weight for Age Categories of the Panama Ministry of Health System

Age in Months	Percentage of Children							
	Normal		First Degree		Second Degree		Third Degree	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
0-6	6.5	6.0	2.5	2.7	2.1	0.8	1.4	0
7-12	7.1	6.0	2.1	2.3	1.3	0.8	0.8	0.8
13-18	5.4	4.7	2.9	3.2	2.1	0.4	0.4	0.4
19-24	5.4	5.6	2.5	2.7	0.8	0.8	0.4	0
25-30	5.8	5.9	2.9	3.9	0.4	2.0	0.4	0.4
31-36	5.4	5.6	2.5	2.3	1.3	0.4	0	0
37-42	5.0	5.1	2.5	0.8	0.4	0.8	0	0
43-48	4.6	5.9	2.1	2.7	0	0.4	0	0.4
49-54	5.4	4.3	1.7	3.1	0.4	0.4	0	0
55-60	5.0	4.7	2.1	2.9	0.4	0.4	0	0
61-66	3.4	3.1	0.4	1.0	0.4	0	0.4	0
67-72	2.6	2.9	0.4	1.1	0.4	0.4	0	0
All	61.6	61.7	24.6	28.9	10.0	7.4	3.8	2.0

NOTE: No. of Boys = 236; No. of Girls = 242; Total No. = 478.

Table 43: Mean Six Month Gains of Sample Children by Adapted Gomez Classification and Age Group at beginning Measurement

Age in Months	Mean Gains in Kilograms								Total	
	Normal		First Degree		Second Degree		Third Degree			
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
0-6	2.7	2.2	2.9	2.9	2.4	2.5	1.9	-	2.6	2.4
7-12	1.2	1.6	1.1	1.1	1.6	1.2	2.0	2.1	1.3	1.3
13-18	1.3	1.6	1.4	1.0	1.1	1.3	2.6	2.3	1.3	1.4
19-24	0.8	1.4	0.9	1.4	1.4	1.9	1.6	-	0.9	1.4
25-30	1.3	1.6	1.4	1.6	1.7	1.4	2.1	2.1	1.4	1.5
31-36	0.8	1.0	0.9	0.8	0.9	1.0	-	-	0.8	0.9
37-42	1.2	1.1	1.0	1.2	1.3	1.2	-	-	1.2	1.1
43-48	1.2	1.1	0.5	0.9	-	1.8	-	-	1.2	1.0
49-54	1.7	1.4	1.5	1.4	1.5	1.0	-	-	1.6	1.3
55-60	1.8	2.0	1.1	1.4	-	0.9	-	-	1.4	1.4
61-66	1.7	1.6	1.4	1.6	1.4	-	-	-	1.5	1.6
67-72	1.8	1.6	1.3	1.4	-	0.9	-	-	1.5	1.5
All	1.5	1.4	1.6	1.5	1.7	1.9	2.0	2.1	1.5	1.4

samples were from the United States. The data indicate, however, vigilance is needed and that probably studies of gains in Panama should be conducted.

Graphic VI illustrates more clearly than the tables, that the seriously malnourished children had higher gains than their counterparts. It is easy to ascertain that at certain ages, the gains were double those of children in other percentile groups. These dramatic gains in weight of seriously malnourished children when they receive the Food for Peace products add dimension to the impact of the Food for Peace program in Panama, despite the fact that establishing an absolute relationship between these gains and the provision of Food for Peace commodities was not possible. In summary, despite the limitations of the data on growth that were compiled by the evaluation team, everything indicates that a considerable need for the supplementary food program exists in preschool children.

Both the national survey and the present evaluation indicate groups of children with a sharp need for the supplementary nutrition program. Considering the limited amount of resources for the program, careful measurement of children, classification of them according to the measurements, and concentration of the products' use on those who need them most become extremely important to the program. Medical staff emphasized the utility of the products to cases of severe malnutrition. At the present time, some health centers are selecting the most needy to receive the Food for Peace commodities. Formalizing this system, and putting it into practice in all the centers would not seem to be difficult, and it would have the advantage of maximum help to children and mothers who are highly malnourished or at high risk of becoming so.

#### POTENTIAL FOR OTHER IMPACTS

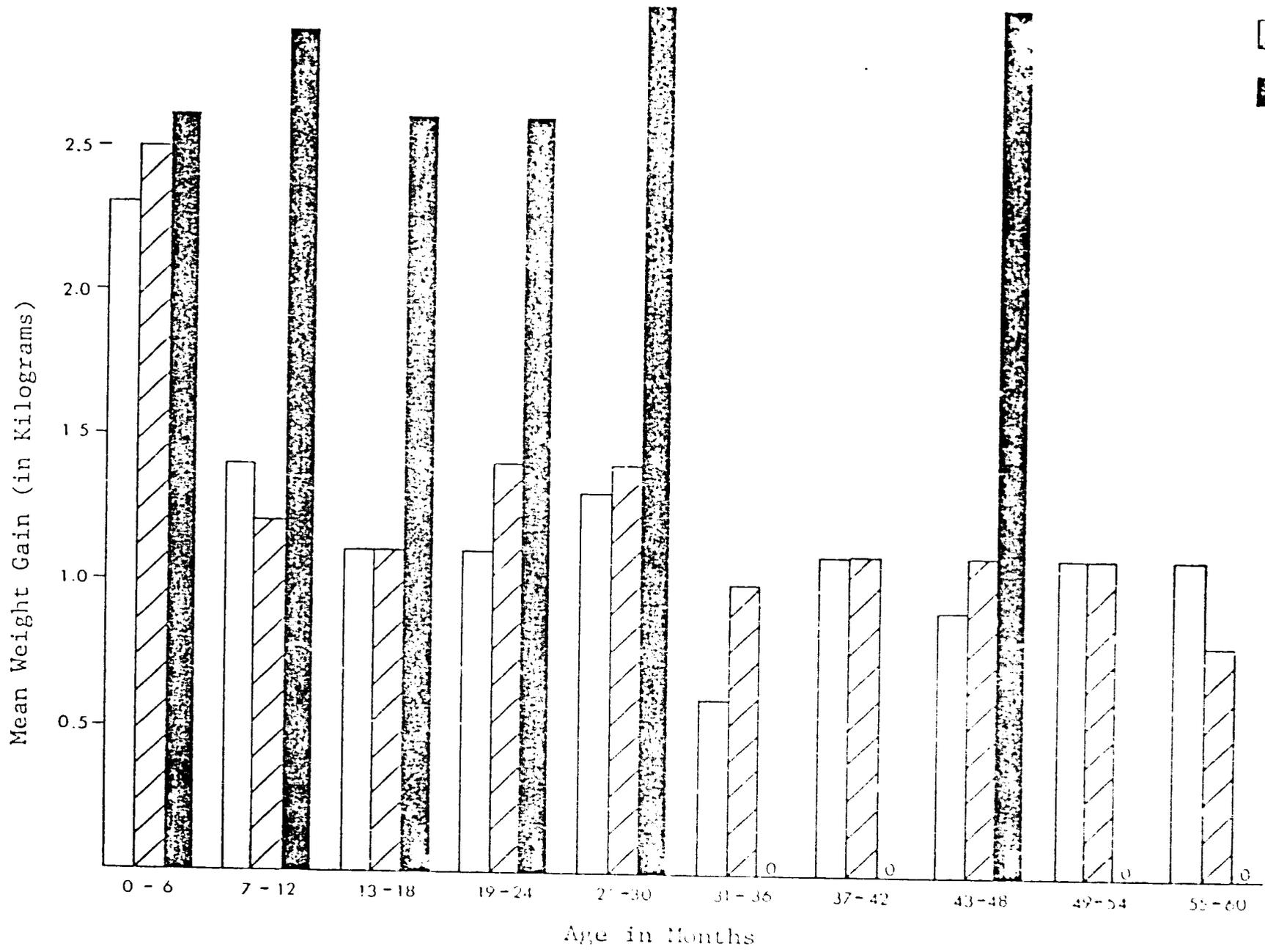
US Public Law 480 and the several publications concerning it suggest several benefits that may be derived, other than emergency humanitarian relief and assistance to the malnourished. Activities that would strengthen a nation's ability to help itself in the future are frequently mentioned. Food for Peace, in combination with other assistance programs is expected to accomplish some degree of that goal. (91, 103) Economic aid to individual families has also been championed as a potential benefit in that they might then advance in economic freedom from charity. (14)

Unintended effects may also occur. Disincentives to agricultural production have sometimes been found. (42) Help may be misdirected, causing undesirable side effects, such as poor public relations.

Growth Data, by Age Group in the Sample Children, using the Panama Ministry of Health "Weight Curves for Nursing and Preschool Children"

PERCENTILES  
 □ 75-100  
 ▨ 50-74  
 ▩ 59 or less

DEVELOPMENT ASSOCIATES, INC.



## Food for Work and Development

The United States Agency for International Development has expressed increasing concerns about the utilization of the Food for Peace commodities in fostering lasting development activities in the recipient nations. (84) Seminars and workshops are being conducted to increase that aspect of the program. The USAID country development strategy papers have begun to reflect those concerns. (91) Despite these efforts, Food for Work and Food for Development activities have been found to be almost negligible in most countries. (46, 70, 76) At the same time, reports continue to emphasize that the imbalance between the production of food and the population growth is becoming increasingly great (3, 4), including Latin America. Panama is no exception (51, 52, 81). The United Nations, too, has become more and more concerned with this dilemma, and except for relief in dire emergencies, has focused all its food resources on development (46, 82).

The management of Food for Peace commodities in fostering development, however, is much more complicated than for humanitarian reasons. Many officials of the voluntary agencies, therefore, are reluctant to engage in expenditure of resources in that direction. (46) CARE/Panama, for example, was associated with only one Food for Work program, and it did not actively participate in the planning or execution of that effort. Caritas in Panama, while devoting a considerable amount of its energies toward that end, conducted such a small Food for Peace program that the total contribution, in terms of the need in Panama, was relatively minor. That statement is not intended in any way to reduce the positive judgement of the evaluation team about its developmental efforts, but instead is made to help point out the need for substantial increases in that type of program in Panama.

The several projects to aid work and development have been described in other sections of this report: little elaboration on them is needed in this portion. They comprised a wide array of activities, some of which are not commonly included in Food for Work and Food for Development:

- . construction of an access road;
- . a vocational training school;
- . an industrial training school;
- . work training for single women heads of households;
- . vocational training in homes for minors;
- . the development of school and community gardens and farm production, paid for by other entities

in the communities while the Food for Peace commodities provided intermediate help to certain needy segments of the population;

- . the stimuli to start and increase gardens and other food production activities in homes for the elderly; through clinic and school demonstration gardens; the raising of garden produce and small animals in homes for minors;
- . the strengthening of some communities' potential to help themselves through the development of cooperatives; committees to manage community services; community members' responsibilities to help through fund raising, the provision of transportation, and repairs/construction of facilities.

Similarly, since the United States is a major contributor to the United Nations World Food Programme, the beginning work in re-forestation and agricultural production of the United Nations Development Programme in Panama must be noted as potentially of considerable effect.

In addition to their developmental aspects, these efforts were also providing education on nutrition, child care, hygiene and general health care, family planning, and other home life skills in most cases. Almost all of them came closer to meeting the Food for Peace goals than the general assistance programs making use of PL 480 commodities in the nation and yet they accounted for a minor portion of the total investment by the Government of Panama or the Government of the United States. A major deficiency in most of these programs was that little, if any, effort was expended in the measurement of nutritional impact; but to a considerable degree, that was also true of the general assistance Food for Peace programs in Panama.

The idea of food for work and development was espoused by many of the interviewed officials, but at the same time they complained that it was difficult to obtain cooperation in most communities. That complaint may be valid but the conduct of many of the previously discussed projects, and the observations by the evaluation team of a great deal of volunteer efforts in some communities, suggested that under the right conditions, additional cooperative effort could be fostered. Technical assistance, especially that related to agriculture, was said to be scarce. The renewed interest of the Government of Panama in re-establishing a rural extension service might help solve that problem. The idea of inter-agency cooperation to help communities develop already exists and could be expanded. In one of the sample communities, the ministries of Education, Health, Agricultural Development, Public Works, and the National Guard were working on an integrated plan. Government of Panama encouragement of that kind of effort may augur

well for community development. USAID/Panama and the volunteer agencies should explore ways of cooperating with such a plan to help foster better conditions for the population.

#### Economic Significance to Panama

Panama enjoys the second highest per capita income in Latin America, and certainly it is much higher than many other nations of the world. The government has placed a considerable portion of its resources into developing its capacity to produce and in its services provision. Since some of those aspects had been neglected in the past, there was an accumulation of needed improvements that caused a severe drain on its financial resources. International and bilateral agreements were pledged to help the Government of Panama in its efforts to improve. The income from the Panama Canal was seen by some as obviating a need for continued assistance programs, but the maintenance, operation, and renovation of some of the facilities utilized the most part of the income. The USAID/Panama mission and many other agencies saw many benefits to continuing the assistance programs for some time to come.

The Food for Peace program represented about 25% of the US direct assistance program to Panama. As such, it represented a considerable investment in the nutrition of the country, and a major portion of that type of help from international and bilateral sources. Further, since much of the relatively high income of Panama was earned by a small segment of the population, some other parts of the nation still had not benefitted commensurately with the appearance of the per capita income. The Food for Peace contributions to those segments of the population were considerably greater than when viewed for the nation as a whole.

In addition, the PL 480 program was viewed in combination with the technical assistance given by the United States, other countries, and the investment in production by the Government of Panama. It was expected to serve primarily as a transitional measure between present needs and the future when development of the country could more equitably benefit the now disadvantaged parts of the population. In that perspective, the developmental aspects stimulated by the Food for Peace programs held special significance.

#### Economic Significance to Families

Inflation and the high cost of importing increasing amounts of the food consumed in Panama have brought about many hardships on families whose income is low. Rising unemployment has further complicated the lives of the poor, making work advancement slower and more problematic.

Absolute calculations of the value of the Food for Peace commodities could not be performed, since most of them were unlike regular products on the market and no cases of the sale of the commodities could be examined; that rarely occurred. Using roughly comparable dried milk, oil, and some grain products similarly used, would give an approximate value of twelve dollars for each ration for one month. For most of the underemployed and those on very low salaries, that was an appreciable contribution to the family welfare. For the unemployed, it represented even more.

It should also be pointed out that for the participants studied in this evaluation, the diets were characterized by low protein content. Further, many areas included in the study had very limited opportunities to acquire high protein foods even if they had the money to buy them. The relative value of the Food for Peace commodities was, then, quite high in terms of the need for such foods.

#### Possible Disincentive Effects

As noted in several sections of this report, the population of Panama has increased rapidly. Agricultural production, however, has not kept pace. Imports of foods have risen, but that also caused price rises which limited the capacity of many Panamanians to purchase those imports. The combination of these factors led to a tentative conclusion that no disincentive effects were immediately in evidence from the Food for Peace program. The amount of food per person has decreased despite all efforts at supply. It is unlikely that the provision of these commodities had any appreciable effect on prices, since in any event, much of the population served by the program could not have bought enough food in the market place to change the supply and demand relationships.

Further, the combined efforts of USAID/Panama to help the government increase food production, together with the assistance from other nations, was seen as having some effects. The estimates on grain production, for example, rose in 1981, the first time in many years. Thus the offsetting of possible disincentives because of lowered prices, which in any event did not happen, would more than make up any inclinations on the part of farmers to produce less. If any disincentives existed, they could not be ascertained among the several counter balancing components in the economic system.

#### Public Relations

Relationships between the United States and Panama have not always been friendly. Several periods of public unrest because of the canal and other aspects of the US presence in Panama are evident in history. (73) The new canal treaty has done much to resolve

problems in the minds of the people. Still, some measure of misunderstandings exist; many people do not know about US assistance to Panama or have only vague notions about it. When the people of the United States furnish technical and humanitarian help, it should be understood as an act of mutual friendship.

The Food for Peace program is such a contribution. That assistance has been provided in Panama in some form since 1953. Nevertheless, it would appear that many of the recipients, and indeed some of the professionals involved in the program, do not realize the origin of the commodities. As might be expected since the foods are channeled through voluntary agencies, those organizations are seen by most people as supplying the food. (See Table 44) While both CARE and Catholic Relief Services have roots in the United States, they do not per se provide the commodities although they do furnish other assistance.

The Government of Panama was also seen by many interviewees as the provider of the commodities. That, too, was understandable since the Ministry of Education, the Ministry of Health, and the National Guard have many functions in relation to them. Those entities are also the direct contacts with the local professionals and participants. Many participants did not know the source of the Food for Peace commodities, even when the products were described and even when they had them in their hands. They seldom see the original sacks and cans, since the products are subdivided into individual rations; that was not the case for the professionals who handle them, of course, so the relatively high proportion of professionals that incorrectly identified the source of the foods was surprising. (Table 44)

There was a noticeable difference in the proportion of CARE related interviewees (15.4%) and the Caritas respondents (50%) that attributed the commodities to either the US government or the people of the United States. Intermediary influence was less with the Caritas programs and they were also smaller, perhaps accounting for some of the greater correct responses. Some confusion in the press and in other segments exists about the origin of the commodities. (See the last column in the United Nations summary of assistance to Panama, Table 7 on page 43.) CARE, with such a huge program, is often given credit for providing the Food for Peace products.

This discussion does not intend to imply that the lack of knowledge about the source is a major fault in the system. It isn't. Nor does it imply that a campaign of some sort should be waged. It does imply, however, that the program is not well understood by many professionals and participants. Some efforts to acquaint them with the source might improve the public relations of the program and the United States.

Table 44: Distribution of the Reported Sources of the Food for Peace according to Professionals and Participants by Voluntary Agency.

	Percentage					
	CARE			Caritas		
	Profes- sionals	Partici- pants	Total	Profes- sionals	Partici- pants	Total
Caritas	1.1	0	0.8	34.4	18.2	27.6
CARE	54.8	17.3	46.8	0	0	0
US Govt.	10.4	25.5	13.5	37.8	9.2	29.3
People of US	2.5	0	1.9	13.9	31.8	20.7
Panama Govt.	23.7	19.5	22.8	0	4.5	1.7
Nat'l Guard	0	2.0	0.4	0	0	0
United Nations	0.8	2.0	1.1	2.8	0	1.7
Dr/Nurse/Tchr	0.8	2.0	1.1	8.3	0	5.2
Priest/Nun/Minister	0	1.0	0.2	0	9.1	3.4
Community	1.1	0	0.7	0	4.5	1.7
Don't know	3.0	27.6	8.2	0	22.7	8.7
No answer	1.8	3.1	2.5	2.8	0	0
Totals	100.0	100.0	100.0	100.0	100.0	100.0

#### IMPLICATIONS OF THE IMPACT FINDINGS

Data from studies of nutritional status in Panama before 1980 had brought about widely diverse reports on the amount of malnutrition existing among children. Comparison between them was also complicated by their utilization of different systems of standards and interpretations. Nevertheless, the incidence of malnutrition was uniformly reported as high. The information on calorie intake and protein intake seemed in contradiction to the incidence of malnutrition, since these often approached or surpassed the nutritional recommendations of the investigative institutions. The use of global means in almost all of the studies in Panama was problematic, as the majority of the beneficiaries of the supplementary nutrition programs were of low incomes and their nutritional intake was much lower than the mean of the country.

The 1980 National Survey of Nutrition adopted a uniform system for anthropometric measurements, and interpreted the data using the NCHS/USNAS standards. It used divisions of normal, -1 to -2 standard deviations from the mean, and below -2 SD, providing reference standards for the second phase of measurements in the survey and subsequent studies. Too, many variables potentially related to the prevalence of malnutrition, such as income levels, urban/rural, political region, food costs, and various descriptions

of living conditions were included.

Although all the analyses have not been performed, a draft report in 1982 and a thesis have supplied extremely useful data to comprehend malnutrition and its distribution. These data confirm the high incidence of malnutrition and the low calorie intake in families of low financial resources (the information on proteins has not yet been released at this time). The existence of a tendency toward even less calorie intake in rural areas than in urban zones, where malnutrition was greater, was shown.

The collection of data and its analysis has occupied much of the time of the personnel of the National Office of Nutrition, since this task is in addition to their normal duties. The second round of anthropometric measurements, scheduled for 1982, will add even more investigative work. Nevertheless, as soon as possible, the new questionnaires on growth vigilance in children should be completed, and training of the local professionals and use of the questionnaires in these local centers should be instituted. This is necessary so that mothers will understand the nutritional status of their children, and take appropriate nutritional action.

The collected data and the observations of the evaluation team coincided substantially with the information in the 1980 survey, in which malnutrition, using the divisions according to the standard deviations from the mean, was between 20% and 30%, unequally distributed through the country and almost all the centers. It seemed to depend principally on the family income levels, or these in combination with other conditions. Excluding certain concentrations of indigenous populations, and others of very low resources:

*Preschool children should be measured, classified according to the new system; and the use of supplementary foods concentrated on those seriously malnourished or at high risk of malnutrition.*

Guides should also be prepared to determine malnutrition in schoolchildren, pregnant and nursing women, and others who need special attention to diet. Some schools and health facilities are already identifying those most needy, and using their relatively scarce resources for those persons. The greater concentration on these persons will result in better utilization of the products.

The relatively high incidence of malnutrition and low nutritional intake in the rural areas, where theoretically the availability of food should be more favorable than in the urban areas, presents special problems for the government officials. This situation is attributable to a series of factors, the most important of which are:

- Unfavorable distribution and utilization of the land.
- Inadequate cultivation techniques, with the consequence of low production.
- Inadequate or harmful alimentary habits from the standpoint of nutrition.

*A nutritional education campaign should be mounted to give information on the effect of nutrition on health, the use of different foods for good nutrition, and the preparation of appetizing meals from them; this information should be efficiently carried to the heads of households.*

The few nutritionists who were found working in the field during this evaluation did not constitute a sufficient number to effectively institute substantial change in conditions. The personnel of the Ministry of Health should be greatly increased, or part of the work should be assigned to another government agency, which also would need additional personnel.

The other facet of the problem, the low food production, deserves more attention too. There seemed to be few agricultural engineers for the amount of work to be accomplished.

*There should be an increase in the availability of personnel specially trained to take knowledge and techniques of production to people in the field, with special attention paid to small farmers and other residents of areas where the production of foodstuffs is feasible, even if limited to gardens and small plantings.*

The evaluation team noted gestures on the part of some Panamanian government officials to reinstate some type of rural extension service. Such agencies have served admirably in certain countries to provide both the methods of production and information on nutrition and the adequate preparation of foodstuffs. It would be advisable to consider the inauguration of some service of this type.

Relatively few work or development projects were observed, although some of those which were seen had had salutary effects on improving knowledge about nutrition, and sometimes also producing increases in the production of foodstuffs. The success of these projects deserves a recommendation pertinent to the Government of Panama, the voluntary agencies CARE and Caritas, and the bilateral

programs:

*A greater production of foodstuffs should be encouraged everywhere there is appropriate land available for their cultivation.*

Indications of the possibilities for success of this kind of program are given by some projects sponsored by Caritas with the Ministry of Work and Social Welfare, in which cultivation projects were required, and in some previous CARE programs in which raising small animals, demonstration gardens in some clinics, and communal and school gardens were stressed.

Obviously, the cooperation of an agency such as rural extension would facilitate the production of foodstuffs. Additionally, the Government of Panama and agencies such as USAID/Panama can contribute to this effort. Donations and/or loans to individuals or groups such as cooperatives, municipalities, or local councils have shown results in some of the AID programs and those of the World Bank. The dissemination to producers of new techniques on cultivation, processing, and warehousing is essential (111, 113). Requiring activities favorable to the production of foodstuffs, in combination with other programs, has been successful in some cases in Panama and in other countries, diminishing the continual necessity for supplementary feeding.

Despite the great importance of the National Survey on Nutrition and the information which it is obtaining, another area of investigation also exists: the effects of the supplementary feeding. The evaluation of the PL 480 programs in Sri Lanka (110), and other studies have thrown doubt on the supplementary scholastic feeding program, or at least the measurement of effects attributed to the program. One part of the problem in studying the cause and effect relationships has been the control of the intake of the provisions; another part is the sporadic or intermittent supply of these foods. The information which could come out of the investigation of this program would contribute toward knowledge of the effects of supplementary nutrition, and at the same time, provide guidelines in the programming of these and similar programs.

To facilitate the study of causes and effects, and to fulfill the auditor's requirements, some local centers of distribution need a system and to be trained in its use. Precise data on the delivery of provisions to the beneficiaries was not available in certain cases. The information given often depended on estimates and/or the staff's memories. In many centers, forms to document the deliveries did not exist. Systematization would help the local personnel, the national offices, and the international agencies to better plan the programs.

The present evaluation has necessarily called attention to some factors which can be improved. Nevertheless, it should be emphasized that the good will, the hard work, and commitment of the personnel of all the institutions involved in the evaluation is a major factor in the success of the Food for Peace program. All want to run their programs in the best way possible to benefit the people of Panama. In many cases, they work with very scarce resources and not enough help. Special mention should be made of the personnel in distant and/or isolated sites; great difficulty and much sacrifice is needed to accomplish their labors. The evaluation team must congratulate the personnel in all levels of the programs.

Changes in the program have occurred following the evaluation; such as the formation of a commission of the agencies to better oversee the conduct of the programs. The rapid response indicated by this action shows the professionalism of the program. This overture and others which are now being considered indicate an improved future for the Food for Peace program in Panama, and for the health of the people of Panama.

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APPENDIX A - INSTRUMENTS

1. Full Site Questionnaire
2. Brief Site Questionnaire
3. Inspection Report
4. Growth Surveillance Data
5. Participant Survey
6. Opinionnaire
7. Market Survey
8. AID/Panama Evaluation Control Sheet

Center Code: \_\_\_\_\_ Date: \_\_\_\_\_  
 Community: \_\_\_\_\_ Interviewer: \_\_\_\_\_  
 District: \_\_\_\_\_ Respondent Type/Job Title: \_\_\_\_\_  
 Province: \_\_\_\_\_  
 Voluntary Agency: \_\_\_\_\_ CARITAS: \_\_\_\_\_ CARE: \_\_\_\_\_

FULL SITE QUESTIONNAIRE

I. GENERAL INFORMATION

1. Food distribution site: \_\_\_\_\_
2. Program administered by: M/Health  M/Educ  M/Labor
3. Food programs offered:  
 MCH \_\_\_\_\_ Schools \_\_\_\_\_ Child Care Centers \_\_\_\_\_ Food for Work \_\_\_\_\_  
 Elderly \_\_\_\_\_ Minors \_\_\_\_\_ Indians \_\_\_\_\_ Others \_\_\_\_\_  
 (Specify)
4. Other services available at site: \_\_\_\_\_

5. Program Participation Data:

	JUNE 1981		JULY 1981		AUGUST 1981		SEPTEMBER 1981	
	Prog.	Att.	Prog.	Att.	Prog.	Att.	Prog.	Att.
Pre-school Children								
School Children								
Pregnant Mothers								
Lactating Mothers								
Elderly								
Others (Specify)								

6. General comments about program participation (seasonal variation or other factors affecting attendance).

7. Type and quantity of food distributed per month:

	C.S.M.	Dried Milk	Wheat Flour	Oats	Soya oil	Rice	Beans	Sugar	Other
Pregnant Mothers									
Lactating Mothers									
Food for Work: Workers									
Dependents									
School Children									
Pre-school Children:									
Other Children:									
Minors									
Elderly									
Indians									
Others									

Others: \_\_\_\_\_  
 (Indicate other foods)

8. Listing of site staff involved in the food program:

POSITION	EDUCATION	TRAINING		EXPERIENCE (Specify years)
		Yes	No	
Director				
Storage/Warehouse Keeper				
Bookkeeper Finances/Accounting				
In charge of food control/distribution				
In charge of food preparation				
In charge of Nutrition Educa- tion.				
Health Personnel				
Other				

II. FOOD DISTRIBUTION PROGRAM: BACKGROUND INFORMATION

1. How long has there been a food distribution program at this site?

2. In the last five (5) years, what changes, if any, have occurred in the program in the following areas?

AREAS OF CHANGE	YES	NO	REASONS FOR CHANGE
Local Sponsor Agency			
Number of Beneficiaries in the program			
Type(s) of program			
Storage facilities			
Composition of food ration package			
Method of food distribution			
Other areas			

3. Describe any problems in the program in the last 12 months including: short rations, transportation difficulties, theft, etc.

4. How often does the program receive Title II shipment?

5. Could this site exist without the FFP commodities? How would the services offered or participation in the program be affected without the food program?

### III. PARTICIPATION INFORMATION

1. What are the criteria for choosing program participants? Who makes the final decision on who should participate? Do the selection criteria remain constant or do they change in different situations?
  
2. In your opinion, what factors affect recipient participation in the program? Would they also come to the site for other activities ( medical/health facilities, school, etc.) if the food were not available?
  
3. Describe all sources of local income that support the food program (donation, sale of containers, local gardens, other food donations, etc.) and how the funds/donations are used in the program.
  
4. Is a payment/donation required for program participation? How much is paid/donated? What happens when a participant cannot pay?
  
5. Is a contract or agreement signed with each participant? Describe how it works. Under what conditions are exceptions made?
  
6. What types of data are collected at the site to measure program impact on the recipients? Who collects these data and how often?

7. Describe the method used for growth surveillance. If growth charts are used, are these kept by the mother or the center?
  
8. How do program staff treat children who are severely underweight, have recurrent diarrhea or other problems, or who suffer from protein-caloric energy malnutrition (PEM) or other forms of malnutrition?
  
  
  
  
  
  
  
  
  
  
9. Are follow-up home visits made to underweight or severely malnourished children? Who does this?

#### IV. SITE MANAGEMENT INFORMATION

1. Who is responsible for the writing and checking of the monthly inventory report?
  
  
  
  
  
  
  
  
  
  
2. Who is responsible for local storage of the rations?
  
  
  
  
  
  
  
  
  
  
3. Describe any major losses of food in the last twelve months, indicating the causes (spoilage, vermin/insects, theft, etc.). How was the situation handled?

4. Does the full allotment of food arrive at the site on time? If not, what happens?

5. If the total allotment is not received, how are the available commodities distributed?

#### V. COMMUNITY INFORMATION

1. From how far away do recipients travel? How do they get to the Center?

2. Are foods served to other persons in their homes? Under what conditions?

3. Are there other food distribution programs in the same service area? If there are, who runs them and how many persons do they serve? Do these other programs serve any of the same participants or families that receive Food for peace commodities?

4. Please describe what people in this area eat?

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AGE

0-2 yrs.

3-5 yrs.

6-15 yrs.

Adults

Pregnant and  
Lactating  
Mothers

---

---

5. Are there variations in the foods consumed by the beneficiaries according to season or availability of foods?

6. List the major diseases that affect the community without including epidemics.

7. Are there changes in the frequency, gravity or type of sickness and malnutrition due to seasonal variations?

8. Describe other factors that affect the health and nutritional status of the people in the community.

9. To what degree has the Food for Peace program been able to serve the needy in the community?

Very little \_\_\_\_\_

Little \_\_\_\_\_

Moderately \_\_\_\_\_

Substantially \_\_\_\_\_

All community needs are met \_\_\_\_\_

10. In your opinion, what types of local programs would have the greatest impact on nutritional and health problems of the community?

#### VI. OBSERVATIONS OF THE INTERVIEWER

1. Food Distribution: Observe and describe food distribution procedures.

2. Food Preparation: Observe and describe the use of commodity food in feeding operations (including facilities, sanitation, food preparation methods, incorporation into menu with use of local foods and other donated foodstuffs).

3. Nutrition Education/Information/Counseling:

(a) Observe and describe posters/displays at distribution site related to the use of commodities and good nutritional practice.

(b) Observe and describe nutrition education/counseling activities at site, including demonstrations of food preparation.

4. Growth Surveillance: Observe weighing process. Are scales calibrated? Are the measurements accurate? How is the child's age determined? Who keeps the growth chart?

VII. OTHER COMMENTS

Center Code: \_\_\_\_\_

Date: \_\_\_\_\_

Community: \_\_\_\_\_

Interviewer: \_\_\_\_\_

District: \_\_\_\_\_

Respondent Type/Job Title: \_\_\_\_\_

Province: \_\_\_\_\_

Voluntary Agency: \_\_\_\_\_

CARITAS: \_\_\_\_\_ CARE: \_\_\_\_\_

BRIEF SITE QUESTIONNAIRE

1. Please describe program operations, including the type of food distribution program, other services provided, and days of operation:
2. General program history (length of operations, administration, changes in the program over time, etc.).
3. Please describe the criteria for participation in the food distribution program.
4. Program Participation Data:

	JUNE 1981		JULY 1981		AUGUST 1981		SEPTEMBER 1981	
	Prog.	Att.	Prog.	Att.	Prog.	Att.	Prog.	Att.
Pre-school Children								
School Children								
Pregnant Mothers								
Lactating Mothers								
Elderly								
Others (Specify) _____								

5. Describe any difficulties encountered by the program in supplying rations to all participants in recent years.
  
6. What does the respondent feel about using part of the food products for beneficiaries as reserves for emergency cases?
  
7. Estimated impact of the food distribution program on the health and nutritional status of target groups.
  
8. General situation in the area (food availability, economic conditions, nutrition and health status of residents, incidence and type of malnutrition, infrastructure, etc.).
  
9. Please describe what people in this area eat?

AGE

0-2 yrs.

3-5 yrs.

6-15 yrs.

Adults

Pregnant and  
Lactating  
Mothers



Center Code: \_\_\_\_\_ Date: \_\_\_\_\_  
 Community: \_\_\_\_\_ Interviewer: \_\_\_\_\_  
 District: \_\_\_\_\_ Respondent Type/Job Title: \_\_\_\_\_  
 Province: \_\_\_\_\_  
 Voluntary Agency: \_\_\_\_\_ CARITAS \_\_\_\_\_ CARE \_\_\_\_\_

INSPECTION REPORT

1. Address of Center: \_\_\_\_\_  
 \_\_\_\_\_
2. Name of Person in Charge: \_\_\_\_\_  
 Title: \_\_\_\_\_
3. Name of Person Interviewed: \_\_\_\_\_  
 Title: \_\_\_\_\_
4. Number of authorized beneficiaries and attendance last month by category:

CATEGORY	AUTHORIZED	ATTENDANCE
Pregnant Mothers		
Lactating Mothers		
School Children		
Pre-School Children		
Food for Work: Workers		
Food for Work: Dependents		
Elderly		

4. a). (Continuation)

CATEGORY	AUTHORIZED	ATTENDANCE
Minors in irregular situations		
Indians		
Others		

b). Please explain the differences in numbers between authorized and attendance: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

5. a) How much of each commodity was distributed per recipient last month (please give measure: kg., lb., g., liter., qt.)?

	COMMODITY						
	Milk (NFM)	C.S.M.	Oats (SFRO)	Corn w/ Soya (SFC)	Wheat Flour	Vegetable Oil	Others
Per Beneficiary							
For the Center							

b) Please explain the differences in cases where the amounts are not those authorized or usually distributed.

6. Verify if the following documents have been submitted:

Receipts: \_\_\_\_\_ When: \_\_\_\_\_

Monthly Food Status Report: \_\_\_\_\_ When: \_\_\_\_\_

7. a) Inventory (please indicate measure): kg., lb., g., lt., sacks, cans.

	Milk	Corn	Oats	Oil	Wheat Flour	CSM
Received						
Physical Inventory						
Difference						

b). Please explain the differences: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

8. Have there been program interruptions during the last twelve months?

Yes \_\_\_\_\_ No \_\_\_\_\_

If yes: When \_\_\_\_\_ For how long \_\_\_\_\_  
 What reason?  
 \_\_\_\_\_  
 \_\_\_\_\_

9. Storage conditions:

	Good	Fair	Poor
Construction			
Space			
Cleanliness			
Ventilation			
Security from theft			
Security from rodents			
Security from insects			
Ease of Count			

10. a) Are there any commodities unfit for human consumption?

Yes \_\_\_\_\_ No \_\_\_\_\_  
Previously Yes \_\_\_\_\_ No \_\_\_\_\_

b) Causes \_\_\_\_\_  
\_\_\_\_\_

11. Commodity losses through theft: Yes \_\_\_\_\_ No \_\_\_\_\_

If yes, indicate quantity: \_\_\_\_\_

When was this? \_\_\_\_\_

Were the losses reported to authorities? Yes \_\_\_\_\_ No \_\_\_\_\_

When? \_\_\_\_\_

12. a). Are there any Food for Peace commodities sold in this community?

Yes \_\_\_\_\_ No \_\_\_\_\_

If yes, origin: \_\_\_\_\_  
\_\_\_\_\_

b) Value: \_\_\_\_\_

13. Do the recipients contribute any money when they receive the commodities?

Yes \_\_\_\_\_ No \_\_\_\_\_

If yes, how much? \_\_\_\_\_ For what? \_\_\_\_\_

14. Does the community contribute in the preparation of the foods?

Yes \_\_\_\_\_ No \_\_\_\_\_

With what? \_\_\_\_\_

15. Does the Center have other food sources?

Yes \_\_\_\_\_ No \_\_\_\_\_

If yes: Products \_\_\_\_\_ From whom/where? \_\_\_\_\_

Donations \_\_\_\_\_ From whom? \_\_\_\_\_

16.a) Do recipients know where the donated foods come from?

Yes \_\_\_\_\_ No \_\_\_\_\_

b) If yes, from where? \_\_\_\_\_



Center Code: \_\_\_\_\_ Date: \_\_\_\_\_  
 Community: \_\_\_\_\_ Interviewer: \_\_\_\_\_  
 District: \_\_\_\_\_ Respondent Type/Job Title: \_\_\_\_\_  
 Province: \_\_\_\_\_  
 Voluntary Agency: \_\_\_\_\_ CARITAS \_\_\_\_\_ CARE \_\_\_\_\_

PARTICIPANT SURVEY

1. Respondent's age (approx.): \_\_\_\_\_ 2. Sex: \_\_\_\_\_  
 3. Food Program:  
 MCH \_\_\_\_\_ Schools \_\_\_\_\_ Child Care Center \_\_\_\_\_  
 Food for Work \_\_\_\_\_ Elderly Homes \_\_\_\_\_ Center for Minors \_\_\_\_\_  
 Indians \_\_\_\_\_ Others \_\_\_\_\_  
 (Specify)

4. Length of time in program: \_\_\_\_\_ 5. Number of members in household: \_\_\_\_\_

6. Monthly ration: Milk  CSM  Oats   
 Oil  Corn/Soya  Wheat Flour   
 Others \_\_\_\_\_

7. How are the FFP commodities used? ( Do not read alternatives)  
 - to supplement family diet \_\_\_\_\_  
 - to substitute for local foods \_\_\_\_\_  
 - sold to increase family income \_\_\_\_\_  
 - sold to buy other foods \_\_\_\_\_  
 - Other \_\_\_\_\_

8. What are the ages of the children in the family? \_\_\_\_\_  
 \* \_\_\_\_\_  
 \_\_\_\_\_

\* If a child less than 2 years old is indicated, proceed to questions 9 and 10.

9. How long are children breastfed? \_\_\_\_\_

Do you breastfeed your child? Yes \_\_\_\_\_ No \_\_\_\_\_

If yes, until what age? \_\_\_\_\_

10. At what age are foods other than milk first used? \_\_\_\_\_

11. Do pregnant women eat special foods? Yes \_\_\_\_\_ No \_\_\_\_\_

If yes, what? \_\_\_\_\_

12. Are they prohibited from eating any type of food during pregnancy?

Yes \_\_\_\_\_ No \_\_\_\_\_

If yes, what are they? \_\_\_\_\_

13. Please describe any food production activities the family engages in (farming, gardening, raising livestock). Which family member is responsible for these activities?

F= Father; M = Mother; C = Childrer A= All O= Others

	Members					HOME CONSUMPTION	SOLD	MIXED
	F	M	C	A	O			
Farming:								
- Home gardening								
-Communal garden								
-Individual farm								
- Other								
Livestock raising:								
-Poultry								
-Hogs								
-Cattle								
-Other								
Agro-industrial:								
-Cheese								
- Crude Sugar								
- Other								

14. Family food recall: List of foods consumed the day before (24-hour record).

Instruction: Try to interview the person responsible for meal preparation for the family unit. Ask them to describe all the food consumed by the family during the preceding day, including the number of persons in the family served. Include all snacks.

MEAL TIME	SOURCES OF FOOD	NUMBER OF PERSONS SERVED	OBSERVATIONS
Breakfast			
Snack			
Lunch			
Snack			
Dinner			
Snack			

If this was an unusual day, please explain the circumstances.

15. How do you prepare the Food for Peace commodities received and which family members consume them?

FOODS	PREPARATION	FAMILY MEMBERS
Dried Milk		
Wheat Flour		
CSM (Corn flour soya and milk)		
Rolled Oats with Soya		
Oil		

Center Code: \_\_\_\_\_

Date: \_\_\_\_\_

Community: \_\_\_\_\_

Interviewer: \_\_\_\_\_

District: \_\_\_\_\_

Respondent Type/Job Title: \_\_\_\_\_

Province: \_\_\_\_\_

Voluntary Agency: \_\_\_\_\_

CARITAS \_\_\_\_\_ CARE \_\_\_\_\_

OPINIONNAIRE

I shall read a series of statements and please tell me whether you completely agree (5), just agree (4), neither agree nor disagree (3), disagree (2), or completely disagree (1)

(. Include other codes - D = don't know, N = No answer, I =Inapplicable)

- 1. I am satisfied with the way the Food for Peace program is operated at this center. 5 4 3 2 1 D N I

Comment: \_\_\_\_\_

- 2. I feel that the amount of food received is adequate for majority of the participants. 5 4 3 2 1 D N I

Comment: \_\_\_\_\_

- 3. I feel that the kinds of food received are well chosen for the needs in this area. 5 4 3 2 1 D N I

Comment: \_\_\_\_\_

- 4. I believe that the Food for Peace program has helped the health of the participants. 5 4 3 2 1 D N I

Comment: \_\_\_\_\_

- 5. I feel that majority of the people that need food in this area receive it. 5 4 3 2 1 D N I

Comment: \_\_\_\_\_

6.a) I believe that instead of food, the program should give the people money.

Yes                      No                      D      N      I

b) Why? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

7. Who provides the food you receive here? (open ended reply)

8. How do the families receiving Food for Peace commodities use them?

9. Is there anything else about the food program that you would like to discuss?

Center Code: \_\_\_\_\_

Date: \_\_\_\_\_

Community: \_\_\_\_\_

Interviewer: \_\_\_\_\_

District: \_\_\_\_\_

Respondent Type/Job Title: \_\_\_\_\_

Province: \_\_\_\_\_

Voluntary Agency: \_\_\_\_\_

CARITAS \_\_\_\_\_ CARE \_\_\_\_\_

MARKET SURVEY

1. Market location: \_\_\_\_\_

2. Service area: \_\_\_\_\_

3. Market days and hours: \_\_\_\_\_

4. General description of market (availability of foods and supplies, prices, method of exchange, etc.).

5. List major food items, availability and prices.

FOOD GROUPS	AVAILABILITY	PRICES (Specify unit)
Liquid Milk		
Dried Milk		
Evaporated Milk		
Eggs		
Meat: beef		
pork		
poultry		
Other		

5. (Continuation)

FOOD GROUPS	AVAILABILITY	PRICES (Specify unit)
Fish: <u>corvina</u>		
<u>pargo</u>		
other		
Beans		
Vegetables: <u>tomato</u>		
<u>Cabbage</u>		
others		
Fruits: <u>bananas</u>		
<u>orange</u>		
others		
Platano		
Roots and Tubers:		
<u>yuca</u>		
<u>name</u>		
otoe		
Rice		
Corn		
Flour: <u>wheat</u>		
Corn		
Sugar		
Oil		
Others		

6. If any donated foods were for sale in the market, try to discover their origin.

## 7. Comments/Analysis



# APPENDIX B

## APPENDIX B

### Samples of Documents Used in Shipment and Receipt of Food

1. Notice of Commodity Availability and Transmittal
2. Bill of Lading
3. Letter Requesting Exoneration
4. Customs Declaration and Permit
5. Entry Form



LYKES BROS. STEAMSHIP CO., INC. BILL OF LADING

UNRECORDED

CARE, ~~THE~~ COOPERATIVE FOR AM. RELIEF EVERYWHERE  
680 71st AVE., N.Y.

EXPORT REFERENCES

IRS ID NO. 13-1685039

FT. NO. 110482  
SBU-533

CONSIGNEE  
COOPERATIVE FOR AM.  
RELIEF EVERYWHERE  
PANAMA CITY, PANAMA  
VIA CRISTOBAL

FORWARDING AGENT - REFERENCES - FMC NO.

FMC 808

W.H. MULLER SHIPPING CO.  
21 FIFTH AVENUE, NEW YORK, N.Y. 10011

POINT AND COUNTRY OF ORIGIN  
U.S.A.

NOTIFY PARTY  
CARE, PANAMA  
DIRECTOR OF CARE  
P. O. BOX 4257  
PANAMA, PANAMA 5

~~XXXXXXXXXXXXXXXXXXXXXXXXXXXX~~

ALSO NOTIFY:  
U.S. PANAMA PUBLIC LAW 480  
TITLE II OFFICER  
P. O. BOX "J"  
BALBOA, CANAL ZONE

(WITHOUT LIABILITY TO CARRIER, SEE CLAUSE 12 HEREOF)

TER OF AIRPORT  
NASHVILLE AVE. SEC. 16/34

REPORTING CARRIER (VESSEL) AMERICAN FLAG PORT OF LOADING  
ELMO LAKES NEW ORLEANS, LA.

IN SEA PORT OF DISCHARGE FOR TRANSHIPMENT TO (SEE CLAUSE 12 HEREOF)  
CRISTOBAL PANAMA CITY

PARTICULARS FURNISHED BY SHIPPER

MARKS AND NUMBERS NO. OF PKGS. DESCRIPTION OF PACKAGES AND GOODS GROSS WEIGHT VEAAS REMOVED

C. A. R. E.	9600	BAGS: GRAIN PRODUCT - ROLLED OATS ( SOY FORTIFIED ) ( 413,000 NET WT. LBS. )  CCC: 2405-02 ,600522-034-0244-040  ND NO. E - 37759-01	490,176 # (22,340) kg.	
-------------	------	--	---------------------------	--

" THIS CARGO MUST NOT BE STOWED IN ANY HOLD THAT IS BEING USED TO CARRY INSECTICIDES OR ANY OTHER TOXIC SUBSTANCES. "

CARGO DECLARED VALUE: 328,080.00

FOR RELIEF FOR CHARITABLE PURPOSES ONLY NOT FOR RESALE  
"United States law prohibits disposition of these commodities in the Soviet bloc, the People's Republic of China, North Korea, North Vietnam, South Vietnam, Cambodia, Cuba and Southern Rhodesia, unless otherwise authorized by the United States."  
FOUR (4) ORIGINAL BILLS OF LADING  
S. A.

0176# @ 157.00/2000#	34,630 92
Less 10"	
5 490176# @ 30.00/2000#	7,352 5L
C 490176# @ 11.25/2000#	2,757 2L
D 490176# @ 1.21/2000#	303 91
TOTAL CHARGES	45,044 72

IN ACCEPTING THIS BILL OF LADING, THE CONSIGNEE AND OWNER OF THE GOODS AGREE TO be bound by all of its stipulations, exceptions, and conditions, whether written or printed or stamped on the front or back hereof, as fully as if they were all signed by said shipper, consignee and owner of the goods, such stipulations, exceptions and conditions to apply in every contingency, wheresoever and whenever occurring, and also in the event of deviation, or of unseaworthiness of the ship at the time of loading or inception of the voyage or subsequently.

IN WITNESS WHEREOF, there have been executed 4 Bills of Lading exclusive of non-negotiable copies, all of the same tenor and date, one of which being accomplished, the others to stand void.

DATED AT NEW YORK AUG 25 1991

FOR THE MASTER

BY LYKES BROS. STEAMSHIP CO., INC.

CONTRACT NO.

B/L NO.



MINISTERIO DE SALUD  
DIRECCION ADMINISTRATIVA  
(Departamento de Proveduria)

Solicitud No. 443-17

A mi Excelencia  
Señor Ministro de  
Hacienda y Tesoro  
E. S. D

Panamá, 4 de setiembre de 19 61

Señor Ministro:

Por medio de la presente solicito, la autorización de Exoneración del pago del impuesto de Importación de (los) artículo (s) que a continuación se detalla (n) amparado (s) por el conocimiento de Embarque No. 24, Factura Comercial No. \_\_\_\_\_, Factura Consular No. \_\_\_\_\_, Guía Aérea No. \_\_\_\_\_, Tarjeta Postal No. \_\_\_\_\_, (Adjunte documentos).  
La presente solicitud se fundamenta en (Base Legal) Artículo 535 del Código Fiscal

BULTO		DESCRIPCION DE LA MERCANCIA	PROCEDENCIA	VALOR
Cent.	Peso o Medida			
9600	490.176 lbs.	<p style="text-align: right;">11360</p> <p>9,600 sacos de Avena fortificada con aceite de Soya</p> <p><b>DONACION para uso del Programa de Materno Infantil.</b></p> <div style="border: 1px solid black; padding: 5px; margin: 10px auto; width: fit-content;"> <p>Ministerio de Hacienda y Tesoro Dirección General de Ingresos</p> <p><b>EXONERACIONES OFICIALES</b></p> <p><i>[Firma]</i></p> <p>Jefe de Exoneraciones Tributarias</p> </div>	<p> Nueva Orleans</p> <p> Valer</p>	<p> \$52,000.00</p>

**EXONERADO**  
del Pago del I.T.B.I.

COMPRA:            DIRECTA   

                     INTERMEDIARIO   

En caso que la compra haya sido efectuada por intermediario especifique:

NOMBRE DE LA EMPRESA	NUMERO Y FECHA DE ORDEN DE COMPRA Cristóbal.
FECHA DE LLEGADA DE LA MERCANCIA Original   Lic. Roy G. Carrington E. Firmado   Jefe de Compras	RECINTO ADUANERO
DEPARTAMENTO DE PROVEDURIA Lic. José Bonilla Jefe de la Dirección Administrativa	MINISTRO
DIRECTOR ADMINISTRATIVO	

DECLARACION - LIQUIDACION DE ADUANA

REPUBLICA DE PANAMA  
MINISTERIO DE HACIENDA Y TRIBUTOS

Sustituido por: BANCO NACIONAL

1. Fecha de Embarque: 19 de 1981  
 2. Fecha de Llegada: de 19  
 3. Medio de Transporte: Maritimo  Aereo  Terrestre  Postal   
 4. País de Origen: S. A. G. S.  
 5. País de Destino: Panamá  
 6. País de Proveniencia: Panamá  
 7. Puerto de Proveniencia:

10. Compañero:   
 11. Firma Autorizada del Compañero:   
 12. Expediente No.:   
 13. No. de Documento de Embarque: 14. 14  
 15. No. de Factura Comercial: 16. No. de la Carga Real:   
 17. Firma del Declarante de Aduana:   
 18. No. de Expediente:

8. EMBARCADOR: COOPERATIVA POR ALIADOS  
 9. RECINTO DE SALIDA: Canal

REGISTRO UNICO CONTRIBUYENTE			DESTINO DEL BIEN IMPORTADO		
TOMO	FOLIO	ASIENTO	CLASIFICACION	INDUSTRIAL	EXCLUSIVO PANAMA
			6A	6B	6C

(118) BULTOS	(120) DESCRIPCION DE LA MERCANCIA	(121) NUMERO DEL ARANCEL	(122) UNIDAD	(123) CANTIDAD	(124)			(25) VALOR F.O.B.	(26) TASA	(27) Impuesto de Importación	(28) Estadística	(29) Artículo del Presupuesto
					NETO	LEGAL	BRUTO					
9,600	AVENA PARA ALIMENTO DE ANIMALES	04001-011	SAQ.	9,600	217,700		217,700	0.04%	8,522.60			
(130) TOTALES												

**IMPORTE PERMITIDA**  
 JUNTA DE FISCALIA GENERAL  
 MIA. DE HACIENDA Y TRIBUTOS  
 PANAMA  
 Fecho: SET. - 9 1981  
 Valido Hasta:

INSTITUTO DE MEDICINA AGROPECUARIA  
 D. N. A.  
 D. N. A. Internacional  
 FERIA INTERNACIONAL DE LA GANADERIA  
 Fecho: SET. 9 1981  
 Firma Autorizada:

**EXONERADO**  
 del Pago del I.T.B.M. 5%

31. Impuesto de Exportación	B/	88,893.60
32. % Ad Valorem (D No. 32 1970)	B/	86,606.60
33. B/ 0.02 p/c bulto (Ley No. 49 1946)	B/	192.60
34. Sujeto al %/subtasa anterior cuando corresponde	B/	15,691.60
35. Timbres Fiscales	B/	
36. Lucha Antituberculosa	B/	
37. Soldado Independencia	B/	
38. Timbres de Consumo Interno	B/	
39. Recargo Consular	B/	
40. T.C.A.C. (Ley 55 del 5 de Diciembre de 1979)	B/	
41. Recargo Factura Consular % (Art. 447 C.F.)	B/	
42. Desc. 5% (Inec. Orden Alm. Oficial)	B/	
<b>42. TOTAL IMPUESTO DE ADUANAS</b>	B/	

44. Total Valor F.O.B.	B/	56,000.00
45. Flete	B/	
46. Seguro	B/	43,044.72
47. 15% S/F O.B.	B/	
48. Otros (res. 201 24, 1974)	B/	
<b>49. TOTAL VALOR C.A.F.</b>	B/	133,124.72
50. Más: Total Impsto. Aduana (línea 43)	B/	
51. Base Imponible del I.T.B.M.	B/	
<b>52. I.T.B.M. (8% línea 51)</b>	B/	
<b>53. TOTAL DE IMPUESTO (línea 43 + 52)</b>	B/	
54. Recargo Pago Tardío (Ley 107 de 1974) (línea 53)	B/	
55. TOTAL	B/	
56. TOTAL A PAGAR EN LETRAS		

OBSERVACIONES

No. A-15455

Firma del Autorizador:   
 Firma del Expediente:

Firma Caja Bco. Nat.	Día	Mes	Año	OBSERVACIONES BANCO NACIONAL
Firma Caja Deposito	Día	Mes	Año	
Deposito No.				

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Appendix C

Newspaper Articles

# LLAMADO A LA CIUDADANIA PARA QUE NO VIAJEN AL INTERIOR

Por ERNESTO QUIJADA

Un llamado a la ciudadanía para que se ABSTENGA DE ASISTIR A LOS ESPECTACULOS PUBLICOS Y VIAJAR AL INTERIOR DEL PAIS EN LOS PROXIMOS DIAS, hicieron ayer las más altas autoridades del Ministerio de Salud por intermedio del ministro del ramo, Doctor Jorge Medrano y del Director Nacional de Epidemiología Doctor Carlos Brandariz.

La nota, que trata de evitar la propagación de los virus de la meningitis y de la conjuntivitis que han afectado a grandes núcleos poblacionales, sobre todo de la ciudad capital, es tajante cuando solicita de manera encarecida a los padres de

familia que eviten a toda costa el viajar al interior del país y a los espectáculos públicos con sus hijos, por el hecho de que las grandes aglomeraciones humanas son propicias para recibir el contagio de algunos de los dos virus que nos afectan.

Con relación al radio de acción del Ministerio de Salud, sobre evitar o cancelar espectáculos públicos el Director Nacional de Epidemiología Doctor Brandariz, señaló que se carece de toda autoridad legal, para impedirlos pero, que la ciudadanía debe poner especial interés en este llamado, toda vez que es su propia salud la que está en juego.

Las próximas celebraciones de festividades de noche

de brujas, espectáculos de salsa y las festividades patrias, son motivo de honda preocupación para las autoridades del Ministerio de Salud, ya que sin el concurso de toda la población conciente de las medidas que se han dictado para evitar la propagación de las enfermedades, aumentará de manera más alarmante la incidencia de personas afectadas.

## **728 Meningitis Cases Reported; Virus Is ECHO4**

An epidemic of viral meningitis is still present in the metropolitan area, a Health Ministry communique said yesterday. Panama City, Arraijan, La Chorrera, Colon and environs comprise the metropolitan area.

A total 728 cases was recorded up to Tuesday night, but Dr. Guillermo Campos, the ministry's chief epidemiologist, said in all the total was 745 cases up to noon Wednesday, including five confirmed cases in Chiriqui Province and 13 in La Chorrera, some of them from nearby areas.

The Gorgas Memorial Laboratory has identified the meningitis virus as ECHO-4 and has agreed with the Health Ministry's recommendations

**Turn To Page A-6 No. A-069**

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## **A-069**

on ways to prevent the spread of the disease:

- Intensify personal hygiene, including frequent washing of hands.
- Avoid unnecessary gatherings (parades, parties, trips to the interior, etc.) in order to limit propagation.

Symptoms of meningitis are fever, vomiting and headaches.

Panama City government clinics will remain open from 7 a.m. to 3 p.m. daily during the Independence festivities which begin Sunday and end Wednesday. All other government agencies, except hospitals, will remain closed over the four-day holiday period.

The highest incidence of viral meningitis is among four-and six-year-olds, with a few isolated cases among 15-year-olds.

Ayuda CARE

## Educación sobrepasa meta en distribución de alimentos

El Ministerio de Educación, a través de una bien definida política de asignación y distribución de alimentos para la paz del Gobierno y el pueblo norteamericano, ha hecho llegar con la valiosísima ayuda de Acción Cívica de la Guardia Nacional, todas las remesas de leche en polvo, crema de maíz, avena y aceite por un total de los 2,960,424 libras, a 65,000 escolares que según el contrato con CARE a principios de este año, deberían recibir estos alimentos dentro del Programa de Nutrición Escolar.

El programa, en realidad, llegó a sobrepasar la meta ya que las escuelas participantes —que llegan a más de 2,200 a través de toda la República— tienen disponibles más alimentos con lo que se asegura la ininterrumpida distribución de las meriendas escolares hasta el fin del año lectivo.

Complementariamente al aporte de los alimentos PL 480, Care lleva seis años de suministrar materiales para la construcción de cocinas con un total, hasta ahora, de 934 unidades construidas. De esta manera, con la participación de las comunidades —la cual ha sido muy positiva—, el Ministerio de Educación y CARE están logrando la autosuficiencia de las mismas, principalmente para el beneficio de la población escolar cuyos planteles en esas áreas rurales cuentan ahora con un lugar seguro e higiénico donde preparar los alimentos.

En 1978, CARE incorporó a su programación en Panamá el aporte de materiales para la construcción de aulas escolares y hasta este momento se han construido 266 ubicadas entre todas las provincias a las cuales se les suministró mobiliario escolar CARE lo

que permitió la inmediata utilización de éstas, ya que dentro del Contrato MINEDUC-CARE existe el compromiso de asignar el personal docente necesario una vez finalizadas las aulas.

CARE, organización de asistencia y desarrollo internacional que opera en más de 36 países en todo el mundo, cumplió 35 años de servicios a la humanidad y durante los 27 años de actividades en nuestro país, ha mantenido en forma conjunta con el Ministerio de Salud, el programa de alimentación complementaria para madres embarazadas y lactantes junto con sus niños preescolares. Así tenemos que para 1981 a través del Programa Materno-infantil, los Sistemas Integrados de Salud de cada provincia, están siendo distribuidos alimentos PL 480 a 60,000 madres y niños en toda la República.



En la gráfica un momento de la reunión entre las Cámaras de Comercio de Panamá y Estados Unidos en APEDE, bajo la presidencia de Juan Alberio Pascual.

# tas patrias

Por Migdalia Fuentes

En medio de grandes expectativas nacionales se cumple hoy el Setuagésimo Octavo Aniversario de nuestra independencia de Colombia.

Desde hace casi un mes, el Ministerio de Salud alertó a la comunidad capitalina de que se suspenderían las celebraciones patrias por motivo de las epidemias de conjuntivitis y meningitis viral que han azotado nuestra población en los dos últimos meses.

El Cabo Augusto Alabarca de la Garita de la Guardia Nacional en Chorrera reportó que por ese sitio pasaron un total de 10,556 automóviles en el lapso de las doce de la noche del primero, a las 9:00 p.m. de ayer dos de noviembre.

El año pasado, durante estos mismos días, y durante el mismo lapso, la cifra fue de 8,320 automóviles, lo que indica que a pesar de la solicitud del Ministerio de Salud en el sentido de que los capitalinos no viajaran al Interior para poder evitar la propagación de las epidemias, no se cumplió estrictamente con esta petición.

Por otro lado, el personal docente y directivo de la Escuela Gil Colunje de esta capital acordó asistir a los actos patrióticos programados en el plantel, los días 3 y 4 de noviembre, "desconociendo la resolución de los directivos de la Zona Escolar No.2" que suspendió todas las actividades educativas a partir del 30 de octubre hasta el 11 de noviembre del año en curso.

Aun cuando no se han registrado muertes, un total de 150 mil panameños de las ciudades de Panamá y Colón han sido afectados por la conjuntivitis mientras que 600 niños, menores de seis años, han sido reportados en los centros médicos como enfermos con meningitis viral, dijo el Ministerio de Salud.

Las dos epidemias, han logrado minar la resistencia de los panameños, particularmente estudiantes que han tenido que permanecer en sus hogares.

Contrario a los años anteriores, nuestra ciudad capital registraba ayer una desusada tranquilidad, no sólo porque se celebraba el tradicional día de difuntos si no porque gran cantidad de capitalinos se dirigieron al Interior del país, para pasar las fiestas patrias.

En la última década, el único año en que no se ha registrado desfiles fue en 1968, a casi un mes después del golpe de Estado que llevó al poder a una Junta de Gobierno encabezada por los Coroneles José María Pinilla y Bolívar Urrutia.

En esa ocasión, profesores y estudiantes de la Universidad de Panamá, regida por el Dr. Bernardo Lombardo organizaron un desfile para demandar la vuelta a la civilidad, pero a la altura del kilómetro Cero en los alrededores del Seguro Social de Transistmica, fueron repelidos por unidades de la Guardia Nacional comandadas por el entonces Mayor Fred Boyd, al mando de la Caballería.

En esa manifestación participaron figuras de la política entre quienes se destacaron los doctores José Antonio González Revilla y Carlos Iván Zúñiga, el último había sido postulado a la Rectoría de la Universidad, así como profesionales y estudiantes.

Para el día de hoy han sido programadas la izada de la bandera y el canto del himno nacional a las 7:15 de la mañana en la Plaza de la independencia y a las 8:00 A.M el TEDEUM en la Iglesia de la Catedral Metropolitana. Actos presididos por el Presidente de la República Dr. Aristides Royo.

Por su parte, el Ministerio de Salud anunció que tres centros de salud y dos policlínicas estarán abiertas todos los días hasta el miércoles 4 de noviembre, inclusive. Los centros que permanecerán abiertos son los de Marañón (Emiliano Ponce) Nuevo Veranillo y Parque Lefevre, mientras que las policlínicas son las de San Miguelito y Presidente Remón en Calle 17 Oeste.



## Programa MINEDUC—CARE

Una misión de la Agencia Internacional para el Desarrollo que vino procedente de Washington se reunió con funcionarios del programa de Nutrición Escolar del Ministerio de Educación, con el fin de examinar la distribución de alimentos que se realiza en las escuelas del país bajo el Programa MINEDUC-CARE.

La representación del Ministerio de Educación participaron la Licda. Nivia Saldaña, Subdirectora Nacional de Administración y Finanzas y Coordinadora del Programa MINEDUC-CARE y el profesor Ezequiel Dimas, Director del Programa de Nutrición Escolar, quienes explicaron la labor que se ha desarrollado hasta el momento. En la foto se aprecia un aspecto de la reunión.

# Misión de A.I.D. examina nuevo programa de nutrición

Con el firme propósito de examinar el programa de Nutrición Escolar, especialmente en lo concerniente al nuevo programa de alimentos locales que se sirven en escuelas de cuatro provincias del país, visitó el Ministerio de Educación una misión de la Agencia Internacional para el Desarrollo AID que vino procedente de Washington y que sostuvo una amplia reunión con los funcionarios responsable del programa a nivel local.

El equipo de evaluación de la AID presidido por el Dr. Earl Jones, Jefe del Equipo de Development Associates, Inc. lo integran especialistas en asuntos de Educación, Nutrición, Salud Pública, Asuntos Laborales, Producción, Agricultura y Administración.

En representación del Ministerio de Educación, la Licda Nivia Saldaña, Subdirectora Nacional de Administración y Finanzas del Ministerio de Educación y Coordinadora del Programa MINEDUC-

CARE conjuntamente con el Prof. Ezequiel Dimas, Director del Programa de Nutrición Escolar explicaron detalladamente la labor que se ha generado hasta el momento.

Durante la interesante reunión, se informó a la Misión Internacional del compromiso del Ministerio de Educación de atender diez mil estudiantes en cuatro provincias pilotos del país, a través de las Direcciones Provinciales de Educación, con una inversión local de B.100.000.00 (Cien Mil Balboas) en su primer año de ejecución.

Se explicó a los visitantes extranjeros la particularidad del Programa de Nutrición Escolar, independientemente del Programa de Alimentos Locales y se detalló las dificultades por la que atraviesa el mismo, especialmente en relación a la supervisión, transporte y costos de los productos en el país. Los funcionarios de AID mostraron interés en todos los aspectos

del programa y se espera que al concluir su misión en Panamá rindan un informe general que proporcione algunos datos cuantitativos sobre el estado actual de los Programas de Nutri-

ción Escolar en Panamá, recomendaciones para su perfeccionamiento y las probabilidades de modificar el Programa existentes para aumentar la posibilidad de impacto.

Appendix D

Annual Estimate of Requirements (AERs)

CARE	1981 & 1982
CRS/Caritas	1981 & 1982

Program Plans for:

CARE	1982
Caritas	1982

*Revised / Final*

TITLE II, PL 450 COMMODITIES  
ANNUAL ESTIMATE OF REQUIREMENTS - FY 1987 (Revised)

FORM APPROVED  
OWS NO 21-0001

1. COUNTRY  
P A N A M A  
2. COOPERATING SPONSOR  
CARE

RECIPIENT CATEGORIES	3. NUMBER FEEDINGS DAYS PER MO	4. NUMBER OF RECIPIENTS	5. NUMBER MONTHS OPERATING	6. NUMBER DISTRIBUTED PER YEAR	PROPOSED DISTRIBUTION											
					NFIM			CSH			SFR0			VEGOIL		
					7. NUMBER RECIPIENTS	8. RATE KGS	9. 1000 KILOGRAMS	10. NUMBER RECIPIENTS	11. RATE KGS	12. 1000 KILOGRAMS	13. NUMBER RECIPIENTS	14. RATE KGS	15. 1000 KILOGRAMS	16. NUMBER RECIPIENTS	17. RATE KGS	18. 1000 KILOGRAMS
Maternal Child Health Worker	30	16000	12	4	16000	2.2	422	16000	0.9	173	16000	0.9	173	16000	0.45	26
Maternal Child Health Child	30	14000	12	4	14000	2.2	892	14000	0.2	367	14000	0.2	367	14000	0.45	184
Preschool Child Feeding	25															
Other Child Feeding	30															
Other Child Feeding	25															
School Feeding	20	65000	7	2	65000	0.2	410	65000	0.2	410	65000	0.2	410	65000	0.23	105
Food for Work Workers	30															
Food for Work Dependents	30															
Other																
<b>7. TOTAL RECIPIENTS</b>		115000			115000			115000			115000			115000		
<b>8. TOTAL REQUIREMENTS FOR FY 87</b>							1730			950			950			375

ADJUSTED REQUIREMENTS FOR SHIPMENT (METRIC TONS)

9. Quantity on Hand September 30, 1974																
10. Quantity Received October 1 through February 28, 1980						264			170			168			71	
10a. From Prior Year Approval						0			215			150			23	
10b. From Current Year Approval						0			0			0			0	
11. Quantity on Hand February 28, 1980						264			215			150			23	
12. Quantity Due or Rec'd for Current FY Program After Feb., 1980						117			98			32			42	
13. Total Line 11 Plus Line 12						882			1181			0			67	
14. Projected Distribution March 1 through September 30, 1980						925			1272			32			109	
15. Estimated Inventory, September 30, 1980						732			1014			32			94	
16. Desired Operating Reserve						258			265			0			15	
17. Adjusted Total Requirements FY 1987						1474			685			950			360	

CLEARANCES

	SIGNATURE	TITLE	DATE
18. Submitted by (Field Representative)	<i>John J. Lucarelli</i>	Director CARE in Panama	November 25, 1980
19. Reviewed and Recommended by US AID or Embassy	<i>John J. Lucarelli</i>	Food for Peace Officer, USAID/Panama	December 15, 1980
20. Cooperating Sponsor Approval	<i>Don Kingdon</i>	<i>Assoc Dir Food Serv</i>	1/5/87

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TITLE 1, 25, 400 COMMODITIES  
ANNUAL ESTIMATE OF REQUIREMENTS - FY 1981  
(Use reverse for continuation)

FORM APPROVED  
O.M.S. NO. 24-00051

1. COUNTRY  
PANAMA  
2. COOPERATING SPONSOR  
CATHOLIC RELIEF SERVICES

RECIPIENT CATEGORIES	3a NUMBER FEED- INGS DAYS PER SID	3b NUMBER OF REC- IPENTS	3c NUMBER MONTHS OPERATING	3d NUMBER DISTRIB- UTED PER YEAR	4. PROPOSED ALLOCATION								
					a. W.F. CORN MEAL				b. Instant Pasta		c. Best Flour		d. Milk
					1. NUMBER RECIPIENTS	2. RATE KGS	3. (1000) KILOGRAMS	1. NUMBER RECIPIENTS	2. RATE KGS	3. (1000) KILOGRAMS	1. NUMBER RECIPIENTS	2. RATE KGS	3. (1000) KILOGRAMS
1. Elderly Health Market	30												
2. Elderly Health Child	30												
3. Single Feeding	25												
4. Feeding	30												
5. Feeding	25												
6. Feeding	30												
7. Milk Makers	30												
8. Milk Dependents	30												
9. Allowance for 1-11		1000	12	12		1.0	12.0		1.5	20.0		0.9	11.0
10. Unemployed		610	12	12		1.8	11.2		1.8	13.2		0.9	5.6
11. RECIPIENTS		1000											1.8
12. REQUIREMENTS KGS							35.2			25.2			17.6
													13.2

ADJUSTED REQUIREMENTS FOR SHIPMENT (METRIC TONS)

Quantity on Hand September 30, 1979	8.9	11.1	0	6.5
Quantity Received October 1 through February 28, 1980	13.8	17.0	12.5	11.7
From Polar Year Approval	0	0	0	0
From Current Year Approval	0	0	0	0
Quantity on Hand February 28, 1980	12.5	28.1	0	2.5
Quantity Held on Hand for Current FY Program After Feb. 29, 1980	11.1	13.6	11.1	11.5
and Line 11 Plus Line 12	26.8	18.0	11.1	13.0
Quantity Distribution March 1 through September 30, 1981	26.8	18.0	11.1	14.0
Quantity Inventory, September 30, 1981	2	0	0	0
Final Operating Reserve				0
Final Total Requirements FY 80 (81)	35.2	35.2	17.6	13.2

CLEARANCES	SIGNATURE	TITLE	DATE
Approved by (Field Representative)	<i>Paul A. Mungler</i>	<i>Acting, Director, CAS-USCC</i>	<i>26 Feb. 1980</i>
Reviewed and Recommended by US AID or Embassy	<i>John Thompson</i>	<i>Chief, Office of USAID</i>	<i>April 8, 1980</i>
Cooperating Sponsor Approval	<i>W.A. Mungler</i>		<i>May 1, 1980</i>
USDA Washington Approval			

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TITLE II, PL 480 COMMODITIES  
ANNUAL ESTIMATE OF REQUIREMENTS — FY 1951  
(See reverse for Instructions)

FORM APPROVED  
D. M. A. NO. 24 (REV. 11-50)

1. COUNTRY  
PANAMA  
2. COOPERATING AGENCY  
CATHOLIC CHARITABLE SERVICES

RECIPIENT CATEGORIES	3. NUMBER FEEDINGS DAYS PER MO	4. NUMBER OF RECIPIENTS	5. NUMBER MONTHS OPERATIVE	6. NUMBER DISTRI. DATES PER YEAR	7. OIL		8. PROPOSED DISTRIBUTION									
					9. NUMBER RECIPIENTS	10. RATE KGS	11. (1000) KILOGRAMS	12. NUMBER RECIPIENTS	13. RATE KGS	14. (1000) KILOGRAMS	15. NUMBER RECIPIENTS	16. RATE KGS	17. (1000) KILOGRAMS			
Infant Child Health Worker	30															
Infant Child Health Child	30															
Preschool Child Feeding	25															
Orphan Child Feeding	30															
Orphan Child Feeding	25															
School Feeding	25															
Food for Work Makers	30															
Food for Work Dependents	30															
Other Uses for Aged Orphanages			12	12		0.45	5.5									
			12	12		0.45	3.3									
9. TOTAL RECIPIENTS																
8. TOTAL REQUIREMENTS FOR FY 1951							0.8									

9. ADJUSTED REQUIREMENTS FOR SHIPMENT (METRIC TONS)

10. Quantity on Hand September 30, 1950	11.2
11. Quantity Received October 1 through February 28, 1951	22.4
12a. From Prior Year Approval	0
12b. From Current Year Approval	0
13. Quantity on Hand February 28, 1951	4.7
14. Quantity Due as Rec'd for Current FY Program After Feb. 28, 1951	22.0
15. Total Line 13 Plus Line 14	26.7
16. Proposed Distribution March 1 through September 30, 1951	26.7
17. Estimated Inventory, September 30, 1951	0
18. Desired Operating Reserve	0
19. Adjusted Total Requirements FY 1951	0.8

CLEARANCES	SIGNATURE	TITLE	DATE
19. Submitted by (Field Representative)	<i>Walter M. Moore</i>	<i>Acting Director, CRS USCC</i>	<i>16 Feb 1951</i>
20. Reviewed and Recommended by US AID or Embassy	<i>W. J. Thompson</i>	<i>W. J. Thompson, Director, Program &amp; Supply</i>	<i>May 7, 1950</i>
21. Cooperating Agency Approval			
22. US AID - Headquarters Approval			

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TITLE II, PL 480 COMMODITIES  
ANNUAL ESTIMATE OF REQUIREMENTS - FY 1982  
(See annex for Instructions)

FORM APPROVED  
O.M.B. NO. 24-00051

1. COUNTRY  
P A N A M A  
2. COOPERATING SPONSOR  
C A R E

1. RECIPIENT CATEGORIES	2a. NUMBER FEEDINGS DAYS PER MO.	3. NUMBER OF RECIPIENTS	4. NUMBER MONTHS OPERATING	5a. NUMBER DISTRIBUTED PER YEAR	PROPOSED DISTRIBUTION											
					6. NEDM			7. GSN			8. SFRO			9. VEGOLL		
					b. NUMBER RECIPIENTS	c. RATE KGS	d. (000) KILOGRAMS	b. NUMBER RECIPIENTS	c. RATE KGS	d. (000) KILOGRAMS	b. NUMBER RECIPIENTS	c. RATE KGS	d. (000) KILOGRAMS	b. NUMBER RECIPIENTS	c. RATE KGS	d. (000) KILOGRAMS
Maternal Child Health, Mother	30	20000	12	4	20000	2.27	545	20000	0.91	218	20000	0.91	218	20000	0.45	108
Maternal Child Health, Child	30	40000	12	4	40000	2.27	1090	40000	0.91	437	40000	0.91	437	40000	0.45	216
Preschool Child Feeding	25															
Other Child Feeding	30															
Other Child Feeding	25															
School Feeding	20	55000	7	2	55000	0.91	350	55000	0.91	350	55000	0.91	350	55000	0.23	89
Food for Work Makers	30															
Food for Work Dependents	30															
Other																
7. TOTAL RECIPIENTS		11500			115000			115000			115000			115000		
8. TOTAL REQUIREMENTS FOR FY 19							1985			1005			1005			413

ADJUSTED REQUIREMENTS FOR SHIPMENT (METRIC TONS)

9. Quantity on Hand September 30, 1981	245		
10. Quantity Received October 1 through February 28, 1981	598	394	0
10a. From Prior Year Approval	53*	0	217
10b. From Current Year Approval	545	0	0
11. Quantity on Hand February 28, 1981	457	227	217
12. Quantity Due or Rec'd for Current FY Program After Feb. 1981	929	164	151
13. Total Line 11 Plus Line 12	1386	358	733
14. Projected Distribution March 1 through September 30, 1981	1148	622	883
15. Estimated Inventory, September 30, 1981	238	671	720**
16. Desired Operating Reserve	0	0	164
17. Adjusted Total Requirements FY 1982	1747	1005	871

CLEARANCES

SIGNATURE

TITLE

DATE

18. Submitted by (Field Representative)	<i>John L. Paccelli</i>	Director CARE in Panama	April 10, 1981
19. Reviewed and Recommended by US AID or Embassy:	<i>John Champagne, RTT Officer</i>	USAID/Panama	May 13, 1981
20. Cooperating Sponsor Approval			
21. USC/AID - Washington Approval			

\*Replacement for condemned shipment CCC-1264-01 (116,900#)  
\*\*49 MT of SFRO will be substituted for GSN, if necessary, during the fourth quarter of FY 1981.

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TITLE II, PL 480 COMMODITIES  
ANNUAL ESTIMATE OF REQUIREMENTS - FY 1982

(See reverse for instructions)

FORM APPROVED  
OMB NO. 24-00051

1. COUNTRY  
PANAMA

2. COOPERATING SPONSOR  
CATHOLIC PELLET SERVICES

3. RECIPIENT CATEGORIES	3. NUMBER FEEDINGS DAYS PER MO	4. NUMBER OF RECIPIENTS	5. NUMBER MONTHS OPERATING	5a. NUMBER DISTRIBUTED PER YEAR	6. PROPOSED DISTRIBUTION													
					a. S. F. C.			b. C. S. M.			c. S. F. F.			d. HHE				
					k. NUMBER RECIPIENTS	l. RATE KGS	m. (000) KILOGRAMS	k. NUMBER RECIPIENTS	l. RATE KGS	m. (000) KILOGRAMS	k. NUMBER RECIPIENTS	l. RATE KGS	m. (000) KILOGRAMS	k. NUMBER RECIPIENTS	l. RATE KGS	m. (000) KILOGRAMS		
Maternal Child Health Mother	30																	
Maternal Child Health Child	30																	
Preschool Child Feeding	25																	
Other Child Feeding	30																	
Other Child Feeding	25																	
School Feeding	20																	
Food for Work Workers	30																	
Food for Work Dependents	30																	
Other HOME FOR AGED ORPHANAGES		1020	12	12	1.8	22.0		1.8	22.0		0.9	11.0					1.8	13.2
		610	12	12	1.8	13.2		1.8	13.2		0.9	6.6						
7. TOTAL RECIPIENTS		1630																
8. TOTAL REQUIREMENTS FOR FY 19						35.2				35.2		17.6						13.2
ADJUSTED REQUIREMENTS FOR SHIPMENT (METRIC TONS)																		
9. Quantity on Hand September 30, 1980						4.2				0.1		13.2						3.5
10. Quantity Received October 1 through February 28, 1981						0				0		4.5						1.2
10a. From Prior Year Approval						0				0		0						0
10b. From Current Year Approval						0				0		4.5						1.2
11. Quantity on Hand February 28, 1981						8.4				19.2		5.1						0.9
12. Quantity Disc or Rec'd for Current FY Program After Feb. 1981						25.6				25.6		13.1						9.8
13. Total Line 11 Plus Line 12						34.0				44.8		18.2						10.7
14. Projected Distributions March 1 through September 30, 1981						24.0				30.8		18.2						10.7
15. Estimated Inventory, September 30, 1981						10.0				14		0						0
16. Desired Operating Reserve																		
17. Adjusted Total Requirements FY 19						25.2				21.2		17.6						13.2
18. CLEARANCES					18. SIGNATURE					18. TITLE					18. DATE			
18. Submitted by (Field Representative)					<i>John Champagne</i> John Champagne					Program Director, CRS - Panama					10 May 1981			
19. Reviewed and Recommended by US AID or Embassy:										FFP Officer, USAID/Panama					May 13, 1981			
20. Cooperating Sponsor Approval																		
21. ISC/AID Washington Approval																		

TITLE II, PL 480 COMMODITIES  
ANNUAL ESTIMATE OF REQUIREMENTS - FY 1982

(See program for further details)

FORM APPROVED  
O.M.B. NO. 24-00051

1. COUNTRY  
PANAMA  
2. COOPERATING SPONSOR  
CATHOLIC RELIEF SERVICES

3. RECIPIENT CATEGORIES	1. NUMBER FEED INGS. DAYS PER MO.	2. NUMBER OF RECIPIENTS	3. NUMBER MONTHS OPERATING	4. NUMBER DISTRIBUTED BUTLS PER YEAR	OIL			PROPOSED DISTRIBUTION								
					5. NUMBER RECIPIENTS	6. RATE KGS	7. (000) KILOGRAMS	8. NUMBER RECIPIENTS	9. RATE KGS	10. (000) KILOGRAMS	11. NUMBER RECIPIENTS	12. RATE KGS	13. (000) KILOGRAMS	14. NUMBER RECIPIENTS	15. RATE KGS	16. (000) KILOGRAMS
Maternal Child Health Mother	30															
Maternal Child Health Child	30															
Preschool Child Feeding	25															
Other Child Feeding	30															
Other Child Feeding	25															
School Feeding	20															
Food for Work Workers	30															
Food for Work Dependents	30															
Other BUNGE FORTIFIED MULTIVITAMINES		1020	12	12		0.45	5.5									
		610	12	12		0.45	3.3									
7. TOTAL RECIPIENTS		1630														
8. TOTAL REQUIREMENTS FOR FY 19		8.8					8.8									

ADJUSTED REQUIREMENTS FOR SHIPMENT (METRIC TONS)

9. Quantity on Hand September 30, 1981	1.8
10. Quantity Received October 1 through February 28, 1981	2.2
10a. From Prior Year Approval	0
10b. From Current Year Approval	2.2
11. Quantity on Hand February 28, 1981	0.5
12. Quantity Drawn on Rec'd for Current FY Program After Feb., 1981	6.5
13. Total Line 11 Plus Line 12	7.0
14. Projected Distribution March 1 through September 30, 1981	7.0
15. Estimated Inventory, September 30, 19	0
16. Desired Quantity Reserve	
17. Adjusted Total Requirements FY 19	8.8

CLEARANCES

SIGNATURE

TITLE

DATE

18. Submitted by (Field Representative)	<i>David George</i>	<i>Program Director, CRS Panama</i>	<i>10 May 1981</i>
19. Reviewed and Recommended by US AID or Embassy:	<i>John Champagne</i>	Food for Peace Officer, USAID/Panama	May 13, 1981
20. Cooperating Sponsor Approval			
21. USC/AID - Washington Approval			

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CARE-PANAMA

OPERATIONAL PLAN

FY 1982

I. Elements of Operation

A. Identification

1. CARE, Inc.  
Panama  
April 1981

Ministry of Health  
Avenida Cuba  
Panama, Panama

Ministry of Education  
Avenida Justo Arosemena  
Panama, Panama

2. James J. Puccetti  
Director of CARE  
Avenida Balboa, Calle 30 E, No.1-16  
Apartado 4257  
Panama 5, Panama

Devotes part time to P.L. 480, Title II activities.

Sub-Director	- Mario A. Scifo
Executive Secretary	- Sonia Arana de Talavera
Secretary	- Poly Rovira
Assistant Accountant	- Marta Estela Párraga
Field Inspector	- Luis J. Córdoba
Field Inspector	- Simón A. Fernández
Messenger	- Rodolfo Villamonte

B. Area - Scope - Conditions of Operations

CARE, as the VOLAG distributing agency, in cooperation with the Ministry of Health and the Ministry of Education provides support for the Mother Child Health and School Feeding programs.

The immediate problem that this program will address is the 50% malnutrition rate which is reported to exist in the priority recipient categories selected by the Government of Panama (GCP) to receive supplementary food assistance in 1982.

Malnutrition has been detected in every province of Panama and affects all age groups. The most recent analysis of the problem was performed in 1980, under

the auspices of the Ministry of Health. A national nutrition survey, part of a multisectoral analysis of the food and nutritional situation in Panama, was conducted during the months of July and August 1980. The nation-wide survey, a coordinated effort involving national and international organizations, included visits to 7,580 households, interviews encompassed more than 28,000 people. Special support and assistance was rendered the Ministry by AID, the Research Triangle Institute of North Carolina and INCAP.

Preliminary results of the national nutrition survey suggest malnutrition in Panama is essentially caused by the insufficient ingestion of calories and proteins due to socio-economic constraints and traditional consumption practices. The survey reveals the existence of significant levels of malnutrition in several provinces, especially among the most vulnerable MCH-child category. The following chart illustrates the range of the problem disclosed by the survey:

Prevalence of Malnutrition in the MCH-Child Category  
(2-5 years)  
Panama 1980

<u>Province</u>	<u>% Malnutrition</u>
Bocas del Toro	44.08
Cocle	55.03
Colon	47.71
Darien	58.64
Chiriquí	48.47
Herrera	48.00
Los Santos	41.38
Panama	44.20
San Blas	65.65
Veraguas	65.30

Note: The anthropometric measurement used in the preparation of the above chart was weight/age.

A major part of the GOP's response to this problem is to distribute a daily ration of PL 480 Title II supplementary food commodities to the following recipient categories:

<u>Category</u>	<u>No. of Beneficiaries</u>
MCH/Mothers	20,000
MCH/Children	40,000
School Feeding	55,000

The availability of nutritious foods for human consumption in Panama is determined by local production, the capacity of the GOP to supplement local production with food imports, and family income. The most economical "energy" food available locally are yuca, potatoes and rice. These three items comprise the major portion of the average Panamanian's diet and are the source of from 60% to 80% of his/her total daily caloric intake.

In reference to estimates of need and the availability of nutritious foods in Panama, during 1980, the GOP projected that the local capacity to satisfy the demand for protein-rich food products (i.e., beans, eggs, meat, milk) would fluctuate between 36% and 67% of the estimated requirements. Taking into consideration the unequal distribution of income, the most vulnerable categories within the lower income groups (the beneficiary targets of this OP) had access to an insufficient quantity of protein-rich food products.

In general terms, malnutrition in Panama is due to a series of economic, social and political factors which directly affect the relationship between the availability, distribution and utilization of nutritious foods. For instance, we know that while in the aggregate there is sufficient availability of most nutritious foods in Panama, lower income group MCH recipients receive about one half of the proteins and calories consumed by upper income families. Likewise, it has been demonstrated that most urban inhabitants receive a much more nutritious diet than rural Panamanians. To reduce these gaps and to effectively realize the national health slogan of "equal health for all", the GOP is slowly developing a national food and nutrition policy whose goal is to ensure optimum nutritional status for all Panamanians. During the interim, PL 480, Title II-assisted supplementary feeding activities will continue to be the most effective means of combating problems related to protein and calorie deficiencies.

The daily PL 480 Title II ration planned for distribution, consumption and absorption under this program is as follows:

Maternal Child Health:	Daily Ration
<u>Commodity</u>	<u>(grams)</u>
NFDM	73
CSM	30
SFRO	30
VEGOIL	15
School Feeding:	<u>148</u>
NFDM	30
CSM	30
SFRO	30
VEGOIL	7.5

The above ration will provide the most vulnerable beneficiaries within these two recipient categories with the following supplemental nutrients (stated as a percentage of the Daily Nutritional Requirement (DNR) recommended by the FAO and WHO):

<u>Recipient Category</u>	<u>% Calorie DNR</u>	<u>% Protein DNR</u>	<u>% Iron DNR</u>
<u>Mothers:</u>			
1st Trimester of Pregnancy	27.4	84	27.3
2 & 3rd Trimester of Pregnancy	25.1	63	27.3
Lactating	23.2	56	27.3
<u>Children:</u>			
6 - 8 months	62.2	210	76.4
9 -11 months	58.6	189	76.4
1 year	52.5	158	76.4
2 years	44.7	135	76.4
3 years	38.9	126	76.4
4-6 years	34.5	115	76.4

2. Maternal Child Health

The final goal of this program is to improve the nutritional status of MCH recipients in Panama over a five-year period beginning FY 1981. The goal indicators which would best reflect the achievement of the primary objective would be:

1. A zero rate of malnutrition increase among the targeted recipient categories.
2. A decrease in the percentage of infants with a birth weight of five pounds nine ounces.  
 $\begin{matrix} \text{less than} \\ \text{Z} \end{matrix}$

Goal indicator measurement would necessitate a follow-up national nutrition survey by the MOH or another agency, to be compared against the baseline data of 1980.

Additionally, beginning with FY 1983, the selection of PL.480 commodities for consumption by recipient categories in Panama should take into consideration the need to provide supplementary foods which contain a higher percentage of calories per 100 grams. It is understood that the human metabolism has the facility to convert excess protein into calories, but from the standpoint of program costs and efficiency it is not feasible to continue to program protein-rich commodities where lower cost products with a higher caloric content might be preferable.

As a related matter, consultations with MOH counterparts will be initiated in light of the preliminary findings of the national nutritional survey to ensure that those provinces with the highest indices of malnutrition receive priority consideration under the PL.480-assisted MCH program beginning CY 1982.

#### School Feeding

The final goal of this activity, aside from the primary objective of improving the nutritional status of school feeding recipients, is to successfully and completely phase in the MOE to assume all school feeding activities during a four-year period to begin FY 1981. In addition to a phasing out of Title II, PL.480 support over the same four-year period, concentrated effort will be given to strengthening the capability of the MOE's School Nutrition and Commodity Distribution Unit in order that they are prepared to fully assume total responsibility for continuing school feeding activities by the end of FY 1984.

#### Final Goal Indicators

- The maintenance of ongoing school feeding assistance to 75,000 low income recipients annually (FY 1981-84) despite major phased reductions in Title II P.L. 480 commodity and CARE administrative inputs.
- Sufficient funding in the MOE's CY 1981-85 operating budgets to replace Title II, P.L. 480 commodities and CARE planning, administrative, supervisory and personnel inputs to the national school feeding program.

- Formalization of detailed MOE phase in responsibilities and activities to be described in annual program agreements which will be signed between the MOE and CARE beginning in CY 1981. The first annual program agreement of this sort was signed on February 10, 1981. Clause 2.5 of this agreement states the Ministry will contribute an "allocation of one hundred thousand dollars (\$100,000) during 1981 for the purchase of local commodities in order to provide a nutritional supplement to 10,000 additional school children over and above the 65,000 beneficiaries of P.L. 480 commodities, resulting in a total of 75,000 participants in the school feeding program." Spanish and English copies of this agreement are on file in the CARE office in Panama City, Panama.

The continuation of the school feeding program calls for a progressive phase over of Title II, P.L. 480 commodity assistance based upon an annual MOE financial input which quadruples to \$400,000 during the four-year MOE phase in period. The following chart depicts the phase in schedule agreed to by the GOP, AID (STATE 003155) and CARE:

(1)	(2)	(3)	(4)	(5)	(6)	(7)
FY	Recipient Allotments		Total Recipients	Financial Inputs		Total
	MOE	CARE		Recipients	MOE	
1981	10,000	65,000	75,000	\$ 60,000	\$100,000	\$160,000
1982	20,000	55,000	75,000	\$ 80,000	\$200,000	\$280,000
1983	30,000	45,000	75,000	\$100,000	\$300,000	\$400,000
1984	40,000	35,000	75,000	\$110,000	\$400,000	\$410,000

NOTES:

- The total annual recipients (column 4) will be selected on the basis of nutritional need. The ministries of Education, Health and Planning will be responsible for determining which areas of the country shall receive priority school feeding assistance based on major poverty and nutrition deficiency indicators. Beneficiary lists are submitted annually to CARE prior to the beginning of the yearly school feeding program.
- Financial inputs to the program for the purchase of local foods to replace Title II, P.L. 480 commodities will be provided on a cost-sharing basis with SF recipients contributing approximately \$0.25 a month (for a maximum of

eight months per year) and the MOE requesting an annual budget allocation from the Ministry of Planning. Recipient inputs will vary as determined by the individual's ability to contribute.

- c. The Civic Action component (G-5) of the Panamanian National Guard has expressed interest in continuing to provide up to 90% of the essential logistical support to the program.
3. The program is countrywide. Commodity distributions are made to all nine provinces and the comarca of San Blas. Approximately 40% of the total number of recipients are classified as lower income urban or semi-urban inhabitants. The remaining 60% are lower income rural inhabitants.
4. Distribution is accomplished overland to the majority of recipient centers, and by sealoft to San Blas, areas of Darien and Bocas del Toro. Commodities are moved from a central warehouse in Panama City to provincial warehouses/ directly to recipient centers. MCH distributions are accomplished quarterly and SF twice a year.
5. The host government public health and education delivery system provide the infrastructures for the implementation of the program. This includes warehouse, handling and internal transport costs.
6. Since CARE is the exclusive P.L. 480 Title II coordinating sponsor for the MCH and SF programs, duplication does not arise.

#### C. Control and Receipting - Record Procedures and Audits

Shipment arrivals are entered by CARE central accounting and checked against corresponding bills of lading, marine survey and arrival reports. Commodities are off-loaded into Balboa or Cristobal port warehouses and shipped directly to Custodia Panama Warehouse, where CARE assumes physical possession of commodities.

Commodities delivered at the warehouse and warehouse records, must correspond to physical stock on hand and CARE book balances.

Records used to control commodity arrivals and distribution are as follows:

1. Bill of Lading
2. Shipment Arrival Report
3. Outturn Report/Marine Survey
4. Claim Report
5. Claim Progress Memo
6. Monthly Physical Count Certificate
7. Exception Certificate
8. General Warehouse Inventory Control Record
9. Warehouse Issue Order
10. Delivery Receipt
11. Consolidated Monthly Inventory Report (B-1)
12. Recipient Center Inspection Report
13. Panama Canal Commission Over, Shortage & Damage Report (O, S&D Report)
14. Commodity Recipient and Loss Status Report

Per CARE Administrative Manual instructions, P.L. 480 records are retained by the CARE Mission for not less than seven years after the close of the fiscal year to which they pertain.

### Claim Procedures

#### 1. Marine Claims

As soon as shipment arrival at Custodia Panama Warehouse is completed, CARE obtains an Exception Report from Terminales Panama as shipping agent or the Panama Canal Commission, certifying any damage or shortage noted. The Exception Report, marine surveys and our warehouse arrival reports substantiate the marine claims filed by CARE/New York against the shipping line.

Any failure to pursue a claim show up in our records at the end of the month. In the inventory record, CARE enters the number of units or pounds per Bill of Lading, then subtracts from that figure any unit lost and subject to a marine claim. CARE loss figures are supported by claim documents. CARE failure to enter a loss results in a difference between its book figure and the actual warehouse physical count at the close of each accounting period.

#### 2. Interior Claim

Interior claims due to spoilage or shortage are promptly filed. USAID/Panama is advised in writing of circumstances pertaining to loss, damage or misuse of P.L. 480

commodities. Spoiled commodities are reported on Form RDC-1 (Report of Damaged Commodities P.L. 480 Unfit for Intended Purposes.)

- a) If interior claim is due to shortage or warehouse physical counts a Claim Letter is sent to the responsible party and payment is pursued until collection.
- b) If interior claim is due to GOP representative negligence, a Claim Letter is sent to CARE's GOP counterpart and the value of the claim is charged to the ongoing feeding program.

Total claims are settled by a Financial Accounting Report to the GOP. Payment of settled P.L. 480 interior claims are made to the U.S. Disbursement Officer.

#### D. Port Facilities - Practices

1. The port facilities which are utilized for the offloading, clearance and temporary storage of P.L. 480 commodities were recently relinquished to the Government of Panama by the Panama Canal Company, under the terms of the Carter-Torrijos agreements.
2. Previously, when the ports were administered by the Panama Canal Company, on special waiver from Washington, marine surveys were not required. The practice of conducting a marine survey on incoming shipments was resumed in the second half of FY 1981.

#### E. In-Country Storage and Transportation

1. Central storage in Panama City is satisfactory. CARE, with GOP contributory funds, contracts the services of a commercial warehouse, Custodia Panama, S.A.

Recipient centers provide only limited storage space and security for their commodity allocations.

All storage and transport costs — outside of Panama City — are defrayed directly by the GOP.

2. The main problem related to inland transportation is the timely and efficient movement of commodity from central storage to the recipient centers. The major constraint is the high cost of fuel. The GOP is exploring alternative methods of arranging transport,

i.e., beneficiary contributions to defray transport-related expenses, a larger involvement by the National Guard, and increase in the participating ministries operating budgets.

3. CARE maintains control of the commodity during inland and maritime transport through delivery orders, receipts and inspection visits.

F. Processing - Reprocessing - Repackaging

There are no plans to do any of the above in FY 1982.

G. Financing

1. All CARE administrative costs related to commodity ordering, delivery, handling, storage (Panama City), distribution, supervision, and reporting are reimbursed to CARE by the GOP.
2. The GOP, through the two ministries and the National Guard, finances internal and coastal transportation, inland storage and distribution and all costs, direct and indirect, related to the ministries administrative and supervisory participation in the program.
3. Commodity containers are not sold.

H. Acceptability of Available Foods

1. There is no plan to utilize whole grain in lieu of processed products.
2. CSM, SFRO, NFDM and VEGOIL have been successfully distributed to the recipient categories since FY 1977. All four commodities are accepted by the recipients. VEGOIL and NFDM enjoy the highest acceptability.

I. Program Publicity

1. The orientation of program recipients on the source of foods, program conditions and requirements, and the preparation and use of the donated commodities, is accomplished by the ministry personnel and CARE field inspectors.
2. The program receives very good media coverage (local press, radio and television.) Media releases are prepared and distributed by the ministries, the public relations office of the National Guard and CARE.

II. Contributions to Program

Government of the United States:

Estimated value of the commodity donated under Public Law 480	\$1,783,360	\$1,783,360
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CARE:

Personnel and operations	\$ 196,000 <sup>a</sup> .	
Prepaid P.L. 480 commodity ocean freight expense	713,695 <sup>b</sup> .	\$ 909,695

Government of Panama:

MOH internal administrative costs	\$ 220,000	
MOE internal administrative costs	170,000	
MOE financial input for the purchase of local foods	200,000	
SF recipient contributions	80,000	
National Guard commodity handling and transport costs	180,000	\$ 850,000
		<hr/>
		\$3,543,055

a. To be reimbursed to CARE by the GOP

b. To be reimbursed to CARE by the USG

JJP/sat

cc: 323.5  
324.5

CRS/CARITAS - PANAMA

PANAMA PROGRAM PLAN - FISCAL YEAR 1980

IDENTIFICATION:

1. Distributing Agency: Catholic Relief Services - USCC
2. Country: Republic of Panama
3. Date submitted: April 1979
4. C.R.S. - USCC Personnel
  - U. S. Citizen; Mr. John F. Contier - Program Director
  - U. S. Citizen; Ms. Carol A. Munroe - Program Assistant
  - Mr. Horacio Pestaña - Office/Field Representative
  - Devote Part-Time

5. Counterpart Agency: Caritas-Panamá

6. Caritas-Panama Personnel:

Mr. Osvaldo Rodríguez, National Director  
Ms. Mercedes Cumberbatch, Office Manager  
Mr. Pedro Villaverde, Nutrition Coordinator  
Ms. Eida Mireya Díaz, Development Fund Coordinator  
Ms. Querube Serrato, Secretary

ARCHDIOCESE OF PANAMA AND COCLE

Fr. Laureano Crestar Durán, Archdiocesan Director  
Ms. Josefina S. de Aranda, Secretary  
Mr. Arnoldo Sánchez, Volunteer Nutrition Promotor  
Mr. Bernardino Pérez, Volunteer Promotor

DIOCESE OF CHITRE

Msgr. José María Carrizo  
Mr. Saturnino Centella, Nutrition Promotor  
Mrs. Lucinda de Centella, Nutrition Promotor

DIOCESE OF VERAGUAS:

Mr. Alfredo Rodríguez, Diocesan Director  
Sr. Teresa del Socorro, Assistant to the Director  
Ms. Celodonia Barría, Nutrition Promotor

DIOCESE OF CHIRIQUI:

Mr. Neil Espinosa, Director

Mr. Iván Mojica, Nutrition Promotor

DIOCESE OF COLON:

Fr. Gonzalo Mateo, Diocesan Director

SAN BLAS

Mrs. Rosa Tañón, Nurse

COOPERATING ENTITIES:

Ministry of Health - Local Health Committees

Ministry of Agricultural Development (MIDA)

Ministry of Labor and Welfare

OPERATION PLAN:

Food allocations will be forwarded to CRS Panama through the ports of Cristobal and Balboa in the Canal Zone. Occasionally, shipments arrive at Bahía Las Minas in Colon. Upon discharge, the foods will be received by Terminales Panamá, S.A. for delivery to the warehouses of Sotodia Panamá, S.A. in Panama City, for intermediate storage prior to shipment to regional warehouses. The foods are officially received by CRS/Caritas of Panama upon arrival at the warehouses and accordingly are entered into inventory.

The intermediate transport of these foods to the Caritas Regional (Diocesan) warehouses will be accomplished by Caritas Panama and National Guard vehicles, and supplemented by commercial carriers, when necessary. Regions of especially difficult access will make separate arrangements for on-going water transport (San Blas). Food for work projects, Ministry of Labor and Pre-school feeding centers, etc., will make their own arrangements for on-site delivery. Local committees for WCH Centers will be financially responsible for transport of commodities. Deliveries will be made on a monthly or quarterly basis, as necessary.

The Nutrition Education Coordinator will continue to stress proper preparation of PL-480 Title II Commodities, as well as utilization of locally available foods not in general use, though of significant nutritional value. Insistence will be had on increased food production on the local

scene. A series of regional local seminars will continue, with the assistance of GOP Ministries of Health and Agricultural regional and local functionaries, as well as employees of various autonomous and semi-autonomous GOP Ministries in related fields. GOP personnel in these fields will continue with their evaluation and give their recommendations.

Financial support on the national level, is derived primarily from GOP Budget allocations, which is \$33,000 for this year. Financial support in the past has been adequate and that which was pledged has been forthcoming. Significant increases both regionally and locally are expected, both in money and in species.

The entire managerial resources on the local and regional levels come from cooperating sponsor (Caritas), with only the supervision of the US vo-lag director and staff, the national managerial staff likewise is entirely sponsored by Caritas, with responsibilities of management on the host entity which will be financially responsible for effective administration of assistance and development programs within the country. Caritas has demonstrated a renewed and vigorous interest, through the recent complete reorganization of the national office and the strengthening of the regional offices.

The Caritas Service Bureau which has been operating now for almost two years, has shown to be even more responsive to overall program needs. The Bureau offers a series of technical, legal, administrative and now credit services to the groups with which Caritas works.

No charges are made to recipients for either Title II goods or for their respective containers. The containers are used in program operations; water carriers, cooking utensils, serving trays; and are otherwise given as gifts for community use. The local committees receive small donations from community members to pay for transportation from the regional (diocesan) warehouse.

In summary, the necessary funds for proper handling and transportation of PL480 Title II Commodities at the national level are adequate. On the local, and probably the most important level, program input is increasing

manyfold. Cognizant of the nutritional values of Title II Commodities added to locally available foods - result of a joint effort of Catholic Relief Services, Caritas-Panama and GOP entities - people at the local level are determined to make the best use of elements offered and combine them with increased levels of locally provided nutritious foods.

A local production is clearly then the emphasis of CRS/Caritas nutrition activities at the community level. This in part explains the reduction of beneficiaries for FY 1980 (see AER) since many MCH programs have been, for some time accompanied by local production which now supply the MCH feeding centers as well as community consumption. In addition all food for work recipients are involved in local production projects. As mentioned above the Caritas Bureau makes available various services which foment the community development and nutrition education process.

#### PROGRAM CATEGORIES

##### 1. Mother/Child Health

The Nutrition Education Program (referred to above) operated jointly by CRS, Caritas and GOP agencies will be continued. The three-fold purpose of this program is to instill within participating mothers a realization of the necessity of proper nutritive intake and of the necessity that they avail themselves of locally obtainable foods. Within the latter context, a continued insistence will be made for community gardens to improve meals in MCH centers. Continued will be had on knowing and using local nutritious foods which they are unaware of and/or because of custom have historically never consumed, increasing production of local foods through comunal/community gardens, and the raising of fish (tilapia) for community projects to increase protein availability for MCH centers (and general community consumption).

The number of participants and the quantities of Title II commodities are realistic, and this program is designed to be an effective implementation element towards the Ministry of Health nutrition education goal; the increased production of foods for MCH centers. Additionally, CRS and Caritas are dedicated to the proposition that the communities, themselves, resolve their own socio economic problems, with a minimum of outside assistance.

The CRS Panama Program as related to MCH assistance is attributed to needs as seen by the Ministry of Health. The GOP priorities in this regard are aimed at improving the dietary intake of lactating mothers, and pre-school age children, as well as instructing the mother on the necessity of proper nutrition as

it relates to physical and mental health, without neglecting the problem of insufficient family dietary intake. CRS and Caritas are also dedicated to a program which assists the communities in resolving their socio-economic problems, as they see these problems.

The foods are distributed monthly in bulk, for preparation in the home.

The projected FY 80 MCH program calls for assistance to 2,475 participants (reduced from last year). The PL 480 Title II Commodities and amounts are as follows:

<u>Wheat flour</u>	<u>CSM (I)</u>	<u>Cornmeal</u>	<u>SFRO</u>	<u>Veg. Oil</u>	<u>Milk</u>
13,400 kgs.	26,700 kgs.	26,700 kgs.	26,700 kgs.	13,400 kgs.	53,400 kgs.

These will be used primarily in Centers in the areas of the Provinces of Veraguas, Chiriqui, Chitre and in the isolated areas of the Provinces of Panama and Colon.

## 2. Pre-school Child Feeding

This category (1550 beneficiaries, (increase in relation to last year) will be based primarily in the province of Cooche, Panama City and two islands in the San Blas area. Foods are prepared and given to the infants at established centers. Locally produced foods are also included in the fare. They are prepared by the mothers, taking turns, five and six days per week.

The mothers are given instruction on nutrition and other subjects, and the program is coordinated with health personnel so as to include, vaccinations, hygiene and medical assistance. The commodities and amount are as follows:

<u>Wheat flour</u>	<u>CSM (I)</u>	<u>Cornmeal</u>	<u>SFRO</u>	<u>Veg. Oil</u>	<u>Milk</u>
8,400 kgs.	16,700 kgs.	16,700 kgs.	16,700 kgs.	8,400 kgs.	33,400 kgs.

## 3. Food -For - Work

This category (reduced from last year) <sup>(1)</sup> is directed towards communities seeking to resolve their own problems, and aimed particularly at increasing agricultural production. Many of the beneficiaries will be participating the ARADO project. (Rural Agricultural Action for Organized Development). The commodities and amounts are as follows:

<u>Wheat flour</u>	<u>CSM (I)</u>	<u>Cornmeal</u>	<u>SFRO</u>	<u>Veg. Oil</u>
7,400 kgs.	14,900 kgs.	14,900 kgs.	7,400 kgs.	3,800 kgs.

(1) to 100 workers and 510 dependents.

4. Orphanages

This category (610 beneficiaries) includes children between 5 and 14 years of age (principally on the younger side) at the Ciudad de los Niños (Boystown) the Residence for Indian and Campesino youth in Tole, and other orphanages, where GOF and other funding are insufficient for proper alimen-  
tation. The commodities and amounts are as follows:

<u>Wheat flour</u>	<u>CSM (I)</u>	<u>Cornmeal</u>	<u>SFRO</u>	<u>Veg. Oil</u>	<u>Milk</u>
6,600 kgs.	13,200 kgs.	13,200 kgs.	6,600 kgs.	3,300 kgs.	13,200 kgs.

5. Homes for the Aged

These beneficiaries (1020) are permanent residents of Old Age Homes, have no income and in general cannot care for themselves. Those who are still physically able, help tend the Home garden or barnyard animals around the Home. This limited program will be coordinated with the Social Welfare Council, and only those Homes with the lowest income level are considered, even though GOF and other funding are insufficient for any of these institu-  
tions to function adequately.

<u>Wheat flour</u>	<u>CSM (I)</u>	<u>Cornmeal</u>	<u>SFRO</u>	<u>Veg. Oil</u>
11,000 kgs.	22,000 kgs.	22,000 kgs.	11,000 kgs.	5,500 kgs.

## Appendix E

### Supplementary Tables and Forms

1. Average Daily Consumption of Food per person in the Rural and Urban Sector of Panama, 1967
2. Nutritional Composition of Selected Foods used in Panama, per 100 grams edible portion
3. Ministry of Health Table of Values for Revision of Growth Monitoring Charts, Weight/Height - Boys (partial reproduction)
4. Evaluation Form for the Ministry of Health Food Distribution Program
5. Theoretical Nutritional Contributions of 100 grams of Food for Peace Products
6. Comparison of Central List, Programmed Participants, and Attendance Figures for the Sample Sites

AVERAGE DAILY CONSUMPTION OF FOOD PER PERSON IN THE  
RURAL AND URBAN SECTOR OF PANAMA, 1967\*

<u>Food</u>	Average Consumption (grams)	
	<u>Rural</u>	<u>Urban</u>
Milk and dairy products	73	163
Eggs	11	19
Meat	90	134
Legumes	20	19
Fresh vegetables	25	68
Fruit	50	99
Bananas, plantains	99	75
Roots and tubers	82	70
Cereals		
rice	186	150
tortilla (corn)	16	6
bread (wheat flour)	37	65
pastas	6	9
others	29	7
Jam, jelly, honey, syrup	51	42
Fats	26	35
Miscellaneous		
coconut water	21	43
coffee	6	-
carbonated beverages	8	-

\*Source: May and McLellan (52)

NUTRITIONAL COMPOSITION OF SELECTED FOODS USED IN  
PANAMA, PER 100 GRAMS EDIBLE PORTION\*

	<u>Calories</u>	<u>Protein</u> (g)	<u>Fat</u> (g)	<u>Iron</u> (mg)	<u>Vitamin A</u> (mcg)
<b>GRAINS</b>					
pigeon peas (gandu)	118	7.0	0.6	1.7	20
kidney beans	150	9.8	0.3	3.6	10
rice, enriched	363	6.6	0.5	(2.9)	0
corn flour (tortilla)	369	8.2	5.8	2.6	5
white wheat bread	307	9.3	0.7	1.7	0
<b>VEGETABLES</b>					
tomato	21	0.8	0.3	0.6	180
pepper	38	1.2	0.2	0.7	150
squash	21	0.8	0.1	0.4	10
cabbage	28	1.7	0.2	0.7	30
peas	97	7.6	0.4	2.0	125
eggplant	27	1.0	0.3	0.8	tr
<b>TUBERS</b>					
cassava	132	1.7	0.5	0.8	10
yuca	132	1.0	0.4	1.4	tr
potato	79	2.8	0.2	1.0	tr
yam (name)	100	2.0	0.2	1.3	tr
<b>FRUITS</b>					
mango	59	0.5	0.2	0.8	630
naranja	42	0.8	0.2	0.7	40
papaya	32	0.5	0.1	0.4	110
banana	107	2.0	0.2	0.5	--
plantain, mature	122	1.0	0.3	0.8	175

Source: Leung and Flores (50)

Ministry of Health Table of Values for Revision of Growth Monitoring Charts  
Weight/Height - Boys (partial reproduction)

Age	PESO/TALLA (Varones)				
	PESO (kg)				
cm	100%	110%	90%	85%	80%
48	3.2	3.5	2.9	2.7	2.6
50	3.3	3.6	3.0	2.8	2.7
51	3.5	3.9	3.2	3.0	2.8
52	3.7	4.1	3.3	3.1	3.0
53	3.9	4.3	3.5	3.3	3.1
54	4.1	4.5	3.7	3.5	3.3
55	4.3	4.7	3.9	3.7	3.4
56	4.6	5.1	4.1	3.9	3.7
57	4.8	5.3	4.3	4.1	3.9
58	5.1	5.6	4.6	4.3	4.1
59	5.4	5.9	4.9	4.6	4.3
60	5.7	6.3	5.1	4.8	4.6
61	5.9	6.5	5.3	5.0	4.7
62	6.2	6.8	5.6	5.3	5.0
63	6.5	7.1	5.8	5.5	5.2
64	6.8	7.5	6.1	5.8	5.4
65	7.1	7.8	6.4	6.0	5.7
66	7.4	8.1	6.7	6.3	5.9
67	7.7	8.5	6.9	6.5	6.1
68	8.0	8.8	7.2	6.8	6.4
69	8.3	9.1	7.5	7.1	6.6
70	8.5	9.3	7.6	7.2	6.8
72	8.8	9.7	7.9	7.5	7.0
73	9.1	10.0	8.2	7.7	7.3
74	9.3	10.2	8.4	7.9	7.4
75	9.6	10.6	8.6	8.2	7.7
76	9.8	10.8	8.8	8.3	7.8
78	10.0	11.0	9.0	8.5	8.0
79	10.3	11.3	9.3	8.8	8.2
80	10.5	11.5	9.5	8.9	8.4



Theoretical Nutritional Contributions of 100 grams of Food for Peace Products

Component and Measurement	Oil	CSM	WSB	SFRO	NDFM	SFCM
Calories	884	547	360	390	363	353
Protein (g)	0	19	20	14	36	9
Carbohydrates (g)	-	66	NA	68	52	-
Fat (g)	100	2	NA	7	1	-
Vitamin A (units)	-	1960	1650	-	5000	-
Thiamin (mg)	-	0.7	1.2	0.6	0.4	-
Riboflavin (mg)	-	0.6	0.6	0.1	1.8	-
Niacin (mg)	-	6.3	10.6	1	0.9	-
Vitamin D (units)	-	198	198	-	500	-
Phosphorus (mg)	-	381	545	405	1016	-
Calcium (mg)	-	502	450	53	1308	-
Iron (mg)	-	11	8	5	0.6	-
Sodium (mg)	-	276	NA	2	532	-
Potassium (mg)	NA	624	-	352	1746	-

NOTES: Oil = vegetable oil; CSM = corn soy milk; WSB = wheat soy blend; SFRO = soy fortified rolled oats; NDFM = non-fat dried milk; SFCM = soy fortified cornmeal.

NA = not applicable; 0 = measured and none contained; - = not determined or so minor that the value is not worth reporting, or not found in preliminary measurements.

Central List, Programmed Participants, and Attendance Figures for the Sample Sites  
 Cifras de la Lista Central, Beneficiarios Programados, y Asistencia en los Sitios de Muestra

Central List Lista Central	Programmed Programados	Attendance Asistencia	Central List Lista Central	Programmed Programados	Attendance Asistencia
95	99	99	50	50	50
35	35	35	90	698	659
60	500	505	60	500	527
60	60	400	50	353	328
50	450	415	34	97	67
94	144	127	202	132	93
25	60	62	50	-	343
60	620	617	436	-	216*
400	650	650	-	40	91
60	60	60	110	100	304
110	110	156	60	65	61
70	70	70	100	100	373
120	505	466	110	110	270
522	436	301*	70	110	109
70	70	485	60	-	150
514	248	248	50	50	205
-	-	364	50	50	51
50	52	52	170	170	177
70	70	980	130	130	763
-	-	1200	20	20	18
125	125	125	210	-	210
92	100	92	135	135	135
40	45	45	105	105	105
100	100	120	59	555	555
100	100	108	200	200	204
60	60	62	75	75	75
120	505	503	16	16	16
200	200	209	75	-	76
120	120	120	100	100	104
127	500	534	70	75	76
300	300	557	150	150	150
290	290	288	500	500	473
170	-	700	-	-	1105
130	150	157	175	-	777
280	280	280	298	775	776
500	500	512	1000	1000	1161
100	100	108	13	13	13
50	120	123	106	106	121
412	457	457	175	175	779
30	30	27	300	300	300
203	554	554	65	65	65
50	50	47	40	40	43
350	350	356	124	400	414
30	30	30	662	665	689
9500	9500	9545	84	84	78
75	75	75	668	700	739
8000	8000	8109	180	800	800

...continued...continuado...

...continuación...continuation...

Central List Lista Central	Programmed Programados	Attendance Asistencia	Central List Lista Central	Programmed Programados	Attend. Asist.
40	235	235	34	34	34
240	260	260	183	183	188
31	31	31	57	57	57
455	455	456	100	100	108
63	65	204	51	60	61
180	445	455	14	14	14
40	200	209	75	75	76
40	105	105	120	120	120
1000	1000	1024	856	900	918
167	700	773	-	-	1200
18	18	18	125	125	125
200	200	210	100	100	92
135	135	135	45	45	45

NOTES: When a site comprised more than one program, the numbers were aggregated to a single sum.

NOTAS: Cuando un sitio contenía más de un programa, los números se sumaron a una sola cifra.

\* One or more of the programs were suspended because of the epidemics or no P.L. 480 products had arrived in some time.

\* Uno o más de los programas fueron suspendidos a razón de las epidemias o porque no productos P.L. 480 habían llegado por un tiempo.