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FOOD SUPPLIES FOR FEEDING PROGRAMS  
IN THE PHILIPPINES

by

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## SUMMARY

Due to limitations on availability of donated food commodities for use in child-feeding programs, AID wishes to assist interested less developed countries to develop new food supplies using their own resources to supplement or replace imported donated commodities. The Government of the Philippines has expressed an interest in having AID assistance on this subject, and in May 1975, a team of food specialists representing AID visited the Philippines to determine the needs, interests, and capabilities of the Philippines for developing new food supplies for feeding programs. This report covers the findings and recommendations of the AID team.

Malnutrition due to inadequate food intake and related factors seriously affects over one-third of the children in the Philippines. The GOP has recognized this problem and is interested in helping solve it through distribution of supplementary foods to malnourished children. Plans are currently under consideration by the GOP in which several existing feeding programs will be expanded and new programs added to reach 8.75 million recipients. School programs are to be enlarged from 900,000 beneficiaries in FY75 to 6,000,000. Preschool programs are to be expanded from the present level of 400,000 beneficiaries to 2,750,000. Implementation of these programs would be expected to result in reaching nearly all the severely and moderately malnourished children 14 years of age and younger, and should result in significantly reduced levels of malnutrition.

In order to carry out the GOP's proposed feeding programs, food supplies totalling 120,000 tons per year will be required. Of this nearly 50,000 tons will be needed for school programs and over 70,000 tons for preschool programs. At 1975 price levels, these foods would cost about US \$47 million. Distribution and preparation of the foods and administration of the programs would be expected to cost an additional US \$18 million so that the total costs for all programs would be US \$65 million.

It is the conclusion of the AID team that all of the commodities needed for the proposed programs can be made available through a combination of international market sources and readily developed domestic supplies. Developing domestic food supplies would be expected to require a strong commitment and the determination by the GOP to implement procurement on a large scale. However it probably can be based on existing well established technology and will require little if any research on new food crops or new processes.

Food supplies from the USG through PL 480, Title II for use in Philippines feeding programs are scheduled to be phased out during the next three years. In order to continue existing programs even at present levels will require a rapid increase in Philippine provided food inputs. Therefore it is the conclusion of the team that urgent action by the GOP is needed to develop procurement procedures and funding if these programs are to be maintained.

The team recommends that:

1. AID provide technical assistance to the Philippines for expanding GOP feeding programs and for developing reliable food supplies for the programs.
2. AID suggest that the GOP act quickly to establish a food procurement agency for the feeding programs, and offer the GOP the services of food procurement specialists to advise on planning and procedures for food procurement.
3. AID recommend that the GOP create a task group to determine specific funding requirements and funding sources for feeding programs.
4. AID offer the GOP assistance in developing a plan for acquiring food supplies produced within the Philippines based on existing food crops and existing technology.
5. AID suggest to the GOP that it establish a FOOD RESEARCH ADVISORY BOARD to identify applied research needed to improve food commodities used in Filipino feeding programs.

FOOD SUPPLIES FOR FEEDING PROGRAMS  
IN THE PHILIPPINES

I. INTRODUCTION

1. Since 1954, over 80 billion pounds of U.S. food commodities valued at more than \$6 billion have been made available through PL 480, Title II for supplementary feeding programs and emergency relief in over 100 foreign countries. The feeding programs supplied by these foods have been developed with the assistance of the U.S. Agency for International Development (AID), Private Voluntary Organizations, the World Food Program (WFP), and by many donor countries which support such activities.
2. Currently there is insufficient food to meet the programming needs in all LDCs due to limitations on availability of donation foods. Therefore, development of alternative food sources to expand, supplement, or replace imported donation foods using the LDCs' own resources is necessary. It is in AID's interest to assist in this effort in order:
  - To fulfill the requirement of PL 480 that LDCs should be assisted in developing their capability to undertake programs without primary dependence upon imported donation food inputs. 1/
  - To assure that past efforts to provide food assistance to needy persons developed through AID's encouragement and assistance will continue without primary dependence upon imported donation foods.

1/ Public Law 480 cites the need to assist LDCs develop their capacity to supply food commodities and limit dependence upon external assistance. Title II Section 202 states: "The assistance to needy persons shall insofar as practicable be directed toward community and other self-help activities designed to alleviate the causes for the need for such assistance." Other sections of the law provide authority and funds to carry out activities of these types.

-- To assist in implementing AID's program policies which propose to concentrate AID resources in integrated approached to solving nutrition problems along with other priority development problems. 2/

In addition, AID has an implicit obligation to provide assistance for developing food supplies for feeding programs because many LDCs have developed food distribution programs as a result of AID's initiative and persuasion.

Providing assistance in developing the capability to furnish foods made available through the LDC's own resources can help fulfill this obligation.

3. AID requested that USDA address the need for development of additional supplementary food supplies and more specifically asked USDA to develop a program to assist LDCs which are interested in and qualified for assistance to develop, through their own resources, foods which can be utilized to expand, supplement, or replace imported donation foods.
4. In response to this request, USDA contracted with Mr. Raymond Hoehle, a food program specialist, to develop a program for AID and USDA to assist selected LDCs develop food supplies for donation feeding programs. Hoehle developed

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2/ In the AID "Nutrition Strategy" and the Program Guideline for the Food for Peace program, it is pointed out that the main thrust of the program is to "concentrate AID resources in an integrated approach to solving priority development problems and to have increased participation of the less developed countries." Title II donation food programs are to develop increasing LDC assumption of responsibility and decrease the dependence on U.S. grant assistance. Priorities for Title II programming are: (1) Mother and Child Health Programs, (2) Food for work; and (3) School Feeding Programs. The Guidelines further stress continued restrictions on the availability of Title II foods and the need to focus these resources in countries which have a "nutrition priority." They also call for specific plans for phase-in of local resources and the phase-down of U.S. grant commodities where there is a lack of interest or need for grant assistance. This policy has resulted in a phase-over/out of grant foods on a program by program basis in some countries and a total program phase-out in others.

a proposal for such a program and submitted it to AID and USDA for consideration in May 1974. 3/ The Hoehle proposal called for a two stage process in which (I) an in-country fact finding team would examine the needs, interests, and capabilities of countries to provide additional food supplies for use in their feeding programs, and (II), if conditions were found to be favorable, an in-country project development team would assist the countries with the development of appropriate projects through which additional food supplies could be generated.

5. As envisioned in the Hoehle program, during Stage I the fact finding team would:

- (a) Determine the amounts and kinds of foods needed to supply the donation feeding programs in which the countries have an interest. (This information to be based on the numbers and kinds of expected program beneficiaries and the needs of those beneficiaries for supplementary nutrients).
- (b) Determine the amounts and kinds of food available from existing or anticipated supplies. (This information to take into account existing plans as to availability of Title II and other imported or domestic donation foods and to include plans for phase-down/out of Title II foods. 4/)
- (c) Determine the additional amounts and kinds of food needed to supply the feeding programs but not available from existing or anticipated resources. (Quantitatively this is the difference between (a) the total food needs and (b) existing or anticipated supplies).

3/ Hoehle, R.A., Programs to Assist Selected LDCs in Developing Foods for Donation Feeding Programs', USDA Nutrition and Agribusiness Group Report. May 10, 1974.

4/ It was not to be the intent of the fact finding team to suggest changes in Title II food supplies or plans for phase-down/out of Title II. Nor was it to evaluate Title II programs in any way. Rather, the team was to take into consideration the existing plans of the countries and the USG regarding Title II food supplies as those plans affect needs for additional food supplies.

(d) Determine the capabilities of the country to supply the additional amounts of food from its own resources. (This determination to be based on an analysis of the financial resources available for food procurement and the food commodities which can be made available for the feeding programs).

Hoehle designed the Stage I fact finding team to consist of experts in (1) operation of donation feeding programs (FOOD PROGRAMMER), (2) nutritional needs of food program recipients (NUTRITIONIST), (3) development and manufacture of food commodities (FOOD TECHNOLOGIST), and (4) business and financial management as related to commercial supplies of food commodities (BUSINESS MANAGER).

6. Hoehle proposed that the fact finding team present its findings together with recommendations concerning follow-up activities to AID and that AID, in consultation with the appropriate country officials, respond to the recommendations with decisions for further action to support the country under Stage II. Since the purpose of Stage II was to develop projects through which additional food supplies could be generated, it was not expected that it would be possible to specify in advance a particular plan of action for Stage II. However, Hoehle envisioned that an in-country project development team (or teams), working closely with country officials, would develop specific projects conforming to the AID PROP format so that goals, purposes, outputs, inputs, and plans for action would all be described in sufficient detail to permit implementation by appropriate agencies. Implementation of the projects designed during Stage II would be expected to result in generation of the new food supplies needed by the country for its feeding programs.

7. Based on recommendations stemming from a preliminary analysis by Hoehle, and in consultation with AID and USAID/Philippines 5/, the Philippines were offered assistance of the type proposed above. The Government of the Philippines accepted the offer and a Stage I in-country fact finding team was organized during Spring 1975. The team consisted of:

Mr. Raymond Hoehle, (FOOD PROGRAMMER and Team Leader)

Dr. Roy Brown, (NUTRITIONIST)

Dr. Hugh Roberts, (FOOD TECHNOLOGIST)

Mr. Amos Flint, (BUSINESS MANAGER)

The team visited the Philippines during the period April 28 - May 23, 1975. The duties and responsibilities of each of the team members are outlined in Appendix 1. The following is a compilation of the findings and recommendations of the team.

## II. IN-COUNTRY TEAM FINDINGS

Needs for and Interests in Feeding Programs

8. The Philippines is a country of 43 million people who chronically produce and consume less than enough food to maintain good nutritional health. According to the most recent surveys, the Philippines population on the average consumes only 84% of the recommended level of calories and 93% of the recommended level of proteins. 6/ As a result of the maldistribution of available food, children and pregnant and lactating women receive disproportionately less food than the average, in some instances less than 1/2 to 2/3 of the recommended dietary allowance. Because of these and related factors, 5% of the child population is believed to be severely malnourished (third degree malnutrition) and 30% moderately malnourished (second degree malnutrition). 7/ According to current estimates, 2.5 million preschool age children (6-72 months) and 3.4 million school age children (6-14 years) are categorized as malnourished. An additional 2.6 million preschool and 4.5 million school children are underweight. Furthermore, there is evidence of widespread deficiencies of vitamin A, vitamin C, riboflavin, calcium, iron, and, in some areas, iodine with the attendant diseases of malnutrition caused by these deficiencies. There is therefore a clear need for nutrition interventions to alleviate malnutrition in the Philippines, particularly among children and pregnant and lactating women. Quantification of the need in terms of the amount of food required to alleviate malnutrition is treated in paragraph 16 below.

6/ USAID/Philippines. Nutrition Statistics and Guidelines, July 1974, p. 1.

7/ Malnutrition according to Gomez classification is defined as (a) 3rd degree, less than 60% of the standard weight for age, (b) 2nd degree, 60-75%, and (c) 1st degree, 75-90%. Standard, as defined by the GOP is 90% of U.S. standards for preschool children and the Western Pacific Office of WHO standard for school children.

9. The Government of the Philippines, assisted by local institutions and international organizations including USAID, has an active ongoing program to improve the nutritional status of Filipinos. Although the program covers a broad range of nutrition activities, supplementary feeding programs have represented a major emphasis. 8/ The Philippines has been a center of innovation for feeding program activity. Notable examples of Filipino innovation include: The development and introduction of the NUTRIBUN for preschool and school children; effective application of the weight chart in targeted maternal-child health center programs (TMCH); and most recently, the development of NUTRIPAC food distribution through community action programs for rehabilitation of severely malnourished preschool children. In addition, an active program for focusing public attention on the nutrition problem and enlisting public support to attack malnutrition has been organized by the government. In a decree issued in June 1974, the President of the Philippines declared that "...nutrition is now a priority of the Government to be implemented by all branches of the government in an integrated fashion." The President created a National Nutrition Council (NNC) to coordinate nutrition related activities. Thus the GOP is clearly interested in improving the nutrition of its people and in using feeding programs as a major element in its improvement program. The commitment required by the Philippines in terms of funds needed to implement the child feeding programs in which interest has been expressed will be presented in paragraph 17 below.
10. The Philippines is in an unusually good position among the LDCs to address the problems of malnutrition through child feeding programs. Because of its

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8/ Through 1974, the Philippines has distributed over 1 1/4 billion pounds of Title II foods valued at nearly U.S. \$200 million in feeding programs.

many years of feeding program experience, the GOP and collaborative organizations like CARE and CRS have developed an effective program structure to reach large segments of the malnourished schoolage and preschool children. In addition, a number of special delivery systems have been conceived and tested as a means of alleviating malnutrition among especially hard to reach groups of children (as illustrated by the community action programs under development by National Nutrition Council). Furthermore, the general food supply of the Philippines is sufficiently large so that the small part needed for feeding programs can be diverted for that purpose without significantly affecting other national needs. 9/ Thus the Philippines has the capability to generate food supplies for supplementary feeding programs and to use those foods effectively in either existing or new food delivery systems.

#### Current Child Feeding Programs

11. In the Philippines child feeding programs are generally categorized as either school feeding programs reaching children in the age range 6-14 years, or preschool programs reaching infants, children through 5 years of age, and pregnant and lactating mothers. An overview of each of these programs as currently practiced in the Philippines is as follows:

- 11.1 School Program - The Department of Education and Culture, with assistance from CARE and CRS, administers a program to provide supplementary

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9/ The maximum part of a nation's food supply likely to be required for child feeding programs under any non-emergency condition is in the range of about 3-4%-- assuming about 1/7 of the population (1/3 of children in the age range 0-14) requiring 1/4 of their food from feeding programs. On the other hand, variations in food supplies which occur throughout the world and are nondisruptive can be as high as 5%. Therefore since maximum food requirements for feeding programs are, even under the most adverse conditions substantially less than normal variations in supply, diversion of food to feeding programs would not be expected to have a significant effect on national food availability or other gross food supply considerations.

food to school children throughout the Philippines. The program currently reach 900,000 children in grades 1-4 (175,000 in Manila and 725,000 in rural areas). Children are selected for coverage by the program based on inadequate weight for their age. A 500 calorie NUTRIBUN 10/ is served to each eligible child 120 days per year in rural areas, 200 days in Manila, as a morning food supplement. NUTRIBUNS are prepared largely in bakeries near the site of use through contracts arranged by CARE and CRS and paid by the beneficiaries through a ₱ 0.10-0.15 contribution. Ingredients used by the bakery, with the exception of flour which is supplied by the U.S. are procured by the bakeries with funds made available through the beneficiary contribution. Flour, as 12% soy fortified wheat is furnished by the USG through PL 480, Title II. Cost of the program in FY 1975 were:

Annual cost <u>11/</u>		
	U.S. \$	₱
Flour, soy fortified (13,900 tons) <u>12/</u>	4,920,000	34,460,000
Other ingredients ( 2,500 tons) <u>12/</u>	630,000	4,390,000
Baking	1,120,000	7,850,000
Distribution and administration	740,000	5,150,000
<b>TOTAL</b>	<b><u>7,410,000</u></b>	<b><u>51,850,000</u></b>
Annual cost per beneficiary (900,000)	<u>\$8.23</u>	<u>₱ 57.61</u>

The effectiveness of the school feeding program was evaluated by the Coordinator of School Feeding, Provience of Bulacan, in a test covering 4,000 beneficiaries. According to USAID/Philippines 13/ in comments

10/ NUTRIBUN is made from soy fortified, enriched wheat flour (100%), dry yeast (2%), salt (1.5%), sugar (12%), oil (5%), and water. A 500 calorie NUTRIBUN weighs about 160 grams and contains 19-20 grams of high quality protein.

11/ U.S. \$1.00 equals ₱ 7.00.

12/ Ingredient prices used in this report are listed in Appendix 2.

13/ USAID/Philippines, Nutrition Statistics and Guidelines, July 1974. p. 12.

on the Bulacan study, "...from the results of the present study, it is reasonable to assume that with a NUTRIBUN program, frank malnutrition among school children can be reduced by 50% in 1½ years or eliminated in three years. This projection is made on the assumption that the rate of improvement observed during this study period would be maintained." Thus the NUTRIBUN program as carried out has been judged by USAID as an effective nutrition intervention. However it has been proposed that the size of the NUTRIBUN be reduced from 500 calories to 200 calories and a 100 calorie supplement of local food is adequate and should be used as the school ration.

11.2 Targeted Maternal Child Health Programs - The Department of Social Welfare, with assistance from U.S. Voluntary agencies, provides a group of programs to reach selected preschool children and mothers with supplementary food, nutrition education, and other health and nutrition services. Since these program differ substantially, an overview of each one is given separately below. 14/

11.2.1 CRS Parish Program - CRS, in cooperation with National Secretariat of Social Action (NASSA), administers a take-home supplementary feeding program to reach 463,000 6-72 month old children and pregnant and lactating mothers in rural areas throughout the Philippines. Recipients are given food supplement at parish centers (Catholic Churches) for take-home consumption. In order to qualify to receive food, children must be categorized as second or third degree malnourished. Children who so qualify and their mothers are provided with 8 pounds

14/ None of the preschool programs have been evaluated for effectiveness in overcoming malnutrition.

of imported blended foods, usually as equal quantities of CSB and soy fortified rolled oats. Costs of the program in FY 1975 were:

	<u>Annual Costs</u>	
	<u>U.S. \$</u>	<u>₱</u>
Commodities (20,200 tons)	7,260,000	50,840,000
Distribution and administration	1,050,000	7,380,000
TOTAL	<u>8,310,000</u>	<u>58,220,000</u>
Annual cost per beneficiary (463,000)	<u>\$17.96</u>	<u>₱ 125.73</u>

11.2.2 Division of Self Development Program - This program is structured the same as the CRS Parish program but operates through social centers associated with the National Council of Churches at churches. A total of 20,000 targeted children and their mothers are served through this take-home feeding program.

Costs of the program in FY 1975 were:

	<u>Annual Costs</u>	
	<u>U.S. \$</u>	<u>₱</u>
Commodities (870 tons)	300,000	2,120,000
Distribution and administration	50,000	370,000
TOTAL	<u>350,000</u>	<u>2,490,000</u>
Annual cost per beneficiary (20,000)	<u>\$17.81</u>	<u>₱ 124.72</u>

11.2.3 Day Care Centers - The Department of Social Welfare, assisted by CRS, operates approximately 2,000 Day Care Centers throughout the Philippines where food is prepared on site and distributed daily to selected preschool children and their mothers. A total of 17,000 beneficiaries were served in FY 75. Children are selected on the basis they are second or third degree malnourished. The food ration consists of 4 pounds per month of equal amounts

of CSB and soy fortified rolled oats and an equivalent amount of locally procured foods such as biscuits, peanuts, fruit, ect. Costs of the program in FY 1975 were:

		<u>Annual Costs</u>
	U.S \$	
Commodities, provided through PL 480, Title II (370 tons)	130,000	930,000
Commodities, provided locally (370 tons)	60,000	430,000
Distribution and administration	20,000	110,000
TOTAL	<u>210,000</u>	<u>1,470,000</u>
Annual cost per beneficiary (17,000)	<u>\$12.33</u>	<u>₱ 86.33</u>

11.3 Rehabilitation Program (Third Degree Malnutrition) - The Nutrition Council of the Philippines has a special interest in alleviating malnutrition among severely malnourished preschool children (6-72 months) through a community level food distribution program. Children are selected for inclusion in the program on the basis of being severely malnourished (third degree malnutrition) as measured through a national weight surveillance program called OPERATION TIMBANG. 15/ To rehabilitate these children food is furnished for a period of 12 weeks along with a nutrition education program for their mothers. Subsequently the mothers are expected to apply the knowledge acquired through the education component of the program to prevent reoccurrence of severe malnutrition. An example of this type of program has been undertaken in Bauan Batangas for the past year. In that project, 157 children have received food supplements for a period of 8 weeks only. The

15/ OPERATION TIMBANG was initiated in 1974 as a means of identifying malnourished preschool children through the Philippines by actually weighing all children and thereby identify individually those who are malnourished.

supplement is varied according to age but generally provided one-half the recommended dietary allowance (RDA).

	<u>Costs</u>	
	<u>U.S. \$</u>	<u>₱</u>
Commodities, for 8 weeks only (3 tons)	900	6,500
Distribution and administration	5,100	35,800
TOTAL	<u>6,000</u>	<u>42,300</u>
Cost per beneficiary (157)*	<u>38.00</u>	<u>269.00</u>

\*Due to the small size of the program, distribution and administrative costs are much higher than would be expected for a full-scale program. Total costs for a full-scale program are estimated to be U.S. \$14 (₱ 98) per beneficiary.

11.4 Summaries of the numbers of beneficiaries, food requirements, and program costs of the major programs undertaken in FY 75 are given in Tables 1 and 2 below.

Table 1.--FY 75 Feeding Programs

Program	Beneficiaries	Age	Type of distribution	Ration	Feeding day/yr.	Amount food required (tons)
School	900,000	6-10	On-site	---	---	16,400
Manila	175,000	6-10	On-site	NUTRIBUN (500 cal.)	200	4,700
Rural	725,000	6-10	On-site	NUTRIBUN (500 cal.)	120	11,700
Preschool	500,000	½-6	Mixed	---	---	21,440
CRS Parish				8 lbs. CSB and rolled oats	300	20,200
Council of Churches	463,000	½-6	Take-home	8 lbs, CSB and rolled oats	300	870
Day Care	20,000	½-6	Take-home	4 lbs. CSB and rolled oats and	300	370
TOTAL	1,400,000	½-10	Mixed	4 lbs. local	---	37,840

Table 2.--Costs of FY 75 Feeding Programs  
US \$ (P) 000

Program	Food			Distribution and administration	Total
	Title II	Local	Preparation		
School	4,920	630	1,120	740	7,410
	(34,460)	(4,390)	(7,850)	(5,150)	(51,850)
Manila	1,410	450	500	220	2,580
	(9,890)	(3,120)	(3,500)	(1,540)	(18,050)
Rural	3,510	180	620	520	4,830
	(24,570)	(1,270)	(4,350)	(3,610)	(33,810)
Preschool	7,690	60	-0-	1,120	10,870
	(53,890)	(430)		(7,860)	(62,280)
CRS Parish	7,260	-0-	-0-	1,050	8,310
	(50,840)			(7,380)	(58,220)
Council of churches	300	-0-	-0-	50	350
	(2,120)			(370)	(2,490)
Day Care	130	60	-0-	20	210
	(930)	(430)		(110)	(1,470)
<b>TOTAL</b>	<b>12,610</b>	<b>690</b>	<b>1,120</b>	<b>1,860</b>	<b>18,280</b>
	(88,350)	(4,820)	(7,850)	(13,010)	(114,130)

12. Summaries of (a) the number of beneficiaries, (b) the imported food supplied, and (c) the costs of the major child feeding programs carried out in the Philippines during 1970-75 are given in Tables 3, 4, and 5.

Table 3. Beneficiaries of Child Feeding Programs 1970-75 \* (000)

	1970	1971	1972	1973	1974	1975**
School Programs	929	1,219	1,331	1,560	1,431	900
Preschool Programs	460	536	238	397	225	500
<b>TOTAL</b>	<b>1,389</b>	<b>1,755</b>	<b>1,569</b>	<b>1,857</b>	<b>1,656</b>	<b>1,400</b>

\* Based on USG Public Law 480 Annual Reports.

\*\* 1975 figures are approved program levels.

Table 4.--Title II Foods Supplied to Child Feeding Programs, 1970-75\*  
(Tons)

Categories	1970	1971	1972	1973	1974	1975
<u>School Programs</u>	8,710	13,370	14,990	21,730	16,370	13,860
Wheat flour	4,180	9,960	13,590	21,000	16,380	13,860
Milk powder	4,530	3,410	1,400	730	-0-	-0-
<u>Preschool Programs</u>	1,330	4,500	5,710	15,760	10,840	21,820
Rolled oats	630	3,010	1,630	5,650	1,150	10,910
CSM/CSB	700	1,490	4,090	10,110	9,690	10,910
<b>TOTAL</b>	<b>10,040</b>	<b>17,870</b>	<b>20,700</b>	<b>37,490</b>	<b>27,210</b>	<b>36,680</b>

\* Local food ingredients supplied to school feeding programs add approximately 20% more food as sugar, oil, yeast, and salt. No local foods were used in preschool feeding programs except in Day Care Centers.

Table 5.--Estimated Costs of Child Feeding Programs, 1970-75 (U.S. \$ 000)  
(U.S. \$ 000)

Categories	1970	1971	1972	1973	1974	1975
<u>School Programs:</u>						
Food	6,640	8,220	7,940	10,320	7,880	4,930
Other	1,390	1,860	2,020	2,470	2,160	1,290
<b>Subtotal</b>	<b>8,030</b>	<b>10,080</b>	<b>9,960</b>	<b>12,790</b>	<b>10,040</b>	<b>6,220</b>
<u>Preschool Programs:</u>						
Food	550	1,760	2,490	6,740	4,520	6,170
Other	420	580	470	930	660	1,110
<b>Subtotal</b>	<b>970</b>	<b>2,340</b>	<b>2,960</b>	<b>7,670</b>	<b>5,170</b>	<b>7,280</b>
<u>Total Programs:</u>						
Food	7,190	9,990	10,430	17,050	12,400	11,100
Other	1,810	2,440	2,490	3,400	2,820	2,400
<u>U.S. Expenditures:</u>	6,230	8,620	8,970	15,390	10,770	10,180
Philippines	2,770	3,800	3,950	5,070	4,450	3,320
<b>Grand Total</b>	<b>9,010</b>	<b>12,430</b>	<b>12,920</b>	<b>20,450</b>	<b>15,210</b>	<b>13,500</b>

Nutrient Requirement of Program Beneficiaries

13. The specific purpose of undertaking feeding programs in the Philippines has been to alleviate malnutrition. 16/ Thus the food and other commodities and services delivered to the program beneficiaries should alone or in combination lead to a significant reduction in malnutrition. In order for supplementary food to play a major role in reducing malnutrition, three conditions must prevail. First, the recipients of the food must be chronically suffering from a significant deficiency of food. 17/ Second, the recipients must consume as a result of the program enough additional food to eliminate or significantly reduce the food deficiency. And third, prevalence of disease, adverse sanitary conditions, and other environmental or cultural circumstances must be controlled such that improved nutritional health will not be seriously inhibited when supplementary food is provided. The team considered the various programs carried out by the GOP with these three conditions in mind. Although it is clearly not possible to reach conclusion with a high degree of certainty or finality, the team concurs with the GOP determinations that:

13.1 School Program - The foods recommended for distribution in the school feeding program (i.e. 300 calories provided through NUTRIBUN and local food supplements, or equivalent) when supplied as a mid-morning food supplement, should contribute significantly to alleviation of malnutrition among school-age children. Although a number of factors bearing on nutritional health of the food recipients are uncontrolled, supplementary food by itself in the recommended quantity should have the

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16/ Certain purposes other than overcoming malnutrition can be achieved through feeding programs, such as improving school and MCH center attendance, helping equalize benefits of development through redistribution of wealth, creating a public awareness of the importance of nutrition, and demonstrating the interest and concern of the government in nutrition improvement, etc.

17/ Food here is meant in the broad sense to include one or more nutrients in an edible form.

intended beneficial effect. However, it is the team's opinion that special precautions ought to be taken to (1) avoid use of the food as a substitute for other foods in the diet rather than as a supplement to the diet, (2) provide larger rations or special rations in specially affected areas or during times of unusual stress (such as during droughts or epidemics), and (3) provide health services, nutrition education, and related services whenever possible to help reduce the adverse affects of the environment on nutrition.

13.2 Preschool Program - The foods recommended for distribution in the pre-school feeding programs (i.e. 8 pounds of food per month for TMCH and Day Care Centers, and one-half the RDA for the Nutrition Council rehabilitation program), when supplied as a supplement to existing foods, should contribute significantly to alleviation of second and third degree malnutrition among preschool children. Since malnutrition among these children apparently arises largely from a combination of lack of food and prevalence of disease, it is especially important that the food be delivered in such a way that it is consumed by the target beneficiaries, not by others, and that health services provided along with the food should be effective in reducing incidence of disease. It is believed that the programs under consideration by the GOP will, if properly executed, be effective except that a part of the food will probably be diverted to non-targeted beneficiaries in the take-home programs, and it will probably be difficult in the short-run to reduce the incidence of disease among beneficiaries so that the food supplement has the maximum beneficial effect. Therefore the team believes that extra efforts should be made to assure that the target recipients receive the amount of food intended to be supplied through the program.

Proposed Child Feeding Programs

14. As a result of its interests in nutrition, the Government of the Philippines has indicated a desire to continue and expand many of the child feeding programs which are now in operation or under test. The ultimate goals regarding the number of beneficiaries to be reached by the various programs set by the GOP for the child feeding programs are as follows. 18/

Program	Target number : beneficiaries	Age	Source of Estimate
<u>School</u>			
(Total):	6,000,000	: 6-14 years	Ministry of Education
	:	:	and Culture
Manila	300,000	: 6-14 years	:
	:	:	:
Rural	5,700,000	: 6-14 years	:
	:	:	:
<u>Preschool</u>			
(Total):	2,750,000	: 0-5 years	:
	:	:	:
CRS Parish	1,000,000	: $\frac{1}{2}$ -5 years	NASSA
	:	:	:
CARE*	1,000,000	: 5-6 years	Ministry of Education
	:	:	and Culture
Day Care	200,000	: 3-5 years	DSW
	:	:	:
3rd degree	450,000	: 0-5 years	National Nutrition
	:	:	Council
Other **	100,000	: $\frac{1}{2}$ -5 years	Estimated by USDA team
	:	:	:
TOTAL	8,750,000	: 0-14 years	
	:	:	

\* The CARE program for kindergarten children is not now in operation but will be patterned after school programs using the same rations and procedures.

\*\* These are expected to be take-home feeding programs administered by CWS and/or others. There is uncertainty at this time concerning the size and start-up date of the programs.

18/ Estimates of the kinds of programs and number of beneficiaries to be served were obtained through discussions by team members with a number of sources in addition to those cited including the Private Voluntary Agencies and USAID/Manila.

15. The basis for the targets set in paragraph 14 is the desire by the GOP to overcome second and third degree malnutrition among all reachable children in the Philippines. The school target, 6,000,000 children, corresponds roughly to the number of reachable malnourished and underweight children in the age range 6-14 years attending school. 19/ Approximately 3.2 million second and third degree malnourished children and 4.8 million underweight children are enrolled in school; it is estimated that only about 75% of these are reachable. Food supplements and other services provided to these children are intended to overcome malnutrition among the severely and moderately malnourished. In addition, they would prevent the underweight children from slipping into the ranks of severely/moderately malnourished. The preschool target, 2.75 million, corresponds roughly to the estimated total number of severely and moderately malnourished children in the Philippines (2.5 million) and assumes that a certain number will be unreachable (about 300,000) and a somewhat larger number of mothers will be covered under the program (about 550,000). The estimate does not provide for changes in the number of beneficiaries due to population growth or reduced numbers of malnourished children resulting from successful implementation of the programs. It is assumed in effect, that these two factors cancel each other with the net result that the number of beneficiaries which must be reached through the programs is constant. 20/

16. The amount of food required to supply the beneficiaries listed in paragraph 14 depends on (a) the type and size of ration and (b) the number of rations provided. Neither of these have been determined with finality as yet.

19/ The total number of school-age children in the Philippines in 1975 is roughly 10.1 million, of these 8.5 million or 84% are enrolled in school.

20/ With experience derived from full-scale implementation of the programs, this assumption can be modified quantitatively to reflect the decreased incidence of malnutrition and the reduced need for food supplements.

However, as a first approximation, the amount of food required can be estimated by assuming that the same rations and numbers of rations will be provided to each beneficiary as are provided in the current programs. Based on this assumption a rough approximation of the amount of food required per year for the proposed child feeding programs is given in Table 6.

Table 6.--Estimated Food Requirement for Proposed Feeding Programs

Program	Type of distribution	Ration	Feeding days per year	Annual food requirement (tons)
<u>School (Total)</u>	On-site	--	--	48,960
Manila		NUTRIBUN (200 cal/daily): plus Local food (100 cal./daily)		
Rural	On-site	NUTRIBUN (200 cal/daily): plus Local food (100 cal./daily)	160	2,450
<u>Preschool (Total)</u>	Mixed	--	--	70,640
CRS Parish	Take-home	8 lbs. CSB and rolled oats		
			300	43,640
CARE		NUTRIBUN (200 cal/day)		
Kindergarten	On-site	Local food (100 cal/day)	160	8,160
Day Care	Take-home	4 lbs. CSB and rolled oats plus 4 lbs local food/mo.		
			300	8,730
Rehabilitation	Take-home	100-175 grams/day	84	5,750
Other		8 lbs. CSB and rolled oats/month		
			300	4,360
<b>TOTAL</b>	<b>Mixed</b>	<b>--</b>	<b>--</b>	<b>119,600</b>

The total amount of food required for the proposed programs is thus roughly 120,000 tons per year.

17. The operating costs of the proposed feeding programs consist of (a) the cost of the food and (b) the cost of distributing the food and administering the programs. Neither of these costs are known precisely. However as a first approximation, the costs of the food can be estimated as the product of the amount of food required (from paragraph 16) and the current unit cost of the food (using the prices listed in Appendix 2). Likewise the costs for distributing the foods and administering the programs can be estimated as the product of the current costs for those items per beneficiary and the proposed number of beneficiaries. Based on these assumption, the costs of the proposed child feeding programs are given in Table 7.

The overall costs for the proposed programs are approximately U.S. \$47 million for food, U.S. \$11 million for preparation and U.S. \$7 million for distribution and administration or U.S. \$65 million for total costs for all programs.

18. In addition to the operating costs for the proposed programs, there will be certain capital costs for initiating new programs or expanding old ones. Capital costs include such items as buildings for feeding centers and commodity warehouses, new equipment for NUTRIBUN bakeries or other food preparation centers, and additional vehicles, office equipment, and similar nonexpendable items. Capital costs for feeding programs vary enormously and can not be estimated without knowing the specifics of the program, the existing facilities and other details of the community and program. Accordingly, the additional capital costs required for the programs listed in paragraph 14 have not been estimated. However, although no estimate of capital costs is included here, it is important to recognize the need for capital funds for new or expanded programs. As a correlative to this, it is also important to recognize the

Table 7.--Estimated Operating Costs for Proposed Programs, U.S. \$ (P)  
Thousands

Program	Food				Transport and handling	Administra-tion	Total
	Title II	Local equivalent	equivalent	Prepara-tion and/or local packaging			
<u>School</u>	13,460	7,000	7,200	1,850	1,550	31,050	
	:( 94,250)	:( 48,960)	:( 50,400)	:( 12,930)	:( 10,850)	:(217,380)	
<u>Rural</u>	12,790	5,510	6,510	1,750	1,450	29,020	
	:( 89,540)	:( 45,600)	:( 45,600)	:( 12,389)	:( 10,120)	:(203,140)	
<u>Manila</u>	670	480	690	90	100	2,030	
	:( 4,710)	:( 3,360)	:( 4,800)	:( 650)	:( 730)	:( 14,250)	
<u>Preschool</u>	21,720	4,470	4,120	2,350	1,140	33,930	
	:(152,850)	:( 31,290)	:( 28,850)	:( 16,480)	:( 9,010)	:(237,480)	
<u>CRS Parish</u>	15,690	-0-	-0-	1,650	700	18,030	
	:(109,800)	:( -0- )	:( -0- )	:( 11,520)	:( 4,900)	:(126,220)	
<u>CARE</u>							
<u>Kindergarten</u>	2,900	690	1,140	310	250	5,290	
	:( 20,280)	:( 4,800)	:( 8,000)	:( 2,150)	:( 1,760)	:( 37,000)	
<u>Day Care</u>	1,570	710	-0-	160	20	2,470	
	:( 10,980)	:( 5,000)	:( -0- )	:( 1,150)	:( 164)	:( 17,300)	
<u>Rehabilitation</u>	-0-	3,070	2,890	70	-0-	6,120	
	:( -0- )	:( 21,490)	:( 20,850)	:( 510)	:( -0- )	:( 42,840)	
<u>Other</u>	1,570	-0-	-0-	160	170	1,900	
	:( 10,980)	:( -0- )	:( -0- )	:( 1,150)	:( 1,190)	:( 13,320)	
<b>TOTAL</b>	<b>35,180</b>	<b>11,470</b>	<b>11,320</b>	<b>4,200</b>	<b>2,690</b>	<b>64,980</b>	
	:(247,100)	:( 80,250)	:( 79,250)	:( 29,410)	:( 18,360)	:(454,860)	

need for a substantial "investment" in time and effort to bring about the changes necessary to generate new or expanded feeding programs.

19. The proposed feeding programs cited above represent a substantial expansion of existing programs. It is proposed to increase the number of beneficiaries in school programs from 0.9 million in FY 75 to 6.0 million, an increase of over 500 percent; it is proposed to increase the number of beneficiaries in preschool programs from 0.5 million in FY 75 to 2.75 million, an increase of over 400 percent. Overall it is proposed that 7,350,000 new beneficiaries be added to feeding programs. In order to accommodate this expansion in beneficiaries, the amount of food required will increase from about 37,000 thousand tons in FY 75 to roughly 120 thousand tons per year, an increase of over 200 percent. The cost of this food would be expected to increase from U.S. \$11 million in FY 75 to U.S. \$47 million, an increase of over 300 percent. The costs of preparation, distribution and administration of the programs will increase from U.S. \$2 million in FY 75 to U.S. \$18.2 million, an increase of over 600 percent.
20. In summary, the GOP proposes as a long term goal to furnish roughly 120 thousand tons of food supplements to 8.75 million beneficiaries. At 1975 prices, these foods excluding preparation will cost approximately U.S. \$47 million annually and the programs, including the foods, preparation, distribution, and administration will cost about U.S. \$65 million.

Sources of Foods for Proposed Programs

21. Part of the food requirements for the proposed feeding programs can be supplied through PL 480, Title II foods donated by the U.S. for a limited time. As presently agreed to by the GOP and the USG, Title II foods will be made available to the Philippines through 1978 but at a gradually reducing level.

The amounts of food expected to be made available through Title II are as follows: 21/

		Title II Foods		
Program	:	Fiscal year (tons)		
		1976	1977	1978
School	:	9,500	6,800	-0-
Preschool	:	30,500	30,500	17,400
TOTAL	:	40,000	37,300	17,400

22. Insofar as the team was able to determine no other food supplies from sources outside the Philippines have been committed for use in the proposed feeding programs.
23. Since the food supplies committed to the Philippines from external sources are limited, the Philippines must plan to provide from local resources all the foods required for the programs except those foods provided through Title II during the period 1976-78. If the Philippines carries forward its intention to provide supplementary food for 8.75 million children, it must eventually generate additional food supplies of about 120 thousand tons per year costing approximately U.S. \$47 million per year at 1975 price levels. The source of these additional foods can be imported foods which are purchased by the Philippines in the international market, or locally produced foods, or a combination of imported and locally produced foods.
24. Imported foods are available essentially without limit. Any practical amount of standard commercial food commodities can be purchased in the international market and delivered to the Philippines for use in donation feeding programs.

21/ Non Capital Project Paper No. 492-60-580-252, October 11, 1974 (p. 27).

Imported foods can include all the foods of commerce and in addition any of the items now supplied to the Philippines through Title II such as soy fortified flour, CSB, etc. 22/ Although special efforts would be required by the GOP to develop reasonable procurement procedures, no unusually difficult problems should be encountered in purchasing food in the international market. The only serious drawback to importation of foods by the Philippines is the drain on foreign exchange. If all foods for the program were imported, the drain on foreign exchange would be roughly U.S. \$47 million per year. In terms of the 1974 balance of trade this level represents 1.5 percent of imports. 23/ It also represents 3.1 percent of the Philippines 1974 foreign reserves. 24/ Consequently importation of all foods proposed for use in the feeding programs for a prolonged period would have a modest but significant effect on foreign trade and on foreign reserves. On the other hand, importation of a part of the food commodity requirements or of certain ingredients for use in commodities appears to fit within the limits of normal foreign trade.

25. Locally produced foods are also feasible within the scope of the needs of the program. Food crop production in the Philippines for the past several years has been at or near 10 million tons per year, including about 5 million tons of palay (rough rice), 2 million tons of corn, over 1 million tons of root crops, and several thousand tons each of beans and peas, peanuts and other crops which could provide raw food commodities for feeding programs.

22/ Many of the Title II foods including the blended foods (CSB, WSB, ICSM) and fortified foods are special products manufactured to meet U.S. Dept. of Agriculture specifications and purchased only for use in USG sponsored food distribution programs. These products are not normal items of commerce. However, any of those products can be purchased by the GOP or others through contracts with the suppliers.

23/ According to preliminary estimates for 1974, Philippines trade consisted of U.S. \$2.7 billion in exports and U.S. \$3.2 billion in imports. (FAS Agricultural Situation Report. PH 5003, Feb. 4, 1975).

24/ Net foreign reserves as of June 1974 were about U.S. \$1.537 billion.

In addition, the Philippines produced over 5 million tons of crops designated as commercial crops (much of which is exported) including over 2 million tons of sugar and nearly 2 million tons of coconut (as copra). Also fishery production is in excess of 1 million tons per year and is growing rapidly, and a sizeable production of a livestock and poultry exists. Thus the Philippines generates within its agricultural sector a source of raw commodities which can be converted to foods and which might be used in feeding programs. The 120 thousand tons of food required for all the proposed feeding programs, serving 8,750,000 beneficiaries (about 20% of the total population) requires less than one percent of the over 15 million tons of domestic and export food production. And although the Philippines imported in 1974 approximately U.S. \$400 million of agricultural commodities, including about U.S. \$100 million in wheat products, its agricultural exports totaled approximately U.S. \$2 billion. 25/ Thus the agricultural sector of the Philippines appears more than capable of providing the relatively small amount of foods necessary to supply the proposed feeding program.

26. Processing facilities to produce finished food commodities for "kitchen" use are now available for essentially all Philippines grown raw food crops. 26/ For example, mills to dehusk and polish rice are universally available throughout the rice consuming areas of the Philippines. Corn milling facilities are also available wherever corn is consumed. Likewise processing

25/ Although the Philippines is a net exporter of food, the food needs of the population remain unfilled (as shown in paragraph 8). This is likely due to inadequate purchasing power and cannot be remedied altogether by increased production. Redistribution of a part of the food production through food procurement by the GOP and distribution to needy persons should, however, provide a means of improving food intake among the population segments with the least purchasing power.

26/ Proof that processing facilities are available lies in the fact that if processing facilities were required but not available in the Philippines, the food crop could not be used for food and would be exported or used for feed or some other nonfood purpose.

facilities are available for legumes, sugar, edible oils, and all other locally grown food commodities used in the diets of Filipinos. Accordingly, facilities are now available to process any locally grown food crops into commodities suitable for use in feeding programs provided the feeding program provides at a minimum, facilities necessary for normal "kitchen-type" preparation of the food, such as facilities for cooking of rice or corn grits.

27. Centralized facilities are not available or are available on only limited scale for making precooked, ready-to-eat foods (such as precooked CSM-type foods for infants). Facilities are not available for processing Philippines food crops in "novel" or "unusual" ways (such as making edible starches from cassava or coconut beverages from fresh coconuts). And facilities are not available for making edible products from certain crops which haven't been grown traditionally in the Philippines (such as soybeans and sorghum). Thus with certain exceptions, to do any of the above to produce commodities for feeding programs is likely to require additional facilities. Even though this is the case, a substantial research effort has been made to explore new food crops and new foods. Particular attention has been given to research on utilization of existing food crops in new ways for nutrition-oriented programs. Also there has been emphasis on work which might lead to new sources of protein concentrates. Among these studies have been:

- (1) Protein beverages and flours from coconuts
- (2) Edible flours from bananas, cassava, and sweet potatoes (kemote)
- (3) Protein concentrate from dried mini shrimp and fish
- (4) Low cost calories from molasses
- (5) New protein products from legumes including mungbeans, cow peas, pigeon peas and chickpeas.

In addition, studies have been made to introduce new crops and develop or adapt methods of processing those crops to produce nutritional food products.

Among these have been:

- (1) Soybeans
- (2) Sorghum
- (3) Mecan peas
- (4) Wheat

As of this time, none of these efforts have resulted in production of any substantial amount of new foods. However, as in other development enterprises, if a real demand existed for the products, supported by a source of funds with which to purchase the products, reliable sources of these products could be developed within the Philippines. The choice of whether to develop one or more of these new products or to use existing sources should of course be based on economic considerations.

28. Even though there are limitations on availability of certain locally produced food crops and on certain types of facilities for food processing, a number of practical possibilities for local production of foods for use in feeding programs seem worthy of consideration. Among these options are the following:

#### 28.1 School Feeding Programs

Supplementary food for school feeding has been the NUTRIBUN served as a mid-morning snack in order to minimize its use as a replacement for food in the normal diet. If this concept of serving snacks in school feeding programs is continued, expanded school feeding programs might be supplied either with NUTRIBUNS, or some other precooked, ready-to-eat snack-like food. Food commodities meeting these requirements might include:

- a. Locally processed soy fortified wheat flour for NUTRIBUN - Imported wheat can be milled to flour in the Philippines and if necessary, fortified with imported or locally produced soy flours using imported "improvers" <sup>27/</sup> and vitamins and minerals.
- b. Composite flours for NUTRIBUN production - The soy fortified wheat flour used in making NUTRIBUNS can be replaced in part by indigenous non-wheat flours such as rice or corn flour. Technology for extended wheat flours of this type, which are known as composite flours, has been developed through research at a number of baking technology institutes around the world and can be readily adapted for use in the Philippines. Use of composite flours could reduce the need for imported wheat by perhaps as much as 10-25 percent.
- c. Rice or corn based snacks as supplementary foods - Rice or corn based snack items can be used in place of NUTRIBUNS so that need to import wheat for feeding programs is totally eliminated. Ready-to-eat foods, made by extrusion cooking or by deep-frying or by baking can be produced from local grains and used as the supplementary foods in school feeding. Simple processing systems to make shelf-stable foods at a national or regional or even a local level are available.

## 28.2 Preschool Feeding Programs

Commodities used in preschool feeding programs have largely been those that are cooked on-site or at-home and served as main course items (such as rolled oats and CSB consumed as porridges or gruels). The commodities used in nutrition rehabilitation programs have the special

<sup>27/</sup> A bread "improver" is essential to maintain a good bread quality when soy flour is added as a fortificant. The soy fortified flour currently used in NUTRIBUNS contain 0.3 - 0.5 percent sodium steroyl lactylate as an improver.

requirement that they contain an adequate amount of good quality protein and supplementary vitamins and minerals. Since many of the programs provide foods for take-home use, the commodities ought to be inherently preferred as foods for children to avoid consumption by other family members. Food commodities meeting these requirements might include:

- a. Milled rice or corn - Ordinary rice or corn, processed in the traditional way to yield polished rice or corn grits, can be mixed half and half with rolled oats or blended foods and thereby act as an extender of those foods. 28/ In cases where protein levels of 8-10 percent are adequate, blended foods and protein-fortified foods might be replaced with milled rice or corn.
- b. Locally produced blended foods - Corn or rice can be mixed with peanuts or soy, and the mixture precooked, ground, and blended with vitamins and minerals to produce a wholly indigenous blended food. Products of this kind can be packed in bulk, distributed, and prepared on-site or at-home in the same way as CSB. Alternatively, cassava might be processed to produce flour or chips and this used as an "energy" component of a new blended food.
- c. Oilseeds as protein - Whole, dehulled soybeans mixed with peanuts and cooked to inactivate the growth inhibitors might be used as a protein concentrate in NUTRIPAK. These products can serve as a protein supplement for the cereal foods in the NUTRIPAK but can also act as a source of oil to provide energy and essential fatty acids.

28/ Although mixing cereals with protein-fortified foods acts to reduce the protein content, in many cases a reduction in protein will not detract from the utility of the food.

Which, if any, of these options or other possibilities are adapted as means of supplying foods for Philippines feeding programs must depend on the specific requirements of the programs and on the priorities of the GOP. Some options can be put into effect more quickly than others, some result in less drain on foreign exchange, some need less new capital facilities, and some require less adjustments in programming. However it should be clear that one way or another food can be supplied to feeding programs from existing sources with existing technology if the GOP chooses to do so.

Funding

29. The 120,000 tons of foods required annually to feed the 8.75 million food program beneficiaries is expected to cost U.S. \$47 million dollars. In addition, the administration of the program, including distribution and preparation of the foods, is expected to cost an additional U.S. \$18 million so that the total cost of the program will be U.S. \$65 million. Funding of this magnitude is not currently available. Therefore, in order to carry out the program, annually renewable, reliable source of funds must be generated.
30. Several sources might be considered as possibilities for funds for feeding programs. These include:
  - (a) National Government Revenues - The National government obtains over U.S. \$1.2 billion annually from taxation, earnings, and other revenues (see Appendix 3 for a listing of revenues for FY 74). If feeding programs were financed totally from national government revenues, over 5 percent of the budget would be allocated to feeding programs and nearly 4 percent to food procurement alone. To put these potential expenditures in perspective, the estimated costs of feeding programs are roughly equivalent to the total FY 1974 budget allocations for Public

Health and Medical Care; the estimated costs for food procurement alone are nearly equivalent to the budget allocations for Maintenance of Peace and Order (see Appendix 4 for a listing of proposed national government expenditures for FY 1974). Even though the required funding for feeding programs is large, it seems reasonable to assume that if the GOP places a high priority on nutrition and programs to benefit low-income families, it can allocate a significant portion of its budget to feeding programs. 29/

(b) Contributions by beneficiaries - NUTRIBUN recipients are now required to contribute ₱ 0.10-.15 (about U.S. \$0.02) daily toward costs of producing and distributing their food supplements. This represents 25-50% of the total program costs, a significant source of funding for the school feeding program. A similar requirement in the future would be expected to raise over U.S. \$15 million from the 6 million projected school feeding beneficiaries. In addition, small contributions from the families of 2.75 million beneficiaries of the preschool feeding programs would also be expected to be a significant source of funding. It should be noted, however, that if a large contribution from the beneficiaries is required, extremely poor families will be discouraged from participation in the program. Furthermore, if the beneficiaries contribution approaches the total cost of the food, the program will no longer represent government or community assistance to deprived segments of the population.

(c) Charitable contributions - Certain nutrition oriented activities in the Philippines are being funded by charitable contributions by the people.

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29/ Pakistan, a country of 70,000,000 provides subsidies of about U.S. \$90 million annually to reduce the price of wheat to low income families. (FAS Report PK 2079 Sept. 1972). In its 1975 budget Egypt allocated over U.S. \$1.2 billion for wheat, edible oil, and other food subsidies.

For example, the 2,000 Day Care Centers are being partially funded through private contributions raised this year through functions such as a nutrition parade with a goal of U.S. \$1.0 million. 30/ Similarly free-will contributions can provide funds for designated elements of feeding programs, such as food, food preparation, distribution, or administration. However charitable contribution would likely not be capable of furnishing a very large part of the funds necessary for feeding programs nor would charitable contributions be expected to provide a reliable, on-going source of funds.

(d) Local community funding - Local communities can provide funds (or equivalent) from local revenues. The National Nutrition Council anticipates that local communities will furnish the bulk of the foods used to reach the 450,000 children to be covered by the rehabilitation program for third degree malnutrition. Similarly, local communities might make contributions toward other programs including school lunch and other on-site programs.

31. Clearly none of the sources cited above except, of course, National Government revenues, can provide a reliable on-going source of total funding for all the proposed programs. However, if the GOP places a high enough priority on feeding programs as compared with other national priorities, it can select a combination of funding sources that will meet all the funding needs of the programs.

## III. CONCLUSIONS AND RECOMMENDATIONS

Conclusion 1.

32. The Philippines needs, is interested in, and is capable of carrying out large-scale, nutrition-oriented feeding programs for children using food supplies procured through its own resources. Malnutrition due to inadequate food intake and related problems seriously effects over one-third of the child population. Specific feeding programs have been developed in the Philippines which would be expected to rehabilitate severely malnourished children and significantly reduce malnutrition among the others; the GOP has expressed a strong interest in expansion of these programs to reach 8.75 million children. Food supplies for these programs are required.

Recommendation 1.

33. It is recommended that AID and USAID/Philippines provide technical assistance to the Philippines for expanding GOP feeding programs and developing reliable food supplies for the programs. The specific types of technical assistance will be outlined in subsequent recommendations.

Conclusion 2.

34. The bulk of the food commodities currently used in child feeding programs are provided by the USG through the PL 480, Title II donation program. Starting in FY 76, supplies of Title II foods will be reduced progressively and by July 1978, will be phased out of Philippines feeding program entirely. Unless additional supplies are obtained, the existing programs (currently reaching 1.4 million children) cannot be continued, and the expanded program (to reach 8.75 million children) can not be carried out. Action to procure

3,000 additional tons of food starting in FY 77 and 23,000 tons in FY 78 are necessary just to maintain existing programs. Actions to procure 120,000 tons annually are necessary to carry out all of the proposed programs.

Recommendation 2.

35. It is recommended that (a) USAID/Philippines suggest to the GOP that a food procurement agency be established immediately and that the agency be charged with developing plans and procedures for timely procurement of food commodities required for the feeding programs, and (b) AID offer to the GOP the services of experts on procurement of commodities for feeding programs (e.g. representatives of the Agricultural Stabilization and Conservation Service of USDA) who can advise the GOP on planning and procedures for food procurement. In view of the urgency of the need for additional foods, it is recommended that this matter be given highest priority.

Conclusion 3.

36. In order to develop realistic plans for generating food supplies for the proposed feeding program, it is necessary to have a firm commitment on funding for program use. (The magnitude of this commitment would have to be about U.S. \$65 million annually for the programs currently under consideration, including U.S. \$47 million for food commodities for those programs). If the commitment for funds falls short of the amount necessary to carry out all the proposed programs, it will be necessary to establish priorities among the proposed programs and allocate funds so that program expenditures equal availability of program funds.

Recommendation 3

37. It is recommended that USAID/Philippines suggest that the GOP establish a task group to (a) analyze in detail the funding needs of proposed feeding programs, (b) examine the availability of specific sources of funds, (c) set priorities among program alternatives if necessary, and (d) propose to appropriate GOP agencies the legislations, decrees, etc. which will result in reliable, on-going funds for feeding programs. NOTE: By establishing priorities for feeding program, it is not necessary that low priority programs be totally eliminated to provide funds for high priority programs. Instead, consideration can be given to allocation of funds among all programs with a disproportionately higher allocation to high priority programs.

Conclusion 4

38. Full-scale implementation of all the feeding programs proposed by the GOP will require an annual supply of 120,000 tons of food commodities. Of this amount nearly 50,000 tons will be required for use as prepared foods for school feeding programs (e.g., NUTRIBUNS or other ready-to-eat prepared foods), and over 70,000 tons will be required in various forms for preschool programs (e.g., blended foods or other special childrens' food supplements). All of the commodities needed for the proposed programs are available both immediately and also long-term through a combination of international markets and readily developed local market sources. The preferred balance between imported versus domestically produced foods depends on priorities for use of foreign exchange, level of domestic

development efforts, and related policy considerations which rest with the GOP. However it seems likely that a well-managed development program could lead to adequate food supplies produced largely within the Philippines. Such a program can be based on existing well-established technology and requires very little if any research on new crops or new processes. It would however require a strong commitment to development and large-scale implementation of existing know-how.

Recommendation 4

39. It is recommended that USAID/Philippines offer the GOP technical assistance to help prepare an action plan for acquiring food supplies produced within the Philippines for use in feeding programs based on existing food crops and existing technology. The plan should provide a comprehensive set of practical actions leading to implementation, and include a time schedule, budget, and list of action agents.

(Note: Recommendation 4 is proposed in lieu of a Stage II in-country project development team provided by the USG as cited in paragraph 6 of this report. The Philippines has the necessary capable personnel to develop a food supply project--ad hoc assistance on special matters related to planning and technology however might accelerate project development and could be offered to the GOP.)

Conclusion 5

40. Certain imported or readily developed local foods which are likely to be used in Philippines' feeding programs probably can be replaced eventually with less expensive or more effective commodities created through a

program-oriented research effort. For example misuse of take-home foods through adult consumption might be reduced by creating special "childrens' foods" based on combining research on Filipino food preferences/habits with food formulation and acceptability studies. Or, food costs might be reduced through applied research leading to new, less expensive food crops for the Philippines. The Philippines has a strong cadre of researchers who can undertake food program-oriented research; these researchers need guidance as to what specific research is required and would be used by the GOP if successfully undertaken.

Recommendation 5

41. It is recommended that USAID/Philippines suggest to the GOP that it establish a FOOD RESEARCH ADVISORY BOARD to identify research that needs to be undertaken to improve the foods used in feeding programs and to suggest to the GOP applied research projects that are likely to lead to reduced costs, more effective food use, or other improvements in foods supplied to feeding programs.

APPENDIX 1  
**DEPARTMENT OF STATE**  
**AGENCY FOR INTERNATIONAL DEVELOPMENT**  
**WASHINGTON, D.C. 20523**

**April 23, 1975**

**Mr. Thomas C. Niblock  
Director  
US A.I.D./Manila  
Agency for International Development  
Washington, D.C. 20523**

**Dear Mr. Niblock:**

**This is to introduce the team of Messrs. Hoehle, Flint, Roberts, and Brown who will be in the Philippines during the period April 28 - May 23 to consider possibilities for developing new food supplies for programs to supplement or replace imported donated foods.**

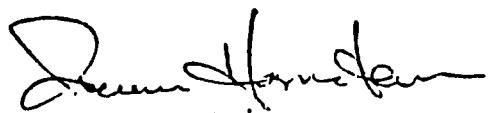
**The members of the team have been asked to provide you and your staff with an overview of their intended activities. Also they will be pleased to keep you informed of their progress to the extent you feel appropriate. In the meantime, you might be interested in reviewing the attached Scopes of Work for the contracts of the Team Members which outline their objectives and provide a brief description of their intended courses of action.**

**The team basic approach will be to assess the future needs for food commodities for use in feeding programs, estimate the amounts which will be available from existing sources, and by difference determine the amounts and kinds which must be supplied from new sources. Based on these estimates and the interest/capabilities of the Philippines, the team will then examine alternative means for supplying the needed food commodities. The team's findings and recommendations will be made available to the Mission and AID/W as soon as possible after their visit to the Philippines is completed.**

**AID/W looks on the team's activity as supportive to the ongoing Mission work on nutrition and supplementary foods. It is expected that the team will work closely with your staff and with representatives of the GOP, the voluntary agencies and others during their assignment. They**

have been asked to take into account and draw on the excellent work which has taken place in the Philippines during the past several years. Therefore we hope you will find the team's efforts helpful to your program.

Sincerely,



Irwin Hornstein  
Deputy Director  
Office of Nutrition

CC: Wade Hall  
P. R. Crowley  
Ray Hoehle  
Hugh Roberts  
Amos Flint  
Roy Brown

Mr. Amos Flint, Jr.  
Management Specialist

## APPENDIX A - BACKGROUND AND SCOPE OF WORK

### BACKGROUND

A need exists to develop alternative sources of foods for supplementary feeding programs in developing countries. Reasons for the existence of this need are:

- (1) Limitations on the availability of foods provided for developing country feeding programs under the U.S. PL 480 Title II program.
- (2) Increase food programming needs in developing countries.
- (3) Fulfillment of AID's policy to assist developing countries to create the capability to implement feeding programs without primary dependence upon imported donation food.

AID and USDA are, accordingly, instituting a program to assist interested developing countries to provide foods for their feeding programs from their own resources as a supplement to or replacement for Title II foods.

The Philippines has been selected as a possible site for the establishment of one of these assistance projects. As a first step, information is required on the needs, interests, and capabilities for supplying foods for feeding programs from Philippine resources. This information must include an analysis of the feasibility of such a program in terms of business management, financial and related aspects of the food industry. This analysis will complement parallel assessments being conducted in food technology, nutrition, and food programming.

The conduct of each study will be coordinated with the other studies, as each will provide important background information for the others. Individuals conducting the assessments will also cooperate in the preparation of a preliminary joint overall recommendation regarding possible initiation of a project to assist the Philippines with a program to supply food for feeding programs from its own resources. The individual analyses and the joint preliminary recommendation will together form the components of an overall study.

## SCOPE OF WORK

The contractor will, in executing the work scope coordinate his work on a continuing basis with the team coordinator, Mr. Ray Hoehle, to ensure that all points relevant to the overall joint team analysis are covered to the extent possible.

### I. General Objectives

The contractor, Food Industry Specialist, will provide:

- (1) An analysis as related to business management, finance, and related aspects of the food industry, considerations of the need, interest, and capability of the Philippines for supplying foods for feeding programs from its own resources.
- (2) In collaboration with other team members, a preliminary recommendation for consideration by USDA as to the course of action the U. S. Government should take with respect to initiating a project to assist the Philippine Government (GOP) to institute the program referred to in I (1) above.

The contractor's analysis, cited in (1) above, will be in the form of a final report, while the recommendation of the team, as cited in (2) above, will be provided as a draft for USDA consideration. The two reports will be based on information obtained by the contractor through participation in a team visit to the Philippines of approximately twenty working days.

### II. Specific Objectives

The contractor will be responsible for providing the following specific information.

#### A. Analysis

The contractor will prepare a detailed analysis which will address the questions listed below.

In developing this information, the contractor will both draw relevant information from other team members for the preparation of his assessment and provide other team members with corresponding relevant information which will be needed by them. In cases where it is desirable to obtain related information from another team member before preparing a response, a notation has been made in parentheses following the question.

1. What are the capabilities and interests of Philippine industry to produce the food commodities suggested by the Food Technologist and the needs, if any, for industry to modify or expand manufacturing and distribution facilities, to obtain new or additional supplies of raw materials or ingredients or packaging materials, and for the government to change policies or regulations?  
(Fm - Food Tech. - commodities, tech. changes required)
2. What is the capability of industry to raise the additional capital necessary to produce the food commodities identified by the Food Technologist? What sources are likely to be used?  
(Fm - Food Tech. - commodities)
3. What practical procurement procedures would be expected to be satisfactory both to the GOP and industry?
4. What is the capacity of the Philippine Government and local governments to provide (or obtain) the overall fiscal and managerial inputs necessary to initiate and maintain feeding programs both short -term and long-term? (to be addressed in collaboration with the Program Specialist)

The information collected by the contractor and his analysis regarding the above questions should be directed to preparing conclusions and recommendations to USDA relevant to the needs, interests and capabilities of the Philippines to provide food supplies for donation feeding programs and for assisting the Philippines to create project(s) for developing such food supplies. Accordingly, the analysis should include, but need not be limited to, replies to the above questions.

-In addition to the preceding questions, the contractor may wish to provide comments regarding the subsequent phase, if such phase is anticipated. Such comments should be addressed to defining specific problems in his area that might be anticipated in assisting the Philippine Government to institute an indigenous program and to indicating the specific technical assistance that might be required to meet these problems.

#### **B. Preliminary General Recommendations**

Based on his assessment (see II-A above), the contractor will contribute his findings and participate in the preparation with the other participating members of the overall study of a general recommendation as to the suitability of the Philippines as the site of a project to assist the Philippines to institute a program to provide from its own resources supplies of food for donation feeding programs.

1. An overall assessment of the suitability of the Philippines in terms of three principal considerations: the need; the interest of entities (government and private) in the Philippines which would be required to contribute to the institution of an indigenous program; the capability of such entities to execute such an undertaking.
2. If the overall recommendation is that food supply project(s) be initiated in the Philippines, a listing of several possible alternative approaches that could be used, e.g. local production, purchase abroad, etc., will be provided: Each alternative should include key information relevant to the alternative e.g. source of food-amounts, and capital and recurring costs. In addition an indication of preference with supporting rational for each alternative will be provided.

**C. Final Report**

A draft of the Contractor's report on Analysis and the team preliminary recommendation will be submitted to the contract representative for review and comment and will be returned to the contractor within 10 calendar days for preparation of final draft reports. In addition to preparation of these written reports, the contractor will participate with other members of the overall study in the presentation of an oral report to USDA and other interested parties in Washington which will summarize findings.

Dr. Hugh Roberts  
Food Technology Specialist

## APPENDIX A - BACKGROUND AND SCOPE OF WORK

### BACKGROUND

A need exists to develop alternative sources of foods for supplementary feeding programs in developing countries. Reasons for the existence of this need are:

- (1) Limitations on the availability of foods provided for developing country feeding programs under the U.S. PL 480 Title II program.
- (2) Increased food programming needs in developing countries.
- (3) Fulfillment of AID's policy to assist developing countries to create the capability to implement feeding programs without primary dependence upon imported donation food.

AID and USDA are, accordingly, instituting a program to assist interested developing countries to provide foods for their feeding programs from their own resources as a supplement or replacement to Title II foods.

The Philippines has been selected as a possible site for the establishment of one of these assistance projects. As a first step, information is required on the needs, interests, and capabilities for supplying foods for feeding programs from Philippine resources. This information must include an analysis of the technological feasibility of replacement or supplementation of imported donated foods. This analysis will complement parallel assessments being conducted in nutrition, food industry, and food programming.

The conduct of each study will be coordinated with the other studies, as each will provide important background information for the others. Individuals conducting the assessments will also cooperate in the preparation of a preliminary joint overall recommendation regarding possible initiation of a project to assist the Philippines with a program to supply food for feeding programs from its own resources. The individual analyses and the joint preliminary recommendation will together form the components of an overall study.

### SCOPE OF WORK

The contractor will, in executing the work scope coordinate his work on a continuing basis with the team coordinator, Mr. Ray Hoehle, to ensure that all points relevant to the overall joint team analysis are covered to the extent possible.

## **I. General Objectives**

**The contractor, Food Technology Specialist, will provide:**

- (1) An analysis as related to food technology, considerations of the need, interest, and capability of the Philippines for supplying foods for feeding programs from its own resources.**
- (2) In collaboration with other team members, a preliminary recommendation for consideration by USDA as to the course of action the U. S. Government should take with respect to initiating a project to assist the Philippine Government (GOP) to institute the program referred to in I (1) above.**

**The contractor's analysis, cited in (1) above, will be in the form of a final report, while the recommendation of the team, as cited in (2) above, will be provided as a draft for USDA consideration. The two reports will be based on information obtained by the contractor through participation in a visit to the Philippines of approximately twenty working days.**

## **II. Specific Objectives**

**The contractor will be responsible for providing the following specific information.**

### **A. Analysis**

**The contractor will prepare a detailed analysis which will address the questions listed below.**

**In developing this information, the contractor will both draw relevant information from other team members for the preparation of his assessment and provide other team members with corresponding relevant information which will be needed by them. In cases where it is desirable to obtain related information from another team member before preparing a response, a notation has been made in parentheses following the question.**

**1. What are practical alternative food commodities which can:**

- (a) Supply the nutrients identified by the nutritionist as required for the various feeding programs.**
- (b) Satisfy the programming requirements (acceptability, storage, shipping, packaging, preparation) identified by the Program Specialist.**

(c) Be procured with local resources, either through local manufacture (preferably with existing facilities and with local raw materials) or through importation as determined in consultation with the Food Industry Specialist.

(Fm Nutritionist - nutritional requirements for food, acceptability;  
Fm Prog. Spec. - program requirements, no beneficiaries

NOTE: Selection of the food commodities will be based on efforts to keep overall program costs at a minimum but taking into account policies of the GOP re balance of payments, industrials and agricultural development, etc. The food commodities, if not standard commodities such as rice and wheat flour, will be described in terms of (a) product composition, form, packaging, and use characteristics, (b) ingredients and proportion, (c) amounts required per beneficiary and amount per year for each program, (d) estimated delivered cost (to the GOP program) and source.

2. Do producers and processors now have the plant, equipment and technical know-how to supply required product or product alternatives. If not, what changes would be required? What will be the costs e.g., plant, equipment and plant operations which would be economically feasible for the producers and processors to undertake.

(Fm - Food Ind. Spec. - economic feasibility)

The information collected by the contractor and his analysis regarding the preceding questions should be directed to preparing conclusions and recommendations to USDA relevant to the needs, interests and capabilities of the Philippines to provide food supplies for donation feeding programs and for assisting the Philippines to create projects for developing such food supplies. Accordingly, the analysis should include, but need not be limited to, replies to the above questions.

In addition to the preceding questions, the contractor may wish to provide comments regarding the subsequent phase, if such phase is anticipated. Such comments should be addressed to defining specific problems in his area that might be anticipated in assisting the Philippine Government to institute an indigenous program and to indicating the specific technical assistance that might be required to meet these problems.

**B. Preliminary General Recommendations**

Based on his assessment (see II-A above), the contractor will contribute his findings and participate in the preparation with the other participating members of the overall study in general recommendation as to the suitability of the Philippines as the site of a project to assist the Philippines to institute a program to provide from its own resources supplies of food for donation feeding programs

1. An overall assessment of the suitability of the Philippines in terms of three principal considerations: the need; the interest of entities (government and private) in the Philippines which would be required to contribute to the institution of an indigenous program; the capability of such entities to execute such an undertaking.

2. If the overall recommendation is that food supply project(s) be initiated in the Philippines, a listing of several possible alternative approaches for that could be used, e.g. local production, purchase abroad, etc., will be provided: Each alternative should include key information relevant to the alternative e.g. source of food-amounts, and capital and recurring costs. In addition an indication of preference with supporting rationale for each alternative will be provided.

**C. Final Report**

A draft of the contractor's report on Analysis and the team preliminary recommendation will be submitted to the contract representative for review and comment and will be returned to the contractor within 10 calendar days for preparation of final draft reports. In addition to preparation of these written reports, the contractor will participate with other members of the overall study in the presentation of an oral report to USDA and other interested parties in Washington which will summarize findings.

Dr. Roy Brown  
Nutrition Specialist

## APPENDIX A - BACKGROUND AND SCOPE OF WORK

### BACKGROUND

A need exists to develop alternative sources of foods for supplementary feeding programs in developing countries. Reasons for the existence of this need are:

- (1) Limitations on the availability of foods provided for developing country feeding programs under the U.S. PL 480 Title II program.
- (2) Increased food programming needs in developing countries.
- (3) Fulfillment of AID's policy to assist developing countries to create the capability to implement feeding programs without primary dependence upon imported donation food.

AID and USDA are, accordingly, instituting a program to assist interested developing countries to provide foods for their feeding programs from their own resources as a supplement to, or replacement for, Title II foods.

The Philippines has been selected as a possible site for the establishment of one of these assistance projects. As a first step, information is required on the need, interest, and capabilities for supplying foods for feeding programs from Philippine resources. This information must include an analysis of the nutritional requirements which should be provided by a Philippine supplemental or replacement food. This analysis will complement parallel assessments being conducted in food technology, food industry, and food programming.

The conduct of each study will be coordinated with the other studies, as each will provide important background information for the others. Individuals conducting the assessments will also cooperate in the preparation of a preliminary joint overall recommendation regarding possible initiation of a project to assist the Philippines with a program to supply food for feeding programs from its own resources. The individual analyses and the joint preliminary recommendation will together form the components of an overall study.

## SCOPE OF WORK

The contractor will, in executing the work scope coordinate his work on a continuing basis with the team coordinator, Mr. Ray Hochle, to ensure that all points relevant to the overall joint team analysis are covered to the extent possible.

### I. General Objectives

The contractor, Nutrition Specialist, will provide:

- (1) An analysis as related to nutritional, considerations of the need, interest, and capability of the Philippines for supplying foods for feeding programs from its own resources.
- (2) In collaboration with other team members, a preliminary recommendation for consideration by USDA as to the course of action the U.S. Government should take with respect to initiating a project to assist the Philippine Government to institute the program referred to in I (1) above.

The contractor's analysis, cited in (1) above, will be in the form of a final report, while the recommendation of the team, as cited in (2) above, will be provided as a draft for USDA consideration. The two reports will be based on information obtained by the contractor through participation in a team visit to the Philippines of approximately ten working days.

### II. Specific Objectives

The contractor will be responsible for providing the following specific information.

#### A. Analysis

The contractor will prepare a detailed analysis which will address the questions listed below.

In developing this information, the contractor will both draw relevant information from other team members for the preparation of his assessment and provide other team members with corresponding relevant information which will be needed by them. In cases where it is desirable to obtain related information from another team member before preparing a response, a notation has been made in parentheses following the question.

1. What are the needs of the beneficiaries of the donation feeding programs for supplementary nutrients. (The need will be expressed quantitatively in terms of calories, protein and micronutrients for the beneficiaries of each program identified by the Program Specialist taking into account all relevant factors including health factors, other sources of food, seasonal variations, etc., and using as sources of information first hand observations of the beneficiaries and the advice of local nutrition and health authorities).

(Fm-Prg. Spec. - programs planned, including settings and beneficiaries)

2. What types of food would be culturally and nutritionally acceptable for each feeding program? (This should take into account consideration of both general cultural acceptability, digestability and bulk).
3. What is the estimated nutritional impact of programs which distribute supplementary nutrients of the types and amount cited in 1 above.
4. What appears to be the strength of interests of Philippines health and nutrition authorities in the various donation feeding programs and their capability of obtaining local fiscal support for the program?

The information collected by the contractor and his analysis regarding the preceding questions should be directed to preparing conclusions and recommendations to USDA relevant to the needs, interests and capabilities of the Philippines to provide food supplies for donation feeding programs and for assisting the Philippines to create project(s) for developing such food supplies. Accordingly, the analysis should include, but need not be limited to, replies to the above questions.

In addition to the preceding questions, the contractor may wish to provide comments regarding the subsequent phase, if such phase is anticipated. Such comments should be addressed to defining specific problems in his area that might be anticipated in assisting the Philippine Government to institute an indigenous program and to indicating the specific technical assistance that might be required to meet these problems.

17 In the case of take-home preschool programs, foods which might only, or primarily, be culturally acceptable for feeding to young children should be given particular attention.



Mr. Raymond Hoehle  
Programming Specialist

1. What are the GOP's needs, intentions, and interest in donation programs: Specifically, which programs is it expected the Government will undertake over the short and long term (10 years).
  - (a) by type (this includes support services which are provided)
  - (b) by age group to be reached
  - (c) by number of beneficiaries
  - (d) by general location
2. How, for each program, will the food be distributed e.g., daily, monthly, etc.  
What part of the total diet is ration intended to meet e.g., one complete meal, protein supplement only, etc.
3. What are the program requirements of food commodities by area and type of program. This should take into account the expected delivery systems including specific storage, handling, transportation, packaging, preparation, and control/evaluation procedures for the food and derive the program requirements of the food commodities. (Program requirements should include such items as required storage stability, package size, pre-cooking preparation).
4. What is the estimated availability of food commodities from both GOP and from non-GOP sources which will be available during the next 10 years, and need not be supplied through new projects.
5. What are the GOP's capabilities for supporting a food commodity procurement program, including financial capabilities and program management (procurement, planning control and other administrative capabilities).

The information collected by the Contractor and his analysis regarding the preceding questions should be directed to preparing conclusions and recommendations to USDA relevant to the needs, interests and capabilities of the Philippines to provide food supplies for donation feeding programs and for assisting the Philippines to create project(s) for developing such food supplies. Accordingly, the analysis should include, but need not be limited to, replies to the above questions.

In addition to the preceding questions, the contractor may wish to provide comments regarding the subsequent phase, if such phase is anticipated. Such comments should be addressed to defining specific problems in his area that might be anticipated in assisting the Philippine Government to institute an indigenous program and to indicating the specific technical assistance that might be required to meet these problems.

APPENDIX 2  
Costs of Food Commodities

**I. Food Commodities in Past and Proposed Feeding Programs**

Commodity	Cost	
	US \$ per ton	₱ per ton
1. Rolled Oats <sup>1/</sup> .....	268	1876
2. CSB <sup>1/</sup> .....	291	2037
3. Soy Fortified Wheat Flour <sup>1/</sup>	275	1925
4. Milk Powder <sup>1/</sup> .....	770	5390
5. Sugar <sup>2/</sup> .....	214	1500
6. Oil <sup>2/</sup> .....	493	3450
7. Salt <sup>2/</sup> .....	71	500
8. Yeast <sup>3/</sup> .....	714	5000
9. NURTIPAK Composite (rice etc) <sup>4/</sup>		
(a) Unpackaged	700	4900
(b) Packaged	1100	7700

1/ USDA, Agricultural Stabilization and Conservation Service, Information Release. Note: Figures shown are from April 1, 1975 release (except milk powder which is from FY 74 guidelines). In addition to USDA procurement costs, estimates of food cost for Philippine programs include US \$80 per ton for ocean freight and US \$38 for inland transportation.

2/ Local market prices, May 1975.

3/ Estimate by author.

4/ NURTIPAK units vary in size and content to suit needs of recipients. Costs are estimated to range from ₱ 3670-5714 per ton (unpackaged) or ₱ 6857-10,000 per ton (packaged).

APPENDIX 2  
Cost of Food Commodities

II. Local Foods which Might be Used in Proposed Programs

Item	Cost	
	: US \$ per ton	: ₦ per ton
1. Milled Rice <sup>2/</sup> .....	: 271	: 1900
2. Corn grits <sup>2/</sup> .....	: 207	: 1450
3. Dried Cassava <sup>2/</sup> .....	: 157	: 1100
4. Wheat Flour <sup>2/</sup> .....	: 379	: 2650
5. Sugar (refined) <sup>2/</sup> .....	: 214	: 1500
6. Coconut Oil <sup>2/</sup> .....	: 714	: 5000
7. Mungo beans <sup>2/</sup> .....	: 857	: 6000
8. Peanuts <sup>2/</sup> .....	: 786	: 5500
	:	:

2/ Local market prices, May 1975

**APPENDIX 3**  
**National Government Revenues**

**ESTIMATED INCOME FOR THE FISCAL YEAR 1974  
 DERIVED FROM LOCAL REVENUE SOURCES  
 TOTAL P8,645,083,000**

	<b>Percentage</b>	<b>Amount</b>
<b>A. REVENUE FROM TAXATION</b>		
a. Income taxes .....	22.51	P1,945,630,000
b. Import duties .....	18.30	1,582,250,000
c. License & business taxes .....	18.15	1,563,942,700
d. Excise taxes .....	9.90	855,946,300
e. Other taxes & duties .....	6.96	602,125,000
f. Amnesty tax .....	2.20	190,000,000
g. Science stamp tax .....	.27	23,000,000
h. Apportionment of internal revenue to provinces & municipalities.....	(9.39)	(811,620,000)
<b>TOTAL REVENUE from taxation .....</b>	<b>68.90</b>	<b>P5,956,324,000</b>
<b>B. EARNINGS AND OTHER CREDITS</b>		
a. Operating & service income .....	5.34	462,155,960
b. Miscellaneous income .....	2.34	202,241,840
c. Sales of assets .....	.04	3,482,900
d. Income from public enterprises .....	.01	705,000
Total earnings and other credits .....	7.73	€13,565,700
<b>C. RECEIPTS AUTOMATICALLY APPROPRIATED .....</b>	<b>.81</b>	<b>69,629,300</b>
<b>D. EXTRAORDINARY INCOME .....</b>	<b>16.93</b>	<b>1,463,544,000</b>
<b>E. ADDITIONAL REVENUE FROM NEW TAX PROPOSALS .....</b>	<b>5.63</b>	<b>467,000,000</b>
<b>TOTAL INCOME .....</b>	<b>100.00</b>	<b>P8,645,083,000</b>

APPENDIX 4

**National Government Expenditure Budget**

**PROPOSED EXPENDITURES FOR FY 1974  
SHOWN BY FUNCTIONAL CLASSIFICATION**  
**TOTAL P8,605,904,400**

<b>All Funds Combined</b>		
	<b>Percentage</b>	<b>Amount</b>
<b>A. ECONOMIC DEVELOPMENT</b>		
Transportation and Communication .....	16.76	P1,442,653,700
Agriculture and Natural Resources .....	11.38	979,295,200
a. Commerce & Industry .....	6.33	544,391,532
b. Other Economic Development ..	5.20	447,343,800
	<hr/> 39.67	<hr/> 3,413,684,282
<b>B. SOCIAL DEVELOPMENT</b>		
Education .....	21.89	1,883,953,695
a. Public Health & Medical Care ...	5.49	472,136,260
b. Labor and Welfare.....	.99	85,468,300
	<hr/> 28.37	<hr/> 2,441,558,255
<b>C. NATIONAL DEFENSE</b>		
a. National Defense .....	11.57	996,046,400
b. Maintenance of Peace and Order	4.38	377,077,000
	<hr/> 15.95	<hr/> 1,373,123,400
<b>D. GENERAL GOVERNMENT</b>		
a. General Government .....	5.28	454,362,417
b. Pensions & Gratuities .....	3.02	259,719,046
c. Administration of Justice .....	1.64	140,834,000
	<hr/> 9.94	<hr/> 854,915,463
<b>E. DEBT SERVICE</b> .....	6.07	522,573,000
<b>TOTAL</b> .....	<b>100.00</b>	<b>P8,605,904,400</b>