TECHNICAL REVIEW OF THE PHILIPPINE NUTRITION PROGRAM

Agency for International Development
Manila and Washington, D. C.
February 1978

SUMMARY

A.I.D. has provided technical and material assistance to the Philippine Nutrition Program and predecessor programs since 1968. The current USAID project expires in August, 1973 and a follow-on project is being considered. In view of this, AID/W requested that a review be made of the Philippine Nutrition Program, including A.I.D. assisted elements, to assess progress achieved to date and to provide A.I.D. with guidance for future nutrition program design.

The review was carried out in the Philippinesduring February 13 to 24 by a six person team of two AID/W staff and four outside experts. Team members interviewed numerous individuals and visited program activities in Manila and eleven provinces. The USAID and National Nutrition Council made the review possible by providing complete access to program personnel and information. The team's conclusions are the product of their own observations and extensive dialogue with and feedback from the Philippine and USAID counterparts. Nevertheless the team remains solely responsible for them and for any errors of fact or judgment. The recommendations are made in the hope that they will be useful for our Philippine and A.I.D. colleagues to consider in planning new nutrition activities.

Conclusions and recommendations are included in sections IV and V of this report. The team's overall assessment can be summarized as follows: Excellent progress has been made in identifying malnutrition as a national problem, establishing a sound policy and institutional framework for attacking the problem and initiating imaginative measures for that purpose. Local level commitment to the program appears to be strong. Initially, the program emphasized supplementary feeding to reduce more severe cases of malnutrition but is now placing high priority on local-level planning and preventive, outreach interventions centered in the municipality and village or barrio (barangay). Integration of nutrition concerns into economic and agriculture planning has not yet been achieved.

Notwithstanding the fact that there is much more to be done, the Philippine Nutrition Program stands out as one of the best national nutrition programs with which the team is familiar and AID's support for the program has apparently contributed materially to that success.

ACRONYMS

PNP	- Philippine Nutrition Program
NNC	- National Nutrition Council
NCP	- Nutrition Center of the Philippines
NFAC	- National Food & Agriculture Council
NEDA	- National Economic Development Authority
DOA	- Department of Agriculture
DOH	- Department of Health
DEC	- Department of Education and Culture
DSSD	- Department of Social Services and Development
BaEx	- Bureau of Agricultural Extension
FNRI	- Food & Nutrition Research Institute
OPT	- Operation Timbang (national weighing program)
MNP	- Malnutrition Prevention Program
BNS	- Barangay Nutrition Scholar
MIS	- Management Information System

TABLE OF CONTENTS

I. Introduction

A. Scope and Objectives

The basic purpose of this review was to provide information on AID - supported Philippine nutrition activities which was not available to the Asia Bureau, AID/Washington from regular information sources. The Asia Bureau and the Office of Nutrition, Development Support Bureau, AID/Washington, drafted a general design for the study and enlisted the support of three members of the Committee on International Nutrition Programs of the Food and Nutrition Board, National Academy of Sciences in refining the design and conducting the study. The members were acting on their own behalf and were not representing the Committee.

During the design process it was decided to concentrate on the overall Philippine Nutrition Program including the USAID Food and Nutrition Project rather than restrict our attention to the latter. It was felt that this approach would provide a better information base on which to make decisions regarding future AID assistance. While the review team recognized the important role played by PL 480 food commodities, it was decided not to place emphasis on these inputs. (Interested parties can consult the 1977 Evaluation of the PL 480, Title II Program in the Philippines conducted by Food for Peace Office, AID/W).

B. Methodology

The AID review team was composed of the following:

Mr. Sol Chafkin, Ford Foundation (Chairman, NAS Committee on International Nutrition Programs)

Mr. James Pines, New Transcentury Corporation (Consultant to AID/W, Office of Nutrition)

Dr. Gerald Keusch, Mt. Sinai Hospital, N.Y.C. (Member, NAS/CINP)

Dr. Barbara Underwood, Massachusetts Institute of Technology (Member, NAS/CINP)

Mr. Robert Pratt, Office of Nutrition, AID/W.

Dr. James Brady, Office of Technical Resources, Asia Bureau, AID/W.

The review was completed during a two week period (February 12-24). Within that short period the team, accompanied by NNC national or local representatives, visited several regions of the country and saw a sizeable cross-section of local operations and interventions. (A list of areas and individuals contacted is attached as Annex A.)

The National Nutrition Council and USAID/Philippines gave full cooperation and support in the conduct of the review. Likewise, other agencies (e.g., NEDA, NFAC) and local governments did much to facilitate the evaluation. Nonetheless, the team members are aware of the risks inherent in generalizing from specific judgements about the performance and impact of such a diverse and complex operation as the Philippine Nutrition Program. Reliable quantitative and other data to test assertions and impressions were frequently not available.

As indicated in the substantive sections which follow, the team members were favorably impressed by the substantial progress which has been made but noted a number of activities which demanded attention and expansion.

II. The Philippine Nutrition Program 1974 - 1978

A. Diagnosis of the Problem

Prior to the initiation of the current integrated Nutrition Program in 1974-75, numerous studies, surveys and analyses of nutrition and related subjects had been carried out by a variety of organizations and individuals between 1950 and 1973. Data and experience were also obtained from several nutrition intervention programs carried on during the same period, such as the Targeted Maternal and Child Health Program (TMCH), Food Production/Green Revolution campaigns, School Lunch Program, and Applied Nutrition Program. Although these efforts did not constitute a coordinated, standardized diagnostic exercise intended to guide the development of an integrated national nutrition program, they did provide a reasonable data base for understanding the nature, extent and severity of malnutrition and also suggested the probable causes of the malnutrition problem and identified remedies.

A list of representative studies which contributed to the design of the PNP is attached. Quantitative evidence was obtained through nutritional status and food consumption surveys, food production and distribution reports, family income and expenditure data from census surveys, morbidity data from health services reports, infant and young children mortality data, food balance sheets, weaning practices surveys, etc.

Analyses of these studies revealed a number of deficiencies in that data and produced recommendations for further studies. For instance, American Technical Assistance Corporation (ATAC) recommended, as had others, that future nutritional status surveys be age and income specific and that information be collected on breast feeding and weaning practices, feeding sick children and consumption patterns. (1)

Analysis of the information available produced the following list of problems which existed as of 1973:

1. Protein/Calorie malnutrition (PCM) was the most serious nutrition problem with calories more prominently deficient than protein.

2. Infants, pre-school children and pregnant and lactating women of low income households were most at risk.

3. Ninety percent of infants and children were malnourished (1st, 2nd, 3rd degree) and about 35% suffered from 2nd and 3rd degree.

4. Iron deficiency anemia was serious, followed by vitamin A deficiency.

5. Between 56% and 81% of families could not afford to purchase a minimum "food basket"

6. Income distribution was severely skewed and did not appreciably improve during 1950-1970.

---

(1) An overview of the Nutrition System of the Philippines, American Technical Assistance Corporation, August 1977.

7. Average family size was very large: 6 - 8 members.

8. Population growth rate was very high - about 3.0% per year.

9. The level of knowledge of good nutritional practices was low.

10. The high prevalence of disease was a significant barrier to improving nutritional status.

11. An unstable grains market was a disincentive for producers and food production was inadequate to meet nutritional requirements.

12. Neither the government nor private sector was fully organized to address nutrition problems.

13. Malnutrition of children and women was not a development priority of the government.

B. Evolution of the Program

The need for a more integrated attack on food and nutrition problems was recognized in the early 1970's. After achieving significant progress in increasing rice yields during 1967-69, the GOP established the National Food and Agriculture Council (NFAC) in 1969 to coordinate all food production activities. In 1971 NFAC was given the additional function of coordinating all food and nutrition activities. By 1974, the importance of nutrition as a national need was given recognition through the creation of the National Nutrition Council. Coordination of nutrition programs was transferred from the NFAC to the NNC. Using earlier experience in program coordination and the problems encountered in the process, the NNC pursued greater inter-agency involvement through its multisectoral composition. The task of policy formulation and coordination to guide planning and implementation was undertaken by the Council and implemented through the umbrella program for nutrition called the Philippine Nutrition Program (PNP).

During the interim period (1974-1975), a great deal of effort was devoted to restructuring the organizational system both at the national and the local levels, up-dating of guidelines to meet current program needs, and coping with changes

and new requirements that accompanied the transfer of duties and responsibilities of nutrition program coordination from the National Food and Agriculture Council.

The current 5-year Philippine Nutrition Program emphasizes a family centered approach to the "package" delivery of five intervention schemes to help arrest malnutrition. These nutrition interventions are:

1. Food Assistance
2. Health Protection
3. Nutrition Information and Education
4. Food Production
5. Family Planning

In addition to these intervention schemes the following support activities were undertaken:

1. Nutrition Planning at the local level
2. Locating the malnourished
3. Training
4. Research
5. Monitoring, surveillance and evaluation

Nutrition-related activities and projects were then assigned to one or more of the above intervention schemes. In some cases, new projects were designed and initiated; in other cases, existing projects were brought into the Philippine Nutrition Program.

C. Program Organization and Institutionalization

1. The Policy Base

One critical prerequisite to a successful program is a commitment by the national leadership in the form of expressed policies and implementing instructions. Such a commitment to the

improvement of nutrition has been made in the Philippines. In June 1974, Presidential Decree 491 (Nutrition Act of the Philippines) was issued to: (1) declare that nutrition is a priority of the government to be implemented by all branches of the government in an integrated fashion, (2) order the drafting of a Four-Year Food and Nutrition Program involving the public and private sectors, (3) create a National Nutrition Council, under the Office of the President, composed of cabinet level officials and private sector representatives and (4) designate July as Nation Nutrition Month.

The Decree assigned the following functions and powers to the National Nutrition Council:

1. Formulation of an integrated national plan on nutrition.

2. Supervision, coordination, and evaluation of the implementation of "the integrated Philippine Food and Nutrition Program".

3. Coordination and integration of policies and programs of "all agencies and instrumentalities of the government charged with the prosecution of existing law, policies, rules and regulations concerning nutrition".

4. Coordination of the release of public funds for nutrition purposes.

5. Coordination of all requests for loans and grants by the government agencies involved in the nutrition program,

6. Calling on any government entity to provide assistance in form of personnel, facilities, and resources.

The Decree also authorized the Council to accept any type of donation, grant, or gift from any source.

The National Nutrition Council thus has broad powers and responsibilities in the area of nutrition. The potential exists for overlapping or conflicing activities vis-a-vis such entities as NFAC, but an effort is made to avoid this problem through joint memberships. For example, Decree 491 specifies that the Chairman-Coordinator of NFAC shall be the Chairman of the National Nutrition Council (NNC). At present, the Secretary of Agriculture is the incumbent of both positions.

The NNC became generally operative in July, 1975 when it issued Document 015.75 which further defined the policy directions to be pursued:

1. Priority shall be given to improvement of the nutritional status of the most vulnerable groups, particularly those in the low income bracket (listed in order of priority):

   a. infant and pre-school children, pregnant women and nursing mothers;

   b. other children up to adolescence;

   c. those engaged in heavy manual labor, and

   d. the aged and such other groups that are found to have serious health problems with nutritional implications.

2. Priority shall be given to health protection, malnutrition prevention, and cure/rehabilitation of the malnourished through enriched foods, hospital treatment and post-discharge follow-up activities.

3. Improvement of the economic status of the poor segment of the population shall be an important consideration of the Nutrition Program.

4. Nutrition education, information and communication programs shall be designed to encourage the maximum utilization of nutritious indigenous foods.

5. The government shall encourage and assist in the increased production, improved processing and marketing, and increased utilization of food, preferably low cost food. "Supplementary feeding programs shall be based primarily on indigenous foods. Stockpiling of basic food commodities to meet any emergency situation shall be encouraged"

6. There shall be effective cooperation among those engaged in both family planning and nutrition activities.

7. Applied and basic research in food and nutrition and related fields shall be encouraged and promoted. "Focus shall be on applied research and maximum utilization of findings".

8. All nutrition activities, both public and private, shall be centrally coordinated through the NNC.

Letter of instructions No. 441, issued by President Marcos on July 31, 1976, provides for the following division of labor on nutrition activities:

1. The Department of Social Services and Development is the principal agency in charge of a nationwide food assistance program for malnourished children. This program shall concentrate on the second degree malnourished.

2. The Department of Agriculture (through NFAC and the Bureau of Agriculture Extension (BAEX) is to (a) mount a program to increase the production of legumes, beans, vegetables, fruits, livestock, poultry, and fishery products (in coordination with the Green Revolution and the Department of Education and Culture); and (b) extend nutrition education to farm housewives through the BAEX.

3. The Department of Education and Culture is to include nutrition subjects in the curricula of public and private schools at all levels and in the curricula of Schools of Medicine, Nursing, Agriculture, Midwifery, Social Work and Education.

4. The Department of Health, through its National Nutrition Service, is the principal agency responsible for the treatment and rehabilitation of severely malnourished children, using the Mal-Wards in its hospitals and Rural Health Units for this purpose; the DOH will obtain food commodity support from the NCP as needed.

5. The Department of Local Government and Community Development is to establish nutrition committees in every region, province, city and municipality which are to formulate a plan for their respective jurisdiction to be compiled and integrated at the different levels, culminating in a national nutrition plan put together by the NNC.

6. The National Science Development Board is to support nutrition research projects which are certified to be high priority by the NNC

7. The Budget Commission is to treat Food and Nutrition Programs as one of the top priority programs of the New Society.

8. The NNC is to provide allowances to field nutrition workers, establish a national nutrition surveillance scheme, and coordinate with Asian countries on possible surveillnace or other nutrition activities which may be implemented for the region.

These and related decrees and regulations establish an adequate legal and administrative basis for the NNC to carry out its role. Given the large number of organizations involved in nutrition at the national and local levels, coordination and cooperation will be difficult and will present continuing issues. In fact, the current formal organization linkages between the NFAC and NNC may not be adequate to facilitate the close cooperation needed between food production and nutrition programs. The Secretary of Agriculture is the Chairman of both councils, providing a channel for top policy coordination; and a member of NFAC Secretariat serves on the NNC Management Committee. Nevertheless, some consideration might be given to the idea of even closer ties at the policy and program levels. One possibility could be the restoration of a nutrition (NNC) representative on the NFAC.

The evaluation team did not closely examine the linkages between the NNC and the Nutrition Center of the Philippines (NCP) which was established by Mrs. Imelda Marcos in July, 1974 as a nonstock, nonprofit private foundation.

The NCP is a member of the NNC and provides a flexible channel for attracting and utilizing private resources for the Philippine Nutrition Program. The NCP has been the instrument for developing new interventions, such as the Nutri-pak, Gro biscuits, Nutri-noodle and Superpan (fortified pan de sal) The NCP also provides a means of recruiting scarce talent for the program through a more attractive salary structure. At present, the same person serves as Executive Director of NCP, Executive Director of the NNC Secretariat, and as the NCP member of the NNC (Council). This naturally provides for very close coordination between the NNC and the NCP.*

2. Organization and Staffing of the National Nutrition Council

Decree 491 specifies that the Council membership shall include:

a. The Chairman-Coordinator, National Food and Agriculture Council (NNC Chairman)

b. The Secretary, Department of Health (Alternate NNC Chairman)

c. The Secretary, Departmentof Education and Culture

d. The Chairman, National Science Development Board

*Some additional information on the NCP is contained in Annex C.

e. The Secretary, Department of Social Services and Development

f. The Secretary, Department of Local Government and Community Development

g. The Chairman of the Nutrition Foundation of the Philippines

h. One other representative of the private sector to be appointed by the President of the Philippines (presently this is the Executive Director of the Nutrition Center of the Philippines).

The Decree also calls for the Council to appoint an Executive Director to implement its policies, programs, projects and decisions. The Council may also appoint one or more Deputy Executive Directors to assist the Executive Director. The Executive Director's position has been filled by Dr. Florentino Solon and the Deputy Executive Director's position by Mrs. Delfina B. Aguillon.

Each member of the Council appoints the head of his agency's nutrition program to serve on a Management Committee, which is chaired by the Executive Director of NNC. The Committee shall perform any functions assigned by the Council. The Council has also created a Secretariat whose general structure is shown in Chart I.

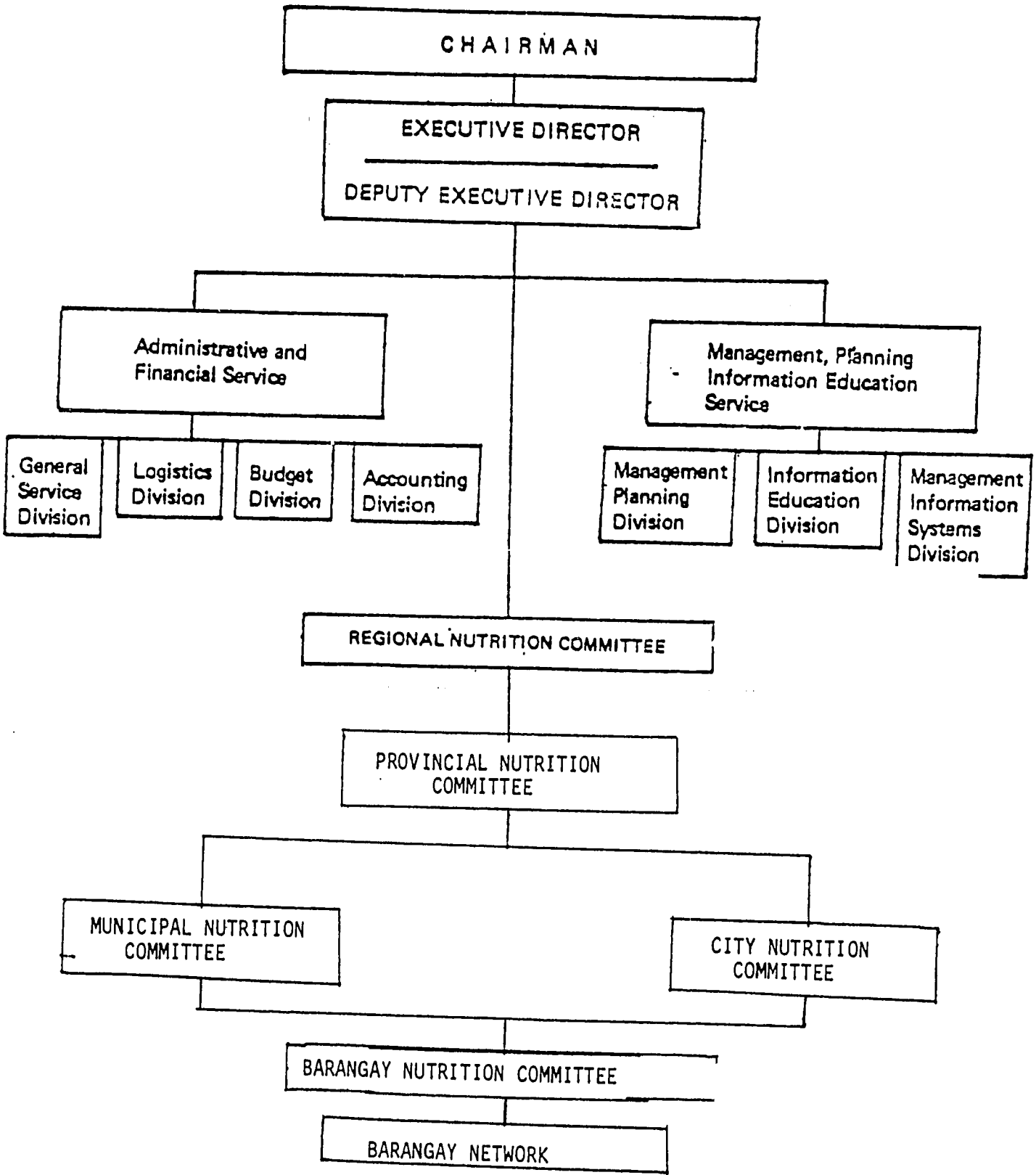
The NNC has a total staff of 184 (101 regular, 23 contractual, and 60 casual). Of these 133 are based in Manila and 51 in the 12 regions. Each regional office consists of a nutrition coordinator, driver, and clerical help. Six mobile training teams of two persons each were trained and sent to the field in 1977. Below the regional level, the nutrition action officers normally operate on a part-time basis on detail from local governments or field offices of national agencies. At the base of the structure is the Barangay Nutrition Scholar who serves under a contract between the NNC, the municipal mayor, and the scholar. The NNC provides each scholar with an allowance of 10 pesos per month. In some cases, this is supplemented by the local government.

100

CHART I

ORGANIZATIONAL CHART

NATIONAL NUTRITION COUNCIL
SECRETARIAT



Source: NNC Briefing Materials

3. Financial Support

It is difficult to identify precisely the amount of money being expended for nutrition activities. The evaluation team observed in several communities that funds and other resources were being contributed by private groups, local governments, participating central government agencies, and by the program clients. There appears to be a strong self-help element in the program which is not reflected in the reporting and budgetary process. If we confine ourselves to formal financial planning documents, we discover, for example, that the Five Year Philippine Development Plan 1978-1982, calls for the Government to spend about 1.64 billion pesos for health, nutrition and family planning services in 1978, but the nutrition element of the budget is not isolated for comparative purposes (see page 194 of the NEDA Plan issued September, 1977). Total government expenditures were estimated to be 37.6 billion for 1978. (per page 369 of the Plan).

The more detailed Five-year Nutrition Plan, 1978-82, prepared by the NNC in March 1977 indicated that government expenditures for nutrition would total about 196 million pesos in 1978 (including UNICEF and USAID contributions). The private sector, including voluntary agencies, was expected to contribute an additional 33 million pesos including donated food. The NNC estimated its recent budgets as follows:

NATIONAL NUTRITION COUNCIL BUDGET (BY SOURCE)

1975 - 1978 (000 Pesos)

Source	1975	1976	I.Q.	1977	1978	Total
Phil. Govt.	5,000	10,000	-	10,000	10,181	35,181
USAID	3,606.76	2,220	414.4	2,733	4,173.6	12,451.99
USAID/NEDA*	3,000	-	-	-	9,451.99	12,451.99
UNICEF	2,116.4	2,523.4	-	2,530.8	2,146.0	9,316.6
Total	13,723.16	14,743.4	414.4	15,268.8	25,952.59	70,102.35

* Title II rice fund and Section 206 NFOM grant

The above data provide some estimates of the general magnitude of financial support for nutrition, but are inadequate for meaningful comparisons. There is, therefore, a need to include financial data in the new management information system (MIS) now being designed by NNC with consultant assistance from the USAID-VPI contract. The NNC should know: (1) the amounts (2) actual budget disbursements, and (3) estimated value of non-budgeted cash and in-kind contributions from private and governmental sources.

II. Assessment of Program Performance

This section describes the general impressions gained by the team through interviews, field visits, conferences, and review of written materials. As indicated in the Introduction, we are aware that our impressions are based on limited observations of a complex and diverse Program. However, such impressions can be of value of highlighting issues and potential opportunities which the Program managers can assess and utilize as appropriate.

A. Institution Building

1. Building on Current Successes

The Philippine National Nutrition Program represents a major accomplishment in program and institutional development. In less than four years, the National Nutrition Council and the Nutrition Center of the Philippines have built facilities, developed educational and training materials, and made impressive progress in institutionalizing a structure for nutrition planning, programming, and action equal to any in the world. The power of governors and mayors has been harnessed in support of nutrition, through a political and educational process that has also produced popular

support and generated a significant expansion of private, provincial and municipal financial allocations for nutrition-related activities. Political commitment and financial support from the National Government continue to be impressive.

Sectoral agencies meet with National Nutrition Council representatives at all levels of government and reach joint decisions often more nutritionally favorable than precedent would anticipate. The Barangay network, has been used successfully to identify and publicize cases of serious malnutrition, with Barangay Nutrition Scholars providing valuable outreach linkage to families. The idea of targeted nutrition efforts, once a rarity, is now commonplace in the Philippines and accepted widely, particularly in supplementary feeding. There is now the motivational and institutional base that, if properly used, can virtually eradicate serious malnutrition within a forseeable period of time. Consequently, we also feel that the institutional goals of AID's Nutrition Project (492-252) have been achieved to a very satisfactory degree in relation to the resources invested and the short time elapsed.

As with any major promotional institution-building program of this nature, accomplishments are uneven and significant problems remain.

We suggest that the GOP and USAID view the Philippine Nutrition Program as moving from a very successful promotional phase in which the national nutrition problem has been identified and remedial programs initiated to a new phase of consolidation, refinement and extension of gains. This would include the further development of initiatives at local levels and increased attention to intersectoral policies and issues.

2. Field Implementation Structures

NNC is a coordinating body, not an implementing agency; but its effective coordination and monitoring of line agencies sometimes suffer from their limited coverage and performance. NNC also needs to improve its own staff and information capabilities in order to guide and improve the nutrition work of such departments as Health, Education and Culture, et. al. Some of NNC's local action officers are handicapped by having too much to do or from being part-time designees of line agencies. However, such problems can be offset when they have the leadership and technical ability needed to stimulate and improve the performance of others. In many cases, political support is great enough to provide good opportunities to press line agencies to do better, but some action officers do

not know how to utilize such support to further NNC goals. While the unpaid part-time action officer is an attractive choice from the budgetary viewpoint, the required program output and effectiveness may be lacking in some localities.

The National Program's success depends heavily on interest and support from local governors and mayors. They choose and control Provincial Action Officers and Municipal Action Officers, who then work closely with regional representatives of the National Nutritional Council. This works well where strong and interested leaders and bureaucrats provide good program leadership.

As suggested above, it may be unrealistic to expect high quality performance from part-time action officers taken from existing bureaucracies. Consideration should be given by the NNC to seeking the appointment of full time action officers, establishing more rigorous selection criteria, and providing more effective preparation for the technical and policy leadership tasks to be performed at the local level. It is recognized that this may be financially unattractive in some localities, but the investment should be justified by the increased effectiveness of the nutrition officers. The Council should also help the local coordinators to clarify the uses and limits of their power and back them up as they exercise it. Effective nutrition coordination is often a political process and, while action officers may have to move slowly, they should at least be sensitive to opportunities for positive influence.

3. Community-Oriented Development Strategies

One significant NNC accomplishment is the creation of an organizational base for a strategy that might be called municipality nutritional self-sufficiency. This concept provides the potential for:

a) achieving nutritional goals by food and non-food interventions, as determined by local conditions;

b) harnessing municipal and provincial political energies and financial resources for nutrition purposes;

c) Shaping central government line agency actions at the municipality level to achieve positive nutritional impact, whenever feasible, or at least to avoid a negative impact;

d) increase productive collaboration among line agencies; and

e) influence national policy formulation and financing decisions, as well as intervention assistance decisions, by an information system reflecting conditions and needs in municipalities and barangays.

It is necessary for the NNC to design and pilot test this concept of community self-sufficiency in close cooperation with NEDA, NFAC, and others. The NEDA staff suggested that its new integrated area developemnt project, in Region VI (Central Visayas) could be a suitable venue for such experimentation.

B. Impact of Interventions

1. General Assessments Completed or Underway

An assessment of available data indicates that the program has effectively reduced the malnutrition problem in its more severe forms as measured by weight for age data. Although quantitative data on impact is spotty in availability and quality, there is substantial evidence for a general reduction nation-wide in the number of 2nd and 3rd degree malnourished from about 35% of the under 6 year old children in 1971 to 30% in 1977. Data from Bulacan collected in 1971 on weight for age of nearly 9,000 preschoolers in the TMCH program revealed 41% with 2nd and 3rd degree malnutrition. Results from OPT in 1976 in the same province on nearly 53,400 children revealed a reduction in these nutritional categories to less than 22%. However, caution is needed in comparing results of the initial and later OPT surveys, the former admittedly being less accurate as minimally trained implementors learned their job. Improvement in the weighing apparatus, experience in weighing and better understanding of the program undoubtedly resulted in improved accuracy of data collection in later surveys.

Data from the Bureau of Agriculture Extension (BaEx) Malnutrition Prevention Program provides additional evidence of impact on the under-18 month infant. This program is basically one of education in better utilization of available food resources for child feeding, hence a step toward family nutritional self-sufficiency; according to one evaluation, it eliminated third degree malnutrition in 6 month old participants and reduced that at 18 months to o.4%.

Among school age children receiving food assistance during 1973-77, surveys conducted in 1956-76 revealed that recipients. on the average improved their body weight as a percent of standard by 1 percentage point a year. No improvement occurred in schools

not receiving food assistance. A commonly expressed spin-off claimed for school feeding programs is improved school attendance. The team also obtained some anecdotal evidence from community teachers attesting to this effect.

Impact as measured by a reduction in infant and preschool child mortality and morbidity is less clear. Data from the Disease Intelligence Center, DOH, showed no consistent reduction in infant deaths from 1964 - 74 (range fluctuating between 58.7 - 67.9/1000 live births) and no consistent decline between 1968-74 in 1-4 year deaths (range fluctuating between 11.6 - 17.8% of all deaths). More recent data were not available nationwide, although surveillance in Bulacan Province by one municipal health center suggested a decline in infant mortality in 1977.

In order to validate the effectiveness of the national program, comparisons of mortality rates should be made between (a) the total preschool population and (b) the 3rd degree malnourished who were recipients and non-recipients of program interventions.

The NNC program has impacted too on the behavior of mother-participants in a variety of programs utilizing food assistance/education interventions. An evaluation study is now in progress to quantitatively document the behavioral impact of the mother-craft centers, using a standardized methodology. Preliminary results from this study as well as two other evaluation studies of the TMCH suggest improvement of both the nutritional status of the enrolled child and that of the next younger sibling.

Impact of other interventions on nutrition of the target group as yet has not been adequately evaluated. A study now in progress in 18 barangays composing four interventions, i.e., education, immunization, food assistance and sanitation, and a combination of these, will provide information on impact in this limited sample.

The outcomes measured in this evaluation include improved weight for age and morbidity. This study will provide some data on incidence of malnutrition (i.e., number of new cases of 3rd degree in a given period) under a carefully controlled study design, as well as point prevalence. These data can be obtained from OPT in future operations as these take on a more longitudinal orientation.

Changes in nutrition conditions cannot be viewed in isolation from the economic conditions prevailing during the period. During the period of 1973-77 these appeared to have acted in a negative way among the very poor. Hence, the impressive achievement noted above may indeed understate the real impact.

2. Health Protection

Health promoting activities are important components of a nutrition program. There are several biological reasons for this, most important of which is the fact that acute and chronic illnesses cause a state of metabolic vulnerability because of gross loss of critical nutrients from body stores during infections and injuries, and alterations in intake, assimilation and absorption of food. The resultant breakdown in body defense mechanisms pave the way for subsequent illness, the sequential effect of which is progressive deterioration in nutritional status.

Because of these consistent relationships between illness and nutrition the most efficient and cost effective input for medical interventions fall in the realm of preventive activities, including both prevention of disease as well as prevention of deterioration of nutritional state when illness does occur. Indeed this concept carries into convalescence because rapid repletion of nutrient losses will better prepare the individual to handle a subsequent illness and will thereby reduce the cumulative depletion which otherwise results. Data in the Philippines are consistent with other studies of the prevalence of infection in developing countries, showing an extraordinary high point prevalence in pre-school children, clustered significantly in children 6-24 months of age. To the extent that health protection activities are targetted to these most vulnerable children and interpreted in broad nutritional terms rather than more narrow traditional health sectoral terms, nutritional benefits will follow, including improved nutritional status and even community nutrient sparing (i.e. more efficient use of foods available to the community).

The current Philippine Nutrition Program targetting is based on weight for age surveillance. This is a realistic field technique, and it has been used very creatively to develop the PNP during the past few years. It is only now that a degree of uniformity in weighing instrumentation and technique has been established, that useful and uniform data can be collected nationwide. This is a

solid achievement in making routine a procedure greeted with skepticism just a few short years ago. It is important to emphasize, however, as the NNC clearly realizes, that real estimates of impact of PNP cannot be made by comparison of the early data with those currently obtained because of the differences in quality. While this might yield "evidence" of program success which could be conceivably used to sustain and increase present interest in the PNP, it might also foster unrealistic expectations for the future which would impair ultimate incorporation of the program components into routine operations.

The prevalence and diagnosis of malnutrition will surely change with time; therefore, ongoing analysis of problems and programs will be required to guide the appropriate shifts in emphasis and selection of the proper forms of intervention to achieve the nutritional goals of the PNP. The quality of the analysis will certainly depend as much on the quality of the data as well as the analyzer. Continued emphasis on standardized collection of accurate weight data is essential. This requires consistent attention to detail and training, for weight measurement is the basic tool of the program which feeds into performance and impact analysis systems at local as well as at more central levels.

Employing weight for age data in infants and children up to six years of age, the PNP has concentrated intervention efforts at the group classified as 3rd and 2nd degree malnourished according to Gomez criteria. While it is well recognized that this approach could be misleading in quantitative terms, it does provide qualitative estimates which have been extremely useful to the PNP thus far. Nevertheless, the time is at hand to shift to a more realiable indicator, in order to sharpen the focus of the PNP. The principal weakness of weight for age data is that, with increasing age of the child, it increasingly fails to reflect current malnutrition. This is a consequence of the fact that stunting of growth due to previous nutritional problems will continue to be reflected as deficits in weight for age, even though weight for height measures become normal during the later preschool years with improved growth. Thus the prevalence of malnutrition which deserves treatment is overestimated by exclusive reliance on weight for age data, the current PNP methodology. Nevertheless we do not believe that weight for age need be abandoned, nor even substituted by weight for height measures at this time. First it will be difficult to obtain as accurate, and therefore as meaningful a measure of weight for height because of the need for more rigid standardization of length or height measurements. Second, weight for age does reflect acute malnutrition in the younger pre-school children.

Third, a simple shift in concept from collection of repetitive cross-sectional weighings of children, to longitudinal weighings in the same child allows one to extract incremental growth data, a meaningful assessment of nutritional state at the time even in the older child. It is certain that re-evaluation of the nutrition problem in the Philippines in these terms will suggest a tilt in emphasis from the whole 0-6 year old group to the 0-3 year olds, with the expressed purpose of initiating the necessary interventions to reduce the incidence and the prevalence of significant malnutrition.

In preventive terms, several simple health measures which do not require direct physician involvement are desirable. In fact these fit well with the municipal and barangay level programs of the NNC and the self-help concept being fostered. These interventions are currently scattered throughout various line agency programs, being implemented by extension workers, midwives, nurses, and potentially the BNS or health worker. This fragmented effort is difficult to coordinate or to control at best, and, at worst, results in sigmificant redundancy or inefficiency and poor coverage of the at risk population. Means must be found to integrate and to coordinate these efforts at the community and family level, with standard data collection and record keeping to allow analysis and utilization of data for local planning. These measures are in large part educational and will therefore have a lasting effect once learned; it is simply necessary to see them in a nutritional perspective so that the proper linkage is established. Attempts are already underway to accomplish this through the Under 5's Clinic approach of the DOH and the Malnutrition Prevention Program (MPP) of BaEx.

The health interventions which could fit easily into this context are:

1. introduction of the home based growth chart and health record --- as being suggested by Dr. Solon;

2. improved intra and post-infection convalescent care through education to early refeeding, whether breast milk or solid foods;

3. reduction of mortality from diarrheal disease and rapid nutritional repletion through use of oral rehydration techniques and continued feeding practices;

4. monitoring of post illness catch-up growth;

5. immunization which is delivered to nutritionally healthy children through a barangay network assuring coverage.

These objectives are now being reached in hit-or-miss fashion. They are important because the surveillance, preventative, and therapeutic package included is designed to maintain good growth as the best overall clinical indicator of nutrition in young children, and not to respond only to malnutrition which has already occurred.

Certain important concepts of community nutritional self-sufficiency are also addressed by this approach. Young children during and after infection may require 15-30% more nutrients than required for usual maintenance plus growth. This period of increased requirement lasts for weeks longer than the period of acute illness, even when clinical symptoms and fever disappear. Repletion time may be 3-4 days for each illness day in nourished subjects; it is much longer in those already malnourished. If food supply does not change, this additional need represents a significant burden on available calories and other nutrients.

There is little doubt that the calories required for repletion and catch up growth are not provided for by maintenance requirements for a population. With estimates of time ill as high as 40% during the weaning process and early post weaning years this represents a considerable drain on community resources. Preventive health approaches are thus directly related to community nutritional self-sufficiency.

As an example of the shaping of health interventions in nutritional terms one can look at oral rehydration techniques. These are currently being introduced in the Philippines as the "magic bullet" for diarrheal disease to reduce mortality but as yet take no cognizance of the fact that a major benefit of the therapy is rapid restoration of appetite which permits continued oral feeding. Whether breast milk or solid foods are offered acute weight loss is minimized, convalescent weight gain is facilitated and catch up growth occurs. This restoration of nutritional state prepares the child for the next round of infection, which is bound to happen soon

---

* 1) Mata, L. J. Kronmel, R. A., Urrutia, J. J., Garcia, B. "Effect of infection on food intake and the nutritional state: perspectives as viewed from the Village". American Journal of Clinical Nutrition 30:1215-1227 (1977)

2) Mata, L. J. "The Children of Santa Maria Cauque. A prospective field study of health and growth", MIT University Press, Cambridge, MA (1977)

if the environment is not altered. The child is thereby better able to resist the infection and more able to afford nutritionally the inevitable, induced catabolic response if illness occurs. Marked deterioration of nutritional state due to sequential infections has thus been prevented.

3. Endemic Goiter

Endemic goiter is a nutrient-specific problem that is partially reversible in the short run and amenable to solution as a public health problem. The frequent correlate in areas with a high prevalence of severe goiter, cretinism, is irreversible resulting in survivors that are a tragic preventable life-long burden to the community. An early survey conducted by FNRI showed 4% of the total population in the Philippines is afflicted by endemic goiter. This figure, however is deceptive since disaggregation revealed 12% and 8% of pregnant and nursing mothers were affected and in known endemic areas 60% or more of school children had goiter. An even higher prevalence is said to occur in some remote mountain areas where a significant amount of cretinism also is reported. Experience from pilot studies conducted in the Philippines confirm results from many countries showing that the problem is corrected by providing iodine. This can be done through -

1. Importing into the region iodine-containing natural foods or iodinated products such as salt.

2. Iodinating salt in the region at central locations prior to to distributing it to small dealers and retailers.

3. Intramuscular injections of iodinated oil that provides effective protection for 3-5 years.

The foregoing approaches in the Philippines are probably feasible but implementation is hampered by supply limitations and costs.

Lipidiol, the injectable iodinated oil, is an effective means of eradicating cretinism when given to women in the reproductive years. The product must be imported from the sole supplier in France and import regulations limit the available supply. Consideration should be given to targeting the limited available supply to pregnant women in endemic goiterous areas where cretinism occurs. This is an immediate measure that could be implemented while programs to supply iodinated salt for the long range solution are being implemented.

The NNC recognizes endemic goiter as a significant nutritional problem in the Philippines. The team encourages action programs to facilitate an early solution.

4. Vitamin A Deficiency

Widespread suboptimal vitamin A nutrition, particularly in young children, is suggested by dietary, biochemical and clinical surveys. Limited clinical surveys reveal the problem to be more acute in some geographic areas (Cebu region) than in others (Central Luzon). The prevalence of milder forms, manifested as nightblindness and reduced blood levels suggest subclinical deficiency in young children deserves consideration as a significant contributing factor to the high mortality and morbidity from infectious diseases and to depressed growth rates. The NNC health protection intervention and the Department of Health program provide for supplying high dose capsules of vitamin A (200,000 IU) to all preschool children of third degree malnutrition presenting clinical signs and/or a concurrent infection. A pilot project fortifying monosodium glutamate (MSG) with vitamin A proved to be an effective vehicle for upgrading vitamin A nutrition generally and reducing the prevalence of clinical signs. This intervention deserves further consideration and evaluation for preventive programs on a nationwide scale. Alternative vehicles should also be sought. concurrently the educational approaches that emphasize the use of vitamin A containing foods as a part of weaning and child diets should be evaluated to determine their effectiveness in sustaining behavioral change in food practices. The training programs should include the Barangay Nutrition Scholar, training this person in both detection and treatment/prevention. The prevention should seek better utilization and indigenous food resources while the treatment of identified cases should include providing a high dose capsule and follow-up.

5. Iron Deficiency

Surveys suggest that iron deficiency is a major public health problem in the Philippines, particularly for young children and women in their reproductive years. The health consequences of anemia in these vulnerable groups are well recognized. The program of the Department of Health includes providing iron supplements to the vulnerable group where needed. Less well recognized are the more subtle effects of mild iron deficiency on work performance and behavior. A much larger population suffers from mild iron deficiency, including a high proportion of the adult male work force who are not currently covered by the intervention programs of the PNP. The logical public health measure to attack the problem would be iron fortification of one or more common food vehicles, perhaps MSG that also is fortified with vitamin A. However, research is needed to determine the feasibility and stability of iron fortified products

and the availability of such iron when consumed as part of the usual Filipino diet.

6. Curative vs. Preventive Methods

Although the NNC staff recognize well the need to prevent future malnutrition, the initial focus of the PNP properly directed primary attention to treatment of severe malnutrition. Operation Timbang, the broad weighing program that provides a base for directing action and for dramatizing malnutrition, requires some immediate curative response. The extensive availability of PL 480 and other (e.g., Australia, EEC, World Food Program) donated food also stimulated early emphasis on targetted supplementation.

Although feeding has become more preventive (e.g., the BAEX Malnutrition Prevention Program) and the Mothercraft Centers have been effective in preventing malnutrition among later siblings of participants, NNC and NCP now need to press harder for actions directed more clearly to modifying the impact of economic, indigenous food availability, and the environmental determinants of malnutrition. Involvement of Rural Health Units and the rest of the health system has included deworming and immunizations, but full prevention possibilities have not been tapped. The strong popular and governmental momentum, and rising expectations created in the nutrition area should be used to strengthen prevention, if the program is to have permanent impact.

The National Program has already begun to move in more preventive directions. With FAO help, the analysis needed for effective nutritionally favorable intervention in agriculture and for monitoring economic causes is underway. Such instruments as the Nutri-pak and the increase in home and community gardens may stimulate community participation in solving certain aspects of the nutrition problem. Livestock, poultry and fish production for home consumption is encouraged. The fundamental principle that who produces is as important for nutrition as what is produced influences the Philippine approach and is understood more widely than in most other countries. Nevertheless, the attack on major determinants remains nascent. Consolidation and refinement of the PNP require a substantial shift in emphasis from controlling prevalence of malnutrition to reducing incidence by attacking more fundamental causes.

NNC seems also to have given less attention to health and environmental sanitation interventions or family planning. Although Health Protection forms part of the basic National

Program intervention package, there is little evidence that the Council and the Department of Health have analyzed the influence of health determinants on malnutrition and developed interventions related to them. Simple rehydration procedures now receiving attention in other countries, for example, do not appear in Rural Health Unit descriptions of activities. Similarily there seems to be too little current coordination of NNC and Population Commission activities, in spite of the proximity of the two agencies in Manila.

7. Research

Research is the necessary underpinning for sound nutrition action programs. The NNC was fortunate in 1974 to have a research base to provide part of the information needed to diagnose the malnutrition problem and from which to make initial projections as to some of the interventions that would be needed to attack the problem. Much of this research base was provided by the previous research and development work of FNRI. Anthropometric and clinical surveys conducted by FNRI from 1958-1969 revealed that less than 30% of Philippine childrn 0-4 years old reached the weight standard for this age range. Subsequent OPT data collected in 1975 confirmed this finding. Dietary surveys conducted by the FNRI suggested that on a per capita analysis the main cause for this weight deficit was calories, with protein intake being marginally adequate for normal conditions. Both food consumption and biochemical surveys suggest that iron deficiency anemia and vitamin A deficiency were significant nutrient-specific problems, as was iodine deficiency in certain regions of the country.

The NNC had this research base, therefore, from which to design its packages of intervention strategies. This has been effectively done, particularly with respect to the development of educational material and approaches and in the nature of the indigenous food assistance provided to attack the caloric-protein deficit. It has been done also in designing the health package for Barangay Nutrition Scholars to deliver that includes providing iron to high risk groups (pregnant and lactating women and young children) and high doses of vitamin A to third degree malnourished children who present with any kind of infection.

The research potential of FNRI to support the PNP in its continued development is exemplified in its current organizational structure of five functional divisions: 1) food research, 2) nutrition research, 3) medical and applied nutrition, 4) food consumption surveys and 5) food management research. Each division has some research now in progress or projected which has immediate or future relevance to the applied program of the NNC. An example of the immediate research relevant to the NNC program is the nation-wide food consumption survey to provide a reference year from which change can be monitored. The survey will be repeated on a 5-year schedule nationally and at shorter intervals in selected provinces. This will provide one component of a monitoring system that the NNC can use for future planning purposes.

Another division of FNRI is obtaining the needed data to establish growth charts based on growth achieved by children of high income families. The reference standard that will evolve from this work can serve as a long range goal for the PNP. Metabolic studies in children are testing the efficacy of new varieties of rice developed at IRRI, and the newly established pilot processing plant at FNRI allows the small scale processing and testing of products with potential commercial markets. As the food assistance program of the NNC continued to move toward greater utilization of indigenous products including those nutrient-dense foods that could be produced commercially and used for institutional feeding programs (school lunch), the on-going research and development work of FNRI and of NCP--using by-products of local industry to produce human foods-could find additional market outlets. The basic metabolic research in animals and humans on these products now conducted at FNRI deserves continued support to determine biological effectiveness.

Ongoing studies at FNRI to establish energy requirements to support activities of small rice farmers and other occupation groups and to establish other nutrient requirements under conditions prevailing in the Philippines provide basic information to NNC for more realistically estimating nutrient needs for the nation. In turn this information can be used to guide production, marketing and import/export policies of agricultural products. The FNRI is also actively engaged in monitoring the safety of the food supply including that produced as a product of cottage industries.

Applied research is conducted by some of the line agencies. For example, the department of health has studied the anemia and goiter problems in some geographic areas and BAEX and DSSD have done some evaluative research on their educational and food assistance programs. In general, however, most evaluative research of the NNC has been contracted to outside agencies. As its Management Information System (MIS) becomes more functional, the NNC might consider expanding its internal capabilities for evaluation research in order to have a dynamic monitoring system of its programs and hence provide the needed short turn-around feedback needed for program adjustments to improve efficiency.

C. Self-Sufficiency Efforts

The National Nutrition Program literature emphasizes self reliance but field observations suggested that some Program activities may encourage, sometimes inadvertently, overdependency upon free food assistance.

Use of donated food frequently creates dependent attitudes among both receiving agencies and beneficiaries. The team encountered some schools and centers, for example, where delays in food delivery brought only passive waiting for renewal, instead of independent efforts to generate local replacement. However, where, the local commitment to solving nutrition problems was strong, efforts were made to use local resources to keep operations going, at least on a limited basis.

The Rural Improvement Clubs appear more promising than other activities as a model for development, instead of welfare, feeding. They are feasible for certain groups. Intensive training of Barangay Nutrition Scholars in motivation and community development can also help. Treatment of donated food as temporary, accompanying all use of it with definite plans for replacement with local food or self-sufficiency of beneficiaries, will also influence attitudes positively. Interventions that lower rice prices to poor consumers may also be a more respect-building way to deliver nutrients than any supplementary feeding.

If the National Nutrition Council is to guide nutrition improvement effectively, it must intensify its efforts in offering line agencies proven detailed intervention and evaluation models for dealing with major determinants of malnutrition. It should also encourage agencies to evolve such models on their own. By using the models as norms for action, and then guiding agencies in their application the Council will reinforce coordination and improvement of the National Nutrition Program.

The Council has already provided some intervention models, primarily for supplementary feeding. The Nutribak, Nutrihut and the Nutrivillage, for example, illustrate NNC leadership and innovation.

Development of other intervention models still lacks the precision and testing of those dealing primarily with supplementary feeding and nutrition rehabilitation. Home gardens, for example, receive much advocacy, but there is little guidance available for those who would encourage them for nutritional purposes. Criteria for choice of beneficiaries, other than nutrition status, (e.g. availability of land and water) remain unspecified. The likely cost and yield of different nutrient sources in different socio-physical environments has received little attention.

D. Information and Data

The NNC has made dramatic strides in collection of weight-for-age data in the Philippines. Operation Timbang, weighing more than 4,000,000 children, semi-annually according to plan, assists in the identification of targets and monitoring of intervention outcomes. The National Program has also developed a system for planning and monitoring activities, through Provincial and Municipal Nutrition Action Plans, that will sharpen management control of service delivery.

The Program is currently developing an information base for nutrition planning and building a routine data system for evaluating and feeding back intermediate results of component activities. However, there is a need to develop, at the national level, a system to analyze and interpret the data that are currently available for monitoring and evaluation purposes. In Timbang and all other data systems, reporting is sometimes spotty and inaccurate, analysis at levels below NNC is negligible and those reporting could do so with less time and cost.

Before refining what is collected, the National Program needs to build better systems and train people more effectively in how to collect, report and analyze what is now supposed to be collected. Field people are having difficulty, for example, in quantifying malnutrition by age and in distinguishing between counting numbers of malnourished and identifying incidence of new cases. Seasonal variations in malnutrition are also missed. The Timbang network, a tremendous potential resource, should be reviewed and refined as a part of NNC's current efforts to establish an MIS system and institute an index municipality sampling scheme.

The new information system might also contain provisions to monitor regional "market baskets" (relation of food prices to wages), agricultural production, and foreign trade in key foods. In addition to guiding supplementary food allocations and aiding assessment or exogenous influences on intervention outcomes, such monitoring together with data on incidence of malnutrition could give the Council useful information for influencing major decisions and broadening public perceptions of its role.

E. Local Planning Methods

Approximately 1400 municipalities have nutrition committees and over 900 of them have prepared Municipal Nutrition Action Plans at the request of the NNC. The Plans contribute substantially to targetting of the five interventions comprising the National Nutrition Plan (food assistance, food production, health protection, nutrition education, family planning). The plans also outline the nature and magnitude of proposed activities, persons responsible, and costs. They are a major advance in avoiding duplication, encouraging inter-agency referrals, and sensitizing agencies to nutritional implications of their work.

The Action Plans are not, in their present state, coordinated attacks on malnutrition based on functional classification of target groups and analysis of major determinants. Other than directing all activities to families with second or third degree child malnutrition, the Plans do not differentiate among recipients or conditions. They lack elementary nutrient flow analysis that would identify situations more amenable to particular interventions and communities with near term potential for nutritional self-sufficiency.

However, the NNC is currently conducting a pilot study in Samar which will develop the kinds of classifications and malnutrition determinants that are important for further planning. The purpose of this activity is to improve elementary nutrient flow analysis and differentiation of targets, both families and communities. Simple methods of local nutrition planning are well within the training capacity of NNC coordinators. But additional training in techniques of identifying appropriate interventions in relation to specific target groups and nutritional conditions will be required to direct local nutrition planning toward greater impact and municipal self-sufficiency.

Rice production illustrates the need to re-direct national and local nutrition planning. The Department of Agriculture sets production targets and selects farmers who will be assisted to reach them, without reference to identification of areas or individuals where increased rice production is critical to nutritional improvement. NNC can do little to modify this approach, until techniques for classifying communities and larger areas by nutrient availability are developed and applied. The foregoing emphasis on the need to improve methods for local planning is not a criticism, but an attempt to identify critical future directions. The Council has already led other agencies by identifying foci of serious malnutrition and targetting activities to them. To improve effectiveness, it must now lead them in the analysis of causal factors and development of related patterns of intervention directed to specific groups and problems.

Community nutrition planning must also include concern for the ultimate disposition of increased nutrient output. More rice production and aggregate "self-sufficiency" improves nutrition only if it passes to the malnourished. Mechanisms such as the community nutripak plants and related distribution, for example, show how nutrition planning helps channel nutrients more effectively. The National Nutrition Council needs to identify various techniques of this kind and clarify the administrative, economic, and motivational requirements for using them as tools to achieve community (e.g., barangay, occupational group, ecological zone) nutritional self-sufficiency. By viewing nutrition planning as a way to offset nutrition gaps caused by the market system and current income distribution, the Council can identify nutritionally favorable marketing improvements and community alternatives for distributing nutrients more effectively. Local planning also includes examining other determinants and analyzing possible interventions. Community self-sufficiency in nutrition may be possible without production-related activities.

F. Nutritional Effects of Development Policies

It is evident that Philippine government decisions on development objectives, strategies, and supporting policies can exercise a far more powerful effect on incomes and consumption than its current array of nutrition intervention programs. It is precisely for this reason that the National Nutrition Council should undertake the steps that could lead to integrating nutrition into national and local development planning. The Council needs to build further on the promising policy analysis work it has initiated with FAO assistance. Study committees have been formed and may produce useful contributions, but these cannot substitute for the work of one or two professional Council staff members in a Policy Analysis Unit, or similar office, to manage NNC-sponsored policy analysis performed outside under contract or in house.

Policy analysis is especially important for NNC, because the influence of variables exogenous to the National Program (e.g., inflation, world sugar prices, rainfall) may hide positive program results, unless their influence is identified and discounted appropriately. The Program's heavy reliance on weight gain makes it very vulnerable because heavy inflation, for example, can reduce family intake by more than the amount of supplements given. The Program's possible major contribution to maintenance of nutrition status will be missed here, unless the effects of major economic variables is a routine part of Council analytical work.

The process of nutritional review (exploring nutritional implications and consequences of proposed policies) is critical to linking of the National Nutrition Program and the decentralized local planning approach of the Council with the macroeconomic and other broad national policy factors that influence malnutrition. Unless the framework provided nationally satisfies some minimum criteria (e.g., aggregate level of food production, prices of basic staples), the task of the National Program becomes far more difficult and perhaps impossible.

Existence of a Policy Analysis Unit that does effective work or commissions such work cannot assure that national policies will be tilted in nutritionally favorable directions. The Unit can assure that concerns receive adequate presentation and analytical support for use by policy-makers in the government--a condition that will not prevail without it.

To the extent that the policy research identifies politically and financially feasible policy changes, such changes may free budgetary resources for programs to reach groups that are not expected to be beneficially affected by policy changes. Thus, the Council should move increasingly to a two track effort--exploring adjustments in development plans and policies and concurrently refining and improving intervention programs aimed at specific target groups or at specific geographic locations within the country. If this process works well, there should evolve over time incremental adjustments in national and local planning to emphasize nutritional improvements and modification of intervention programs to reach those populations that either have not been reached before or that are not reachable by achievable changes in development strategies and policies.

Policy changes are often best studied and achieved by small demonstration programs. In this light, the Council together with NFAC and the Department of Agriculture ought to test the possibilities of municipality or community self-financing of nutrition programs. To some extent municipalities are already

contributing financially to such programs. There appears to be considerable interest on the part of agriculture sector officials in studying a system whereby farmers in a particular locality benefitting from government credit (Masagana 99) or other government subsidies and enjoying increased returns would have a modest portion of such an increase funneled off to finance nutrition programs for groups that are not now benefited. This mechanism might take various forms but in one way or the other, it would represent a "tax" on gains made possible by government subsidies to permit local self-financing of local nutrition programs.

IV. Conclusions

A. Excellent progress has been made in identifying nutrition as a national problem and in establishing the policy and institutional framework for attacking the problem. A national coordinating mechanism has been established (the NNC) and provided with an impressive physical facility for its central operations. There remain needs to strengthen ties between NNC and other key agencies and to complete and implement current NNC activities to improve planning and information processing systems.

B. Local level commitment to nutrition appears to be strong, probably as the result of the NNC's efforts to intimately involve local governments in the planning and implementation of nutrition activities and as a result of the support of the President and First Lady. The establishment by NNC of the Barangay Nutrition Scholar (BNS) system provides a unique linkage of national efforts to barangay needs. It also exemplifies voluntarism, but by the same token, raises questions about the viability of the voluntary approach when the program matures and some of the initial enthusiasm inevitably diminishes.

C. The Director and staff of the NNC, as well as the Council members, deserve praise for their success in promoting a national awareness of nutrition problems and operational solutions to these problems. This should not be overlooked in efforts to carry the program on from its organizing and program development phase into the next stage of consolidation and refinement of approaches and the expansion of field outreach efforts.

D. The food assistance effort of AID, the GOP, and the PVO's has been well targeted to malnourished children. The feeding program does appear to have produced some element of dependency among recipients which needs to be addressed by new programs directed toward nutritional self-sufficiency at the community level. The

NNC and others are aware of the problem and are commited to reducing the role played by donated foods, but action to achieve this goal needs to be undertaken on a broader scale. Finally, it should be recognized that the supplemental feeding program has had a significant impact on reducing the prevalence of severe malnutrition among Philippine children.

E. There has been a rather heavy curative bias in the feeding and health activities and more attention now should be given to strengthening preventive activities of the NNC and the DOH. More attention might thus be given to monitoring of growth, immunizations, oral rehydration for acute diarrhea, refeeding for "catch up" growth, improved sanitation and water, etc.

F. Field implementation of programs appears to be generally good, but performance varies according to the strength and dedication of local leaders and the nutrition action officers at various levels. At the provincial and municipal levels, the part-time officials detailed to this assignment from central agencies (DOH, DEC, et.al.) need more training on the leadership and program management aspects of their jobs. The use of such part time action officers has been successful in the initiation of activities in many localities, but like the BNS, there needs to be an assessment of the longer term effectiveness of part-time persons.

G. The technical and financial aid and food support provided by AID has played a significant role in reducing infant and child malnutrition and in establishing the current program. USAID was involved in nutrition activities before these became a major concern of the GOP. It is hoped that USAID will continue to give priority to assistance for the nutrition sector, although the types and styles of such assistance may have to be different from those of the past. The NNC apparently looks forward to close cooperation with USAID on solving some of the current problems facing the program. USAID and NNC should also continue their efforts to piggy back nutrition improvement activities onto other USAID-supported activities in agriculture, provincial development, water systems, health development, etc.

H. While considerable verbal support is being given to the desirability of integrating nutritional concerns into other sectors, such as agricultural production, there appears to have been little real substantive progress in the achievement of this objective. Part of the problem may be a fear of diluting efforts in other sectors if nutritional concerns are added. There also

appears to be a lack of knowledge about workable models for addressing nutrition problems through macro-level measures. This is inevitable since we are aware of no perfected models to date. Consequently, it may be necessary to test different combinations of models at the micro or community level to find out what might work best for the Philippines.

V. Recommendations:

A. The NNC should continue to strengthen the local nutrition delivery system by such means as: (a) fielding additional Barangay Nutrition Scholars, (b) providing better role definitions and performance criteria for all local action officers, and (c) continuing technical and program management training at all levels.

B. The NNC should continue to strengthen its own central management capabilities by establishing an effective management information system (MIS) which: (a) encourages field personnel to analyze and utilize the data they collect (rather then simply passing it on up to NNC). (b) reduces required field reporting to the absolute minimum required for program planning, implementation, and evaluation, and (c) provides feedback to the field on performance. It is recognized that a new MIS system is now being designed by NNC with the cooperation of Dr. P. Wesselkamper, a USAID/VPI consultant, so this recommendation may have already been taken into consideration by the NNC.

C. Consideration should be given to alternatives for maintaining the viability of the Barangay Nutrition Scholar system over the long run. The NNC has successfully initiated this critical linkage to the Barangay, but field contacts indicated that the very nominal allowance (10 pesos a month) and the other fringe benefits (insurance, T-shirt, bags, etc.) would probably not suffice to sustain the enthusiasm which now exists. Alternatives suggested to the evaluation team include: (a) expansion of the Barangay Scholar's functions and increased remuneration (with appropriate local cost sharing), (b) provide a more stable basis for part-time positions through some type of civil service recognition, and/or (c) use the BNS as the channel for selling certain goods (vegetable seeds, contraceptives, etc.). Consideration must also be given to the possible impact of other proposed Barangay positions on the BNS program. These include the Barangay Health Workers being considered under the IBRD/GOP Population Project and the USAID Panay Unified Health Services Project.

D. The GOP (NEDA, NNC,NFAC, et. al.) should continue to seek more concrete ways of linking nutrition to other development sectors. The general issues here have been identified by the NNC's Technical Advisory Body on Integrated Nutrition-Oriented Development Planning (created in August 1977).

There may be an urgent need to seize special opportunities which now exist for pilot-testing of an integrated approach at the community level. Dr. Solon has indicated that such an opportunity exists in the proposed IBRD-supported rural development project for Samar and Dr. Alba of NEDA suggested that such schemes might be incorporated into its new Integrated Area Development Project for Region VI (Central Visayas). This micro approach would test such alternatives as linking agriculture production to the needs of nutritionally vulnerable groups in an effort to effect nutritional self-sufficiency at the municipal level.

The NNC should also analyze opportunities for macro-level changes through the sponsorhip of applied research into existing national policies on agriculture production, food exports, income and welfare laws, etc. While groups such as the new Philippine Institute for Development Studies could conduct the research, the NNC needs to have at least one economist on its staff to provide the essential linkage between external researchers and the officials concerned with policy formulation.

E. There should be consideration given to the establishment of closer formal and informal organizational linkages between the NNC/NCP and agencies such as NEDA, NFAC, POPCOM, and the Population Center Foundation (perhaps through exchange of council memberships).

F. More attention needs to be given to specific action measures to decrease the role played by foreign donated foods. NNC policies have already been promulgated to this effect, but higher priority needs to be given to actual implementation steps. Some communities are already operating on a self-help basis and this pattern should be expanded. The school and community gardening effort being considered for the new USAID/GOP Food and Nutrition Project could be one of the elements in a new initiative to achieve self-sufficiency but team contacts generally doubted that the garden strategy would have a major impact on nutrition. Nonetheless, gardening and multiple cropping are elements that should be considered for inclusion in the pilot projects, mentioned above, aimed at community nutrition sufficiency. It is recognized that some degree of welfare feeding may be required for the poorest element of the community, but the GOP still needs to ascertain the costs of

continuing such feeding should foreign donations of food be terminated. In this connection, there appears to be a need for more precise data on the relationship between malnourishment and family income. While it was generally felt that a strong correlation exists between malnourishment and low income, some observers felt that there may be a number of families in the feeding programs who could afford to share a larger portion of the costs of such efforts.

G. The NNC, DOH, and other bodies concerned with the delivery of basic health services should review the current health outreach effort with a view to moving toward a more preventive and promotive program and toward an expansion of services to the Barangay level. The Barangay Health Centers established under the IBRD-supported project and the BNS should have a major role to play in the provision of improved health information and services. This effort could incorporate the introduction of the home-based growth chart and health record, use of oral rehydration techniques, and increased immunization coverage. Special programs might also be included to combat goiter and vitamin A problems in affected areas.

H. USAID and NNC should closely collaborate during the coming weeks on the areas where the new proposed Food and Nutrition Project can have the greatest impact. This project's resources can be used to help strengthen the NNC's ability to conduct more policy oriented research and demonstration activities, expand and continue to upgrade the field staffs and operations (including volunteers), and play a major role in the design and testing of new ways to achieve nutritional self-sufficiency at the community level. USAID should also assist the NNC, as appropriate, in devising plans and time tables for replacing foreign food donations with other resources.

I. If the proposed Food and Nutrition Project is to be implemented in a dynamic and maximally effective manner, it appears important for USAID to have a direct-hire nutrition specialist on its staff to serve as Project Manager and, perhaps, as senior advisor to the GOP on nutrition matters. It is recognized that staffing constraints may make the use of contract employees more feasible for this role, but it would seem more appropriate to use contract personnel to provide more direct and specialized advice to the GOP. It is also suggested that any U.S. contract advisors be located at the NNC on a regular basis.

J. The NNC and USAID should agree on the time frame, objectives, and resources needed for future reviews of the new USAID project and related nutritional activities. The team feels that the information from such reviews could be very useful to AID in planning nutrition

projects in other countries. The Philippines does have the institution-building and program experience needed to exercise a positive influence on countries which are only beginning serious efforts to cope with malnutrition.

Sites Visited By Review Team

Metro Manila

1. National Nutrition Council
2. Nutrition Center of the Philippines
3. Food and Nutrition Research Institute
4. Manila Hospital - Malward
5. Department of Health
6. TMCH Center
7. WHO
8. UNICEF
9. FAO
10. WFP
11. NEDA
12. Day Care Center (DSSD)
13. Mother Craft Center
14. NFAC

Iloilo Province

1. Nutrition Center - Iloilo City
2. Nutrition Bakery - Iloilo City
3. Nutri Pak Plant - Iloilo City
4. Elementary School Lunch Program - Iloilo City
5. Community Feeding Program - Iloilo City
6. Provincial Hospital Malward - Iloilo City
7. School Seed nursery, vegetable gardens, school lunch - San Miguel
8. Leon Agricultural School - Leon

9. Community Gardens - Various
10. Nutri-Hut - Barangay Abiloy-Norte
11. Municipal Nutrition Committee meeting with Barangay Nutrition Scholars, Barangay captains and agency representatives - Cabatuan
12. Western Visayas NEDA Office - Iloilo City

Quezon Province

1. Rural Health Unit - Sariaya Municipality
2. Nut-reWard - Lucena City Hospital
3. Provincial Health Office - Lucena City

Zambales Province

1. Barangay Nutrition Scholars - Masinloc
2. Municipal Action Officer - Masinloc, Palauig
3. Nutripak Plant - Masinloc

Bulacan Province

1. Provincial & Municipal Action Officers - Bulacan
2. Community gardens - Bulacan
3. Nutripak Plant - Bulacan
4. Pre-school Feeding - Bulacan
5. Nutri-Unit (Malward) - Bocaue

Nueva Ecija Province

1. Provincial Action Officer - Cabanatuan
2. Provincial Development Committee - Cabanatuan
3. Nutrition Plant - Cabanatuan

4. Municipal Hospital Malward - Cabanatuan
5. Municipal Action Officer - Talavera
6. Barangay Nutrition Scholars - Talavera, Cuyapo

Isabela Province

1. Municipal Action Officer - Santiago
2. Nutri-Village - Santiago
3. Day Care Center - Santiago
4. NNC Regional Coordinator - Santiago
5. Provincial Action Officer - Santiago
6. Malnutrition Prevention Project (BaEx) - Santiago

Benguet Province

1. Municipal Action Officer - Baguio
2. Under 5 Clinic - Baguio
3. Goiter Control Project - Baguio
4. Malward - Baguio

Tarlac Province

1. Malnutrition Prevention Projects (BaEx) - Tarlac
2. Municipal Action Officer - Tarlac
3. Municipal Nutrition Committee - Cuyapo
4. Municipal Action Officer - Cuyapo
5. Barangay Nutrition Scholars (9) - Cuyapo
6. Nutri Unit (Malward) - Cuyapo
7. Malnutrition Prevention Project (Ba Ex) - San Manuel

Pampanga Province

1. Day Care Center.- Guagua
2. Mothercraft Center - Porac

Misamis Oriental Province

1. Provincial Nutrition Committee meeting - Cagayan de Oro
2. School Gardens - El Salvador
3. Malward - Cagayan de Oro
4. Operation Timbang - Cagayan de Oro
5. Nutribun Bakery - El Salvador

Lanao del Norte Province

1. Day Care Centers - Kausuagan
2. School Gardens - Kausuagan

FOOD AND NUTRITION PROJECT

EVALUATION - Research and Background Data

1. PROP AND 1977 REVISION

2. DESCRIPTION OF NNO - DRAFT

3. EVALUATIONS

   a. TMCH by Econ. Dev. Foundation
   b. TMCH by Asia Res. Org.
   c. TMCH by Asia Soc. Inst.
   d. TMCH by CRS
   e. Program by S.G.V.
   f. School Feeding by CARE, UP Iloilo
   g. PL480 Title II, 1972 by Cheechi Team
   h. PL480 Title II, 1977 by AID/W

4. PROJECT ACTIVITIES WITH VPI&SU TECH SUPPORT

   a. Malnutrition Prevention in Infants (Caedo/Engel)
   b. Barangay Health Aide Project, CIM
   c. Cost/benefits of Nutrition Interventions, UST
   d. Nutrition workers, family planning KAP
   e. Nutrition Statistics & Guidelines, USAID/NTR
   f. Infant Food Intake Study
   g. Nutrition Center, Design of Briefing Rooms
   h. Nutrition Improvement thru GR (Engel)
   i. Food Production/Nutrition Model (Dwyer)
   j. Backyard Garden Model (Boren)
   k. Curriculum - Garden Teachers (Wackernagel)
   l. TMCH Food Production Plan (Boren)
   m. Nutrition Education on Mothercraft-Eval.
   n. TMCH Eval. 1977-AID/NTR.

5. PROJECT ACTIVITIES REPORTS

   a. Nutrition Survey, Visayas
   b. Nutrition Survey, Metro-Manila
   c. FAO Report on Nutrition Surveys
   d. NNC/NCP - Selected Publications
   e. Manoff Mass Media Project, Nutrition Educ.
   f. Coconut Processing, TA&MU

g. Food Supplies for Feeding Programs, aid/W
h. Xerophthalmia Prevention - AFOB
i. Nutrition Planning, FAO
j. Agric. Sector and Nutrition Planning, FAO
k. Nutripak Manual, NNC/NCP
l. Nutrition-oriented Development Planning FAO
m. Seminar on Food Storage
n. Importing Protein, Economic Study
o. Low-cost Weaning Food-Carnation Milk, Co.
p. The Phil. Nutrition Program 1978-82, NNC
q. Project Compassion.

ANNEX C

THE NUTRITION CENTER OF THE PHILIPPINES

The following information was obtained after the Evaluation Team's report was drafted and is included here to amplify the role played by the Nutrition Center of the Philippines (NCP). The NCP's program was initiated with a $3 million grant from USAID.

In the area of information and education, the NCP has developed several innovations for the national nutrition program. Materials were developed to train teachers and doctors through extension courses and information bulletins. The NCP also operates a publishing firm which develops materials on nutrition and then sells them to the program and through commercial channels. The NCP is also carrying out some pilot efforts to use TV and other media technology to disseminate nutritional information to rural areas. Another pilot effort in two provinces uses a Nutribus to make repeated visits to targeted villages with information, seeds, contraceptives, and supplemental foods to support integrated efforts in family planning and nutrition. Finally, the NCP is now publishing a newspaper, Ang Iskolar, to support the Barangay Nutrition Scholars.

In working out future joint activities, USAID and the GOP should explore opportunities to use the NCP or other private entities to perform tasks which cannot be readily carried out by government entities (e.g., in the areas of mass communications and surveillance). The NCP, for example, has a capacity to make radio and TV programs, process photographs, and develop media packages.

The NCP has also undertaken several initiatives to produce new nutritious foods and to expand the use of locally grown items. It thus made a grant to the Bureau of Plant Industry to produce mungo bean seeds and sell these at an attractive price. A limited effort to produce quail eggs is also being carried out in cooperation with the Bureau of Animal Industry.

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

UNITED STATES GOVERNMENT

Memorandum

Carol CA SF LK

TO : See Distribution

DATE: August 10, 1978

FROM : DS/N, Robert Pratt RP
ASIA/TR/HPN, James R. Brady JRB

SUBJECT: Report on Evaluation of the Philippine Nutrition Program

The attached final report was prepared by a team composed of A.I.D. and National Academy of Sciences personnel who visited the Philippines in early 1978. The report may be relevant to the efforts of others concerned with developing a national effort to reduce malnutrition. The Philippines has made considerable progress over the past decade, although all concerned recognize that much remains to be done. Consequently, the National Nutrition Council has agreed to the dissemination of the report as one more way of sharing experiences, not to push particular strategies or activities as the model for reducing malnutrition.

The attached report, although dated February 1978, has been reviewed by the Philippine Mission and by Dr. Solon and revised accordingly.

Feel free to share the report with colleagues and counterparts. Comments, questions, or suggestions will be welcomed and should be sent to us or to Dr. Florentino Solon, Executive Director, National Nutrition Council, Republic of the Philippines, c/o Nutrition Center of the Philippines, South Super Highway, Makati, Rizal, Philippines.

Attachment

44

Distribution:

Philippines, Dr. Solon (10)
VPI, Dr. Arnold
NAS, Ms. M. Brown (20)

USAID/Manila, Mr. Cody
USAID/Manila, Dr. Dodge
USAID/Manila, Mr. Doody (10)
USAID/Manila, Dr. Engel
USAID/Manila, Dr. Van Der Vlught
USAID/Manila, Mr. Dwyer
USAID/Jakarta, Mr. Niblock
USAID/Islamabad, Dr. Martin
USAID/Kathmandu, Dr. Oldham
USAID/New Delhi, Mr. Withers
USAID/Seoul, Mr. Paupe
USAID/Colombo, Ms. Littlefield
USAID/Dacca, Mr. Levinson

AFR/DR/HN, Dr. Cross
AFR/DR, Mr. Keene
LAC/DR/HN, Ms. Sandoval
NE/TECH, Mr. Leonard
DS/N, Mr. Pratt
DS/N, Dr. Forman
AA/ASIA, Mr. Sullivan
ASIA/PT/P, Mr. Elliott (2)
ASIA/TR/HPN, Dr. Brady (30)
ASIA/TR/HPN, Dr. Rice
ASIA/PD, Mr. Love
ASIA/PD, Mr. Nussbaum
ASIA/DP, Mr. Halligan
ASIA/TR, Dr. Clark
ASIA/TR/SHRD, Ms. Doyle
ASIA/TR/ARD, Dr. Newberg