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**REPORT ON CONSULTANCY TO SUPPORT THE NUTRITION SERVICE,  
DEPARTMENT OF HEALTH, GOVERNMENT OF PHILIPPINES.**

**A. Zerfas February 3, 1991**

**Consultant for Management Sciences for Health  
RFP USAID No. Philippines 89-012, Nov 1989**

*This report is the responsibility of the consultant and  
does not necessarily reflect that of AID/Manila*

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## **SUMMARY AND RECOMMENDATIONS**

AID/Manila, as part of the CSP (Child Survival Program) requires the Nutrition Service (NS/DOH), to develop a National Nutrition Plan acceptable to the CSP Coordinator by September, 1991. This Plan should demonstrate that implementation will be expected to reduce morbidity (including nutritional deficiencies) and mortality of mothers/young children in Philippines.

As part of the Management Sciences for Health (MSH) support for the CSP, this consultant spent three weeks in December, 1990 to initially help the NS in clarifying the issues and approaches for the expected plan. During this time, the Nutrition Center of the Philippines (NCP) submitted a proposal to AID to assist the NS in developing an implementation plan, based on a field perspective, including community-based management. In addition, Dr. Bayugo was transferred to the NS from the Public Health Services Office.

The NS since its inception in 1987, has focused on four major programs: Targeted Food Assistance (TFAD), with CARE support; Vitamin A Deficiency (VAD), with support from HKI; Iron Deficiency Anaemia (IDA) and Iodine Deficiency Disorders (IDD). It has made impressive increases in supplementation coverage; has enhanced TFAD using monetized Title II wheat for 106 Municipal Nutritionists in providing services; and conducted key research in OPT, GMP, micronutrient supplementation and fortification.

Major criticisms of the current plan include an unclear policy, confusion in targeting, lack of integration and absent or inappropriate guidelines, particularly for RHU staff. In addition, the NS has been encouraged to select at least one program/initiative in which success ("breakthrough") is likely.

This report focuses on approaches that the CSP, DOH and the NS could consider, in terms of these criticisms and the choice for a focused "breakthrough", realizing that policy/strategies must be re-examined as a first step; that the NS is not an isolated service and relies on coordination of activities particularly with MCH/FP; that responsibilities for the improvement of nutrition also reside outside the NS, for example its acceptance within the CSP support, particularly with potentially competitive priorities, such as EPI, ORT and ARI.

## RECOMMENDATIONS

### GENERAL

These key recommendations are guarded, due to my relatively short period in the Philippines. The NS should

- A. **Review NS policies in relation to CSP (III - refers to section in the major report), with particular reference to promotion/prevention, information use, targeting, integration, decentralization and guidelines/training.**
- B. **Relate policies with strategies/programs/activities. Some suggested examples follow:**
  1. **An integrated IEC for mass media, local community and face-to-face using existing technologies relating to improved feeding practices. This would involve combining current activities such as TFAP "enhanced" activities (modifying approaches related to Mothercraft Nutrition Centres not limited to treatment and rehabilitation), VADAG, increased use of GMP as a communication/ management strategy and breast feeding/weaning; as well as considering maternal nutrition and feeding during and after illness, such as ARI, CDD, communicable diseases particularly measles.**
  2. **Developing appropriate sensitization and performance of DOH field workers in applying basic nutritional concepts. This includes guidelines, use of information with feedback at individual and community levels and counseling.**
  3. **Establishment of a decision-oriented nutritional surveillance system (local and central), for example OPT more efficiently and FHSIS, particularly in the GMP component, using change as the major guide to progress.**
  4. **Using supplementation strategies which are balanced and integrated.**
- C. **Clarify the interaction between case and at-risk targeting, within a geographic or population group area, for rationale and understandable action, including guidelines, supervision and reporting.**
- D. **Improve client-based, health facility and programmatic integration, not only within the NS "major programs", but also between NS/MCH/FP and DOH (CSP and OPHS) as well as other sectors.**
- E. **Re-examine methods by which central support and transfer of responsibilities to the IPHO can be developed, using the RHU perspective.**

*Much of these are medium-long term strategies; in the short term they can be developed accordingly, starting with high priority areas/concerns. The choice of priorities involves appropriate dialogue within the NS, between NS/MCH/FP as well as with/between CSP/PHSO and DOH, in all cases, taking into account field capacities and requirements.*

**F.** With reference to a "major breakthrough", of the current programs, those relating to Vitamin A and iodine deficiencies (VAD, IDD) might be the most appropriate, because of the difficulty in the continuous implementation/ assessment of iron deficiency (IDA).

For VAD, a clearer picture of its prevalence throughout the country must be developed as well as the acceptance of its mass distribution in its effect on mortality. Because of these constraints, the short term plan should be focused in areas of current known high VAD and/or appropriate markers, until the national and provincial situation was resolved.

IDD has several advantages in implementation: its easy recognition/ treatment of cases and focus on limited targets (mothers) within the CSP health system.

One further consideration is a more concerted effort to control parasitic diseases, particularly roundworm for PEM and hookworm for anaemia.

A "campaign" approach is possible, provided it is appropriately phased with longer term objectives and not detract from the overall nutritional priorities.

## **SPECIFIC**

### **I. Assessment**

#### **A. Large scale**

##### **i. Major surveys**

- (1) Do further analyses and presentations for recent surveys by FNRI/DOH
- (2) Clarify conflicting results for VAD prevalences (as suggested by Dr. Solon)
- (3) Emphasize the need for appropriate standardized indicators e.g. for breast feeding, onset of weaning, feeding habits, mother's nutritional status (e.g. anthropometry).
- (4) Explore other major survey sources (e.g. HIES for HH food consumption)

##### **ii. OPT.**

- (1) Increase benefits for attendance and coverage
  - a. Provide services, where feasible/required (deworming, supplementation)
  - b. Improve use of OPT information, especially locally, emphasize changes
  - c. Increase communication regarding appropriate use of bulgur/beans
  - d. Coordinate activities with DSW
  - e. Explain linkage with interventions other than TFAD (for at-risk selections,
  - f. Assess the mother also (e.g. height)

- (2) Improve efficiency and quality of results
  - a. Improve quality of scales use of information in analysis and results.
  - b. Review or provide simple guidelines for field-level editing
  - c. Review responsibilities/time spent-RHM's/ others roles in exercise.
  - d. Limit young children to 0-59 months
  - e. Consider doing the national OPT exercise every 2 years
- (3) Relate exercise to priorities in CSP - examples
  - Identifying mothers for TT immunizations
  - Use simple standardized indicators for selected deficiencies (see C.2)
  - Focus more on mothers and younger children
  - Linkage with GMP information/counseling with individuals and groups
- iii. **Appropriate large-scale surveys or screening**
  - (1) Complete the NS/DOH exercise on goitre prevalence in schools
  - (2) Do regionally executed surveys for selected deficiencies, especially Vit A.
- B. **Service-based information**
  - i. **FHSIS**  
Conduct trial analyses and methods of presentation for weight changes, nutritional status, breast feeding, receipt of services (based on individual and packages), with a view for surveillance.
  - ii. **Potential FHSIS**
    - (1) Clarify reason service given - case or "at-risk"
    - (2) Test other key information in selected areas - counseling, onset of daily weaning foods, whether bottle used daily, etc.
    - (3) Collate information from supervision, reports, research, private sources.
- C. **Local Population-based information (up to province)**
  - (1) Explore strategies using basic and feasible indicators at the local level (e.g. night blindness; pallor using standardized methods such as a color scale; Grade 2-3 goitre; maternal height, weight.
  - (2) Investigate those at high-risk not coming for services (inc. Private sector)
- D. **Use information to and from other sectors**
- E. **Distinguish between the choice and use of indicators for screening, surveys and surveillance, which overlap but are not identical.**

## II. "HIGH RISK" APPROACH

This is currently confusing (as was indicated by ND's at the recent Cavite workshops). There is lack of specifics in the targets and the denominators for coverage assessment are not appropriately defined.

The NS/DOH should clarify what is the "risk" in question and its level of seriousness, taking into account promotion, prevention (primary and secondary), treatment and rehabilitation.

With regards to targeting:

## **A. Population area/groups**

- (1) Major surveys should stratify and present results more suitable for targeting. Thus urban prevalences do not apparently distinguish between slum and other areas.
- (2) Continue the coordination of NS with DOH for area based targeting strategies, with particular reference to IMR and PEM.
- (3) Do local and aggregated assessments/feedback with regards to VAD, IDD and IDA, using appropriate technologies.

## **B. Biological targets**

Focus more on mothers and young children (0-3/5 years), using a "family life cycle" approach (where FP services could be suitably integrated).

## **C. Deficiency-related targets**

Distinguish between cases (including proxy measures for assessment) and probability situations (at-risk for one deficiency because of another, or due to a set of situations, such as "chronic diarrhea"). Standardize, define terms.

## **III. INTEGRATION**

- (1) Review interactively service programs/activities/guidelines to determine levels and scope of responsibilities
- (2) Conduct workshops linked to experiential sharing in the field
- (3) Cross-staff within and between services
- (4) Do combined research activities/presentations/reports.
- (5) The central nutrition office should consider two groups: one with a liaison function for three areas nationally (? by major islands), the other with CSP/DOH services

## **IV. NUTRITIONAL CONCERNS WITHIN BASIC RHU/MCH INTERVENTIONS**

- (1) Review MCH/FP programs/interventions and "nutrition-related topics" to mutually determine roles of the NS in support
- (2) Develop GMP not only as a strategy for health but also to improve links between services, e.g. in information and counseling.
- (3) Prepare nutritional guidelines (e.g. improving feeding practices, use of supplements) for the RHU as a combined effort between the services (NS/MCH/FP), taking into account the practical aspects of implementation/ understanding of the RHM and her team as well as communications with clients and communities. One example given was the workload for supplementation and other interventions, assuming full coverage.
- (4) Focus on an apparently "neglected" area - mothers' nutritional status, as well as initiating and monitoring nutritional services to the very young

## **NCP PROJECT ASSISTANCE**

The objective of the "The Community-Based Management of Nutrition and Health Program" is to model planning and management of nutritional programs at provincial, district, municipal and barangay levels, at first using pilot areas. Results would form a basis for a National Plan.

This approach should greatly enhance many of the recommendations given in this report: such as in information use, integration, decentralization, both within the NS and at the community level, as well as provide field input for training, supervision and guidelines.

### **Recommendations**

1. The project should aim primarily for Provincial-level Plans (coordinated through Region and Centre), which incorporates Municipal/Barangay concerns, focusing on the benchmarks required for CSP.
2. As the focus is primarily at the Municipal/catchment area/Barangay levels, the planning exercise should begin at this level, taking into account provisional plans (and modifications within the project and elsewhere) already formulated.
3. The "line responsibility chart" is a logical process, but a series of workshops alone will not necessarily achieve the objectives. It requires experiential observations and reviews at the RHU and community levels.
4. The project cannot work in "nutritional isolation". It must take into consideration the DOH components of CSP. Ideally, a central representative of CSP and/or MCH should be included.
5. Both NS/DOH and NCP should recognize and resolve their concerns. Improved communications, a provincial focus to the project and collaboration with CSP should help to minimize these.

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# **REPORT ON MSH CONSULTANCY TO SUPPORT THE NUTRITION SERVICE, DEPARTMENT OF HEALTH, GOVERNMENT OF PHILIPPINES.**

## **I. INTRODUCTION**

In November 1990, it was recognized by GOP and USAID that the Nutrition component in CSP required clarification and strengthening in order to provide an acceptable National Nutrition Plan. I was hired on a short-term consultancy by Management Sciences for Health/CSP to work within the Nutrition Service, to help clarify the issues and approaches, including recommendations to satisfy CSP requirements. Initially, this was to be phased over two periods - Visit 1 for three weeks in December 1990 and Visit 2 (if requested) for five weeks in early 1991.

In addition, the NCP was approached to provide technical assistance to help the Nutrition Service in modifying their current plan to improve the field component (IPHO, RHU, community) in terms of implementation, collection and use of information and management.

Within the DOH, a Physician - Dr. Bayugo was transferred from the Office of Public Health Services to head the Standards Development and Research Division of the Nutrition Service and work with the Director - Mrs. Ramos.

During the first visit, I met with Mrs. Ramos, senior representatives of NNC, NCP, FNRI (although Dr. Florentino was absent at the time), CARE, HKI, Universities conducting research with the NS, many NS field ND's [at the NS Silang, Cavite four day Consultative Workshop on "Integrated Approach : A Key to Effective Nutrition Program Implementation"], and other nutritionists throughout the Philippines (at the PSDN's two day Convention on "Research Utilization for a more effective Nutrition Service Delivery"). Further contacts were conducted (often repeated) within the DOH, including those with OPHS (Drs. Roxas, Aranas, Gregorio), CSP (Mr. Tagiawala) OMS (Mr. Gamboa) and MCH service [senior]. I attended the AID debriefing by the EPI and CDD long-term consultants (during which nutrition was not mentioned) and regularly reported to Steve Solter and AID on progress. I attended the presentation for CSP at Batangas on Dec 19/20. In addition I visited with Mrs. Romas, Dr. Bayugo and the Regional and Provincial Nutritionist, the GMA Rural Health Unit, Cavite.

Much of the remaining time was spent in discussions with Mrs. Ramos, Dr. Bayugo (when available) and central NS staff about their current activities as well as perceptions of nutritional problems. I also reviewed available documents within the NS, DOH and other agencies, pertaining to nutritional problems, issues, plans and programs.

Due to the hospitality of my hosts and attendance at end-of-year meetings/workshops, I was able to develop a sense of involvement in a relatively short time, apart from the lack of insufficient field site visits. At the end of the stay, my contributions were incomplete; the December report did not cover all the work scope, nor was there time and opportunity to enlarge on key recommendations. The NCP project revision had not yet been reviewed

by NS or AID, nor had Dr. Bayugo sufficient time to devote himself fully to NS activities.

Initially, it appeared that a major part of my work was to recommend methods to re-orientate the programs of the NS to satisfy CSP requirements, including the "choice" of at least one program or activity which would have a high probability of achieving a "breakthrough". When it appeared that I would not be returning, it seemed such an approach would be insufficient and run the danger of ignoring more medium/longer-term approaches and strategies necessary to improve health/nutrition of the Philippine population.

Hence this report is perhaps more comprehensive than expected and took longer to write. It supersedes the prior "Draft Report" written on December 21, apart from the section on Nutritional Problems in the Philippines, including tables and graphs.

There are several overlapping levels for CSP requirements. The first is a "short-term" restructuring of the current Nutrition Plan, to improve its clarity and efficiency, including a focus on a possible "breakthrough". The second is to further nutrition policy/strategies in line with current CSP objectives - integration of present NS/MCH/FP activities and the third is to consider the overall nutrition/health problems and to determine the direction of DOH in this regard.

The present report considers all of these, realizing that DOH and the NS will require to choose priorities in the short and medium-long term, based on their present and potential capabilities and capacity.

## II. BACKGROUND

AID/Manila requires benchmarks for continued funding of the CSP supported health programs in DOH. Although those for MCH and FP Services have been defined, those for the NS have been postponed until September 1991. **The key benchmark will be to establish a National Nutrition Plan acceptable to the CSP Coordinator (CSPC), DOH. Its development and timely satisfaction has a high priority with CSP.**

The Plan should demonstrate that implementation will be expected to reduce morbidity (including nutritional deficiencies) and mortality of mothers/young children in Philippines.

**Broad requirements of the plan appear as follows:**

- (1) Link a clear policy with strategies and programs
- (2) Strengthen promotive and preventive aspects
- (3) Apply areal/biological/deficiency-related targeting in a rational manner, using appropriate assessment/feedback for monitoring and evaluation
- (4) Integrate
  - NS programs to minimize duplication (e.g. in IEC)
  - Field requirements with Provincial and Central planning
  - NS activities with those of MCH and FP, with particular reference to guidelines<sup>1</sup> management and training
- (5) Decentralize, with increased responsibilities at the IPHO

In addition, the plan should include at least one major activity/program in which a "breakthrough" should be anticipated. The CSP coordinator commented favorably on the EPI program where a high coverage was achieved and the FP strategy where the approach to health enhancement was logical and promising. This focused priority is part of the requested package in the plan and continued dialogue is required to clarify the chosen activity, its level of effort and expectations.

The pressure for an imminent "breakthrough" is contrary to the general nature of nutrition programs, which are more broadly-based and require a relatively long time for their development as compared with the more product-oriented specific approaches, in order to ensure success and sustainability. However a "campaign" approach is possible, **provided it is appropriately phased with longer term objectives and not detract from the**

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<sup>1</sup> A specific request from the CSP Coordinator is to sensitize nutritional concerns to all key health personnel and provide guidelines for incorporating nutrition in their programs and regular activities. Key, focused messages and training could be instituted, such as "the treatment of (severe) ARI is cotrimexazole, fluids AND continued feeding, monitored by continued or recovered (catch-up growth) weight gain.

**overall nutritional priorities. Examples for the NS include micronutrient supplementation<sup>2</sup>. Supplementation alone is a temporary measure to treat cases or "would be" cases and must be accompanied with and superceded by attacking the direct causes - inadequate food intake, morbidity, parasites. The only exception to this might be IDD, where the preferred end goal, is fortification, as shown in other countries.**

Here is the dilemma - the NS may consider the need to integrate programs on the one hand for a rational broad-based strategy to satisfy consumer (individuals, households, communities) needs and increase demand and on the other, in which it already has a tendency to do centrally, to establish separate programs and select at least one which is the most cost effective in terms of CSP.

The overall approach is to recognize that the NS has recently developed National Nutrition Plans (for 1990-4) in its 1989 Review and revised these for 1991-4 and again for the Dec 1990 meeting in Batangas. *Hence this process need not be repeated in toto. What is required is modifying existing plans to be more focused to policy and strategies.*

The contents, scope and responsibilities need to take into account the current infrastructure and capacities of the DOH and relevant services. Areas of nutritional/health concern presented in this report are not necessarily the responsibility of the NS alone, nor even MCH/PF. Indeed, the CSP and DOH must also foster and share responsibilities for effective, sustainable programs. In addition, it must also be recognized that certain NS activities are not directly related to CSP (e.g. care of children aged 5-7 years).

### **III. ISSUES AND PROBLEMS IN THE NS/DOH**

The issues and problems are not primarily related to technical knowledge, availability of personnel nor lack of understanding of nutritional problems in the Philippines. They do however concern perceptions, communication, balance and setting of priorities in the short and long term.

Nutrition is a broad discipline including developmental aspects (e.g. PEM, poverty, including morbidity/use of health services and health/nutrition practices) and the more direct approach to specific deficiencies, such as Vitamin A, Iron and Iodine ("VADAG") supplementation/fortification.

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<sup>2</sup> Expansion of breast feeding and weaning initiatives, appropriately supported, is another example; however this "resides" in the MCH central service.

An impressive range of nutritional activities are being conducted by various sectors and agencies, coordinated at least centrally, by the NNC. In addition there are agencies of world class standing involved in training and projects (NCP) and information gathering (FNRI as part of the DOST). There are at least three major nutrition societies with links throughout the country.

In the health sector, the focus in the NS has been primarily to deficiencies (e.g. in 1989, the GOP officially indicated that anaemia and goitre control were "national programs") as well as support for TFAD and its stated intent - rehabilitation of malnourished children (identified by the yearly OPT) and their mothers: and in MCH for breast and weaning practices, conduct of the under 5's clinics and maternal nutrition.

### **Review NS policies in relation to CSP**

Policies to be reviewed include provision of promotive, preventive and curative services through PHC; establishing standards and guidelines; providing epidemiological information and OR for planning and programming; use of appropriate technology; food sanitation standards and regulatory practices for example re breast milk substitutes and infant feeding formulas. (Dr. Bengzon, NNC circular, 1990)

A 1989 Nutrition Policy Statement outline in its Program Review (nil later on policy seen) was similar to the above statement, with the emphasis on promotion and prevention. In addition, it included collaboration with Private and NGO's, use of indigenous resources and technology for program sustainability.

The key strategies included food and micronutrient supplementation; capacity building (training, monitoring, supervision, evaluation) using area and epidemiological-based planning, data banking, manpower development; IEC, agricultural production (with DAF) and research/development.

The CSP emphasizes targeting, IEC for demand of services, decentralization to local levels and IPHO and integration, especially between MCH/FP/Nutrition.

What has emerged since the inception of the service in 1987, are four basic programs (the "*gang of four*" as stated by Mrs. Ramos, the NS Director) which have been focused primarily on supplementation. The NS has made impressive increases on the micronutrient supplementation and has begun with CARE to develop a broader base in TFAD through hiring over 100 municipal-level nutritionists to establish MNC (Mothercraft Nutrition Centers) to improve continuity of local nutritional care. It has also conducted key research including the use of scales in OPT and GMP; plotting, interpretation and counseling in GMP; and specific issues in micronutrient supplementation and fortification.

Having a central separate service for nutrition allows a more direct approach to programs and success can be directly credited to the NS; on the other hand it has become more divorced centrally from its major "collaborator" - the MCH service. This natural support must be taken into account in evaluating NS activities, both within the service and those that support more directly the "MCH programs"<sup>3</sup>.

Currently, the NS has a number of overlapping functions. These include:

1. Development of "its own" programs: TFAD, VADAG (Vit A, anaemia, goitre)
2. Support of MCH activities: GMP research; provision of scales for OPT/GMP
3. Providing information for MCH, other services in DOH and other sectors, primarily through OPT, for targeting, monitoring and evaluation
4. Linkage with efforts to improve household food security and income in deficient areas/groups

Nutrition in health requires more support in terms of improvement of basic feeding practices, particularly in preg/lact women and young children and related to illness; and the use of information to monitor programs. IEC and GMP offer a means by which a common entities and linkages between NS/MCH/FP can be developed much further. The status of mothers appears to be neglected within DOH, yet her nutrition (food intake shown by surveys to be unacceptably low; high prevalence of low birth weight) is of high priority both for herself and child. Continuation of the breast feeding (and weaning) initiative is of high priority. The central current situation is not conducive to the nutritional focus on these key issues, because of the weak central links between NS, MCH and FP.

Responsibilities will depend on the priorities and capacities of each service and support from CSP/DOH. Methods to improve linkages must be explored, at least within the context of CSP, realizing that mutual advantages will occur. Strategies might include:

1. Increased central support for Provincial/Regional levels:  
- funding/TA/communication
2. An increased coordination role for NS/MCH/FP in CSP ? within the PHSO
3. A freer exchange of views and documentation at least centrally
4. Staffing (at least temporary or intermittent) of a few nutritionists within MCH/FP and of MCH/FP in the NS<sup>4</sup>
5. Unifying research, e.g. performance of RHM and RHU; GMP; IEC; guidelines; information use, etc.

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<sup>3</sup> Improvement of morbidity will reduce malnutrition, hence nutritional status is a useful marker for the progress of MCH activities

<sup>4</sup> An innovative approach may be to have temporary posting of a few RHM's in the more central offices.

#### IV. COMPONENTS OF NUTRITIONAL-RELATED PROGRAMS IN DOH

The structure of current central programs/activities is presented (*Tables 1 and 2*), the first with NS, the second with MCH services. Strategies, such as GMP/OPT and Under 5's clinics will be considered elsewhere. In addition, TFAD is only a part of the control of PEM, focused primarily on malnourished individuals.

This exercise (although crude and incomplete) is more an outsider's "bird's eye" view to indicate the overall picture between and within nutrition-related programs and NS/MCH. It is not meant to be the basis for indicators, although some aspects could be considered.

Components are listed as follows:

- Assessment** - frequency, levels of description
- Prevalence** - national, based on latest FNRI survey
- Variation** - overall national estimate for areal targeting. Thus the strategy for IDA (little variation and high prevalence) is different from that of IDD (often hyper-endemic areas)
  
- Causes** - a reminder of the multiple nature, especially interaction between food intake and morbidity (for convenience purposes, causes in the "MCH group" are not included.
- Targeting** - based on clinical/anthropometric/laboratory criteria (see also Table )  
Awareness problem with regards to the nutritional aspects (from my impressions and review of guidelines, etc)
- DOH/RHM** - perceptions of relative importance. Thus TFAD has a high profile for targeting/monitoring although its nutritional implications are less clear. No mention is made for feeding during/after ARI, measles in the MCH "broad guidelines"<sup>5</sup>. This also represents, to some extent the linkage of nutrition with regular DOH services.
- Public** - based on demand for services, coverage
- IEC** - pertaining to improving food intake
- Supplementation** - indications
- Fortification** - level of progress
- Relevance of interventions to deficiency** - direct and indirect. Thus TFAD not just by specific supplementation, but by improving coverage and demand for services; mothers' PEM and IDD improvement to also enhance young child status.

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<sup>5</sup> See Section VIII on Nutritional Concerns in RHU/MCH Interventions

TABLE 1. COMPONENTS OF NUTRITIONAL PROGRAMS/ACTIVITIES IN DOH

Components	TFAD (PEM)	NS "Programs" Vit A	Iron Def	Goitre
<u>Assessment of Problem</u>	Yearly	By region	By region	By Province for 6 regions
<u>Prevalence(NATL)</u>	Disaggregated	Conflicts		12% (women)
<u>Variation thru Philippines...</u>	18% (0-5's)	1-2% (vul gps)	40-70%	
<u>Identify causes</u>	Some Pov/Int/Morb/Par*	Some Pov/Int/Morb/Par	Little? Pov/Int/Morb/Par Blood loss	Much Soil depletion Goitrogens
<u>Targetting</u>	To malnourished	Vague	Specific but too extensive	Specific, much outside DOH
<u>Awareness problem</u>	DOH High Public Mod-high	Varied Low	High (women) Low-mod	Varied(low-mod) Low-mod
<u>IEC (diet) **</u>	Low	Low+	Low	NA
<u>Supplementation</u>	To malnourished	To at-risk	To at-risk	To cases
<u>Fortification</u>	NA	Research	Research	Limited use "too expensive"
<u>Relevance to Deficiency</u>	Indirect	Direct	Direct	Direct-mothers Indirect-infants

\*Poverty/Food Intake/Morbidity/Parasites

\*\* Initiatives in TFAP (e.g.. MNC) and micronutrients (Vitamin A) are still relatively limited

**Table 2. Nutritional Components of MCH Programs/Activities**

Components	PEM Mothers	MCH Programs/activities		Nutritional components of morbidity			of Parasites (Intestinal)
		Br Feeding	Weaning	Measles, EPI	CDD	ARI	
<u>Assessment of Problem</u>	Diet surveys 70%RDA(Cal)ave. 60% Low wt/ht	Natl. Health Survey (1987) <6M Breast 78% <6M Bottle 25%+	At 6M 25% no added foods mod	Regular reporting + surveys Low but high CFR Rate *18%	Common Dehyd-high CFR Rate *18%(1)	Common Pneumonia- Rate *18%	Surveys Very common HW- 20% RW- 50%
<u>Prevalence(NATL) Variation thru Philippines</u>	?mod-high ?Some	Urban >Rural	?some	?	?	?	?
<u>Targeting</u>	Via Low BW	?	?	?Post attack	?Post attack	?Post attack	?
<u>Awareness problem</u>							
<u>DOH/RHU Public</u>	Low-mod Low-mod	Mod-high Mod	Low-mod Mod	mod ?Low	mod ?	Low ? Low	?Mod-high ?Mod
<u>IEC. (diet)</u>	Low	Growing	?	? Nil	Some	? Nil	?
<u>Supplementation</u>	At-risk	NA	Unknown ?Limited	NA	NA	NA	NA
<u>Fortification</u>	At-risk	NA	NA	NA	NA	NA	NA
<u>Relevance to Deficiency</u>	Direct-mother Indirect-child	Direct - child Indirect-mother	Direct-child	Direct-child	Direct-child	Direct-child	Direct Mother/child

(1) Rate \* prevalence of PEM (18%)

? Not known

NA: Not applicable

9/1.

**From this table, some tentative conclusions may be derived:**

- 1. Assessments are not sufficiently disaggregated to ensure adequate areal targeting**
- 2. Prevalences and variation throughout the country differ greatly**  
Two important areas of concern are **maternal nutrition** (low RDA for calories and high underweight) and **delayed introduction of weaning foods/staples at 6 months (25%+)** which have apparently received little attention. One would also anticipate problems with food intake of young children. Breast/bottle feeding problems are now receiving more attention, but this requires expansion.
- 3. Causes - probably often common across programs (IDD the exception), although the relative importance varies (e.g. urban vs. rural). In general PEM is more likely where poverty and low food availability occurs, but still can be present in more favourable circumstances when morbidity/poor food intake occurs in vulnerable groups.**
- 4. Targeting - criteria vary greatly and may not be clear (see later for details)**
- 5. Awareness - DOH/RHM, etc - this reflects the formal linkage of nutrition and can be more readily defined by review of guidelines, supervisory check lists and observations of activities (e.g. recent RHM studies by MCH and NS within GMP context)**  
Public - an essential component of IEC and service content/quality (part of PRICOR technical assistance)
- 6. IEC - For nutritional aspects this appears far too low at present, and is limited to piggy-backing onto the supplementation initiatives**
- 7. Supplementation - indications vary across programs, need clarifying (see Table 3)**
- 8. Fortification - only IDD has been tried and this on a limited scale.**

### **Promotion, prevention, curative, rehabilitation services**

The relative importance, balance, timing and linkage between these services requires presentation in a holistic manner. There is currently too little emphasis on the promotive (particularly) and preventive aspects. A table listing these and curative strategies according to program was presented in my December draft report. Food supplementation has important benefits and purposes but when restricted in targeting to malnourished children and mothers excludes methods to prevent occurrence of new cases, as would be detected for example in GMP. Promotion through IEC is critical and must be focused to mothers and children (especially in high risk areas and groups) in a timely fashion. The risk approach has a different strategy, depending on the outcome (for example, the risk of developing PEM or that of dying, associated with morbidity<sup>6</sup>).

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<sup>6</sup> The rationale of focusing on children with Grade 2/3 malnutrition in the prevention of mortality is based on a high risk ratio; however most deaths still occur in children with lesser degrees of malnutrition

As one of the major direct causes of PEM and nutritional deficiencies, inadequate feeding habits **MUST** be given a priority. Even if this is a medium-long term objective, evidence suggests a relatively low priority in the NS programs (IEC structured more to the separate interventions particularly supplementation, so that means to improve food practices, particularly during critical periods "fall in the cracks", TFAD is more focused to rehabilitation, lack of integrated guidelines, delayed contact of the NS with PS IEC support<sup>7</sup>).

Hence IEC be:

- a. Given a TOP priority.
  - b. Messages and guidelines be integrated to focus on mother and child, rather than according to the separate specific deficiencies per se. An understanding that the continuity of care (reinforced by feedback, such as in GMP) is critical.
  - c. Guidelines **MUST** be developed and tested/re-tested for the users. For example, RHM's are not nutritionists, but need some understanding of the relative timing and importance of nutritional interventions and strategies.
  - d. Counseling by key health providers (RHM, BHW, indigenous) and other groups, including the BNS (when available) - each has a role to play. The RHM cannot and should not be expected to provide detailed nutritional advice; but at least indicate (with appropriate support) where required the types and frequency of foods needed according to group (e.g. by age) and urgency. Support groups must be part of a team, in which the RHM/RHU has key roles.
  - e. Appropriate mechanisms for feedback and monitoring be incorporated, at the programmatic (e.g. FHSIS), individual (GMP, screening with follow-up) and community level (local surveys/cumulated screening, etc with follow-up).
  - f. Incorporated with non-feeding causes of deficiencies - parasitic (hookworm and treatment/prophylaxis for malaria for anaemia, roundworm for PEM/etc); acute and chronic morbidity, maternal hemorrhage with anaemia, etc.
2. Supplementation must be considered as a "stop-gap" procedure, to be instituted until appropriate health/feeding practices, control of morbidity, parasites or suitable alternatives (such as fortification for IDD) are instituted. Otherwise the issues of sustainability and continuing costs arise.

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<sup>7</sup> The techniques and attitudes of appropriate counseling and learning to listen to mothers (and communities) have yet to be appropriately developed

## V. ASSESSMENT

The following recommendations for assessments relate to nutrition in CSP and consider the scale and location of activities, including current and prospective strategies, such as in surveys, OPT, GMP and FHSIS. All are not necessarily directed to the NS alone.

### **A. Large scale**

#### **i. Major surveys**

(1) **Do further analyses and presentations for recent surveys by FNRI and DOH.** (e.g. stratify urban according to deprived and other areas; clarifications of at-risk, i.e. relationships of PEM and VADAG, maternal with young child results; disaggregating age descriptions in anthropometry for 0-24 months: 0-3, 4-6, 7-11, 12-17, 18-24 to determine periods of highest risks), inclusion of anaemia levels (e.g. below 6 and 8 Gm%) related to distributions.

(2) **Clarify conflicting results for VAD prevalences (as suggested by Dr. Solon)**

(3) **Emphasize the need for appropriate standardized indicators e.g. for breast feeding, onset of weaning, feeding habits, mother's nutritional status (e.g. anthropometry).** Impress on FNRI and DOH their inclusion in future surveys and analysis/ presentations of recent surveys, including appropriate graphics.

(4) **Explore other major survey sources (HIES, demographic, agricultural, etc.),** where simple nutritional/health indicators could be included.

#### **ii. OPT.**

**Improve coverage (reduced from 80% to 70% overall, in part due to change to bulgur wheat and beans) paying particular attention to high risk areas with low coverage.**

#### **(1) Increase benefits for attendance**

**a. Provide services, where feasible and required (e.g. deworming for mothers/ children, if indeed the high prevalences for parasites in the FNRI 1982 survey are still relevant).** Make sure results from this intervention are confirmed and recorded at the next visit.

**b. Improved use of OPT information, especially locally (e.g. change in status by child for all grades, allowing for age cohort effect) at individual and community levels; include emphasis on changes, including improvements in status; combine with GMP as an audit to review events over the past year. Conduct manual trial analyses for groups (municipalities, catchment areas or Barangays), which can be done locally.**

**c. Increase communication regarding appropriate use of bulgur/beans (e.g. in recipes). Studies on the use and distribution of these foods in the HH are desirable, combined with efforts to enhance improved intake of other foods.**

**d. Coordinate activities with DSW (most directly concerned with use of results); other relevant sectors (re support for at-risk populations in economic and agriculturally-related programs); and resolidify the political support from Cabinet through NNC and other agencies.**

**e. Explain linkage with interventions other than TFAD - e.g. for at-risk selections, other MCH services; particularly for younger age groups. Guidelines and their rationale need modifying for recipients, as well as for the providers of services.**

**f. Assess the mother also (e.g. height, using perhaps a single cutpoint with standardized methods, such as walking straight under a bar set at 145 or 150 cm), explaining at least its general relevance to pregnancy outcome (e.g. a general risk factor for low birth weight and more specific for difficult deliveries)<sup>8</sup>.**

**(2) Improve efficiency and quality of results**

**a. Improve quality and maintainance of scales (see Systems Analysis report from NS/DOH), and use of information in analysis and results.**

**b. Review or provide simple guidelines for field-level editing for group data, such as very high prevalences in localized areas; high ratio of Gr3 to Gr2 results; unusual age distributions, etc.**

**c. Review responsibilities and time spent - RHM's and others roles in exercise.**

**d. Limit young children to 0-59 months (reduce work-load by 30%). [Mrs. Ramos is not too keen on this because OPT screens for at-risk HH, so that undernourished children 60-83 months of age would be excluded and not contribute to HH supplementation. However, one could increase the amounts given by 20-30% for**

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<sup>8</sup> See report on Maternal Anthropometry Conference PAHO/USAID/Mothercare, 1990, which I left with NS and MCH.

eligibles].

e. Consider doing the national OPT exercise every 2 years (instead of the current annual) as suggested by Dr. Roxas. Areas of greatest risk or demand could continue annually.

- (3) **Relate exercise to priorities in CSP - examples**
- Identifying mothers for TT immunizations
  - Use simple indicators for VAD, e.g. night blindness; IDD, obvious goiter in mothers - this would be used more for area-level assessments.
  - Mother's height
  - Focusing more on mothers and younger children (0 to 3/5 yrs).

iii. **Appropriate large-scale surveys or screening**

- (1) Complete the NS/DOH exercise on goitre prevalence in school-age children, where 6 regions were covered.
- (2) Do regionally executed surveys for selected deficiencies, such as VAD where there is special interest or uncertainty (e.g. Reg VI where an IEC program is focused) or National according to Province as per FNRI survey of 1989.

**B. Service-based information**

i. **FHSIS**

Although service-based, this information will monitor some deficiencies using anthropometry (Birth weight, weight/month) and concerns (Breast feeding "initiation"). and be useful for surveillance purposes.

- (1) **Conduct trial analyses and methods of presentation, particularly from GMP for local [do manually] and DOH purposes. These include attendance; number of times weight increased, same or decreased by age group; number of times regained weight in 1-2 months after decreased (catch-up) by age group<sup>9</sup>.**
- (2) **Consider the number (and %) of children receiving a defined "package of services" according to age and "risk" status, including those with continuous or intermittent weight declines/flattening. GMP criteria should be consistent with guidelines for action/special counseling, yet to be fully developed.**

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<sup>9</sup> In infants a failure to gain weight is as serious as weight decrease in older children

The receipt of food, Vit A, Iron and deworming (and iodine for mothers) as specific interventions in FHSIS will be important although it is not clear how to distinguish between cases and at-risk groups.

**ii. Potential FHSIS**

(1) Test other key information in selected areas for possible future inclusion in FHSIS after a trial period. These might include whether counseling was done for mother's as well as child's status (health/nutrition), onset of daily weaning foods, whether bottle used daily, etc. This also relates with supervision content (which will overlap with FHSIS and other programmatic concerns) where individual and group information must reinforce clear guidelines. [This will depend on the motivation of RHM and support workers, together with the availability of local clerking facilities]. Operation Research studies related to these issues would be highly relevant.

(2) Collate information from supervision, reports, research, etc., as well as from private sources.

**C. Local Population-based information (up to province)**

(1) Explore strategies using basic and feasible indicators at the local level (e.g. night blindness; pallor using standardized methods such as a color scale; Grade 2-3 goitre; maternal anthropometry). This will vary and overlap, according to requirements of DOH, RHU, catchment barangays, etc. Prevalences of VADAG would not be available from FHSIS.

(2) Consider the relative uses of general and specific surveys and follow-up activities, the latter to determine the characteristics also of HH not reporting for key interventions: mothers/infants, those at high risk by cross-sectional or GMP results.

**D. Use of information to and from other sectors**

Although NS/DOH will not per se be responsible for the collection and use of such information, the knowledge of this (economic, agricultural, social, etc) will enhance understanding of the indirect causes of undernutrition. In addition, the feasibility of IEC messages will have better direction.

**E. Screening, surveys and surveillance.**

Distinguish between the choice and use of indicators for screening, surveys and surveillance, which overlap but are not identical. Cumulated results for screening reflect that specific population and method; surveys require random sampling based on lists or HH structures; surveillance can be done from repeated screening, surveys or even more qualitative information (e.g. statements or general observations of change), provided that

sources are taken into account and indicators are stable and standardized. Apply these results to information strategies.

## VI. "HIGH RISK" APPROACH

This is currently confusing (as was indicated by ND's at the recent Cavite workshops). There is lack of specifics in the targets and the denominators for coverage assessment are not appropriately defined.

### A. Population area targets

The high risk area approach has been implemented by certain agencies (e.g. through LAKASS, UNICEF, etc), although I received no information re the NS activities in this regard (apart from endemic areas for IDD for Regions 1-4, 6-7, 10-11). The lack of consistent available data re nutrient prevalences (e.g. VAD, IDA and to some extent goitre) below regional levels makes it difficult to target appropriately. Also, even at regional levels, it appears (1987 FNRI and other survey info.) that prevalence of VAD varies greatly, as well as IDD. Data from OPT is available for PEM in young children. High anaemia prevalence appears universal although is also expected to vary (e.g. by malaria, etc).

Major surveys should stratify and present results more suitable for targeting. Thus urban prevalences do not apparently distinguish between slum and other areas.

#### *Recommendations*

- i. Continue the coordination of NS with DOH for area based targeting strategies, with particular reference to IMR and PEM.
- ii. Do local and aggregated assessments/feedback with regards to VAD, IDD and IDA, using appropriate technologies. (see assessment section for details)

### B. Biological targets

In the CSP, it is critical to focus more on mothers and younger children. In one sense, supplementation (especially for PEM) is an admission of failure and the later this occurs in children, the more difficult is the condition reversible. Hence promotive/preventive strategies for at-risk groups must start early enough to be effective<sup>10</sup>.

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<sup>10</sup> In addition, strategies/interventions must be oriented on a family/person basis in a "life-cycle" continuity pattern rather than a strictly multi-programmatic intermittent approach. This emphasizes the role of the Growth Card and HBMR as records for RHU/client interactions.

### **C. Deficiency-related targets**

These include:

- i. Cases identified with the condition usually by clinical means (e.g. night blindness, goitre, pallor for severe anaemia) anthropometry (low Weight-for-age) or laboratory (Hgb for anaemia).
- ii. Proxy measures, such as PEM for anaemia or Low Birth Weight for lactating mothers are used when it is not feasible for widespread objective assessment of the prime concern.
- iii. Probability situations where their occurrence might result not only in the onset of deficiencies, but progress to undesirable events, such as death. The key example is morbidity and "sub-clinical" Vitamin A deficiency.

Thus there is more than one element of risk, first to prevent the deficiency from occurring (primary prevention). If the condition is present, early treatment will prevent it worsening (secondary) and rehabilitation or tertiary - to prevent complications, including death, such as 3rd degree PEM. The purpose of interventions, particularly supplementation, should be reviewed along these lines for appropriate monitoring and evaluation.

**TABLE 3: AT RISK GROUPS BY BIOLOGICAL GROUPS WITH DEFICIENCIES**

**3A. Biological Target groups by deficiency (cases)**

	<u>Deficiency</u>			
Prepregnant	*			Goitre
Pregnant	*	Anaemia	TFAP(U'wt)	Goitre
Post-partum		VitA (< 1mth)		
Lactating	*	Anaemia	TFAP(LBW)	Goitre
0-5 months				
6-11 months		Anaemia	TFAP(U'wt)	
1-5 years	VitA	Anaemia	TFAP(U'wt)	
5-7 years	VitA	Anaemia	TFAP(U'wt)	
7-17 years				Goitre

\*contra-indicated

**3B. Deficiency by group and indicator-excluding demonstrated cases**

	<u>Indicator</u>			
	Under'wt	LBW	D-M-ARI	Anaemia
Prepregnant				
Pregnant	Anaemia			TFAP
Post-partum		VitA		
Lactating		TFAP/An		
0-5 months				
6-11 months	Anaemia			
1-5 years	Anaemia/V		VitA	
5-7 years	Anaemia/V		VitA	

**3C. Indicator by group and deficiency-excluding demonstrated cases**

	<u>Deficiency</u>		
	TFAP	Vit A	Anaemia
Prepregnant			
Pregnant	Anaemia		U'wt
Post-partum		LBW	
Lactating	LBW		LBW
0-5 months			
6-11 months			U'wt
1-5 years		U'wt/D-M-ARI	U'wt
5-7 years		U'wt/D-M-ARI	U'wt

**TFAP** : Targeted Food Assistance Program

**An** : Anaemia **V** : Vitamin A **LBW** : Low Birth Weight

**U'wt** : Underweight (2nd and 3rd degree low weight-for-age)

**D-M-ARI** : Chronic diarrhea, Current measles, Acute lower respiratory tract infection

#### **D. Linking biological with deficiency-related strategies<sup>11</sup>**

Table 3 is meant to help rationalize the approach to targeting for both cases and non-cases, using the "at-risk" strategy and based on the perspective of the RHU. The first (Table 3A) considers biological groups for each specific deficiency. Some groups (pregnant, 1-7's) are targeted for three interventions; lactating women for all four (if the immediate post-partum is taken into account); prepregnant (non-lactating) only one - goitre. One assumes the 6-11 month old child is protected by the mother's milk, etc and/or the child is too young to indicate deficiency. TFAP, although targeted to many groups, usually does this partially and indirectly through family supplementation.

Tables 3B and 3C stratify by clinical/anthropometric/biochemical means for non-cases (goitre is not included as its interventions are limited to cases). The first (Table 3B) is by indicator; thus anaemia (usually clinical) is an added indication for TFAP in pregnant/lactating women, in addition underweight in pregnant women (?criteria) or LBW in lactating women indicates iron treatment in lieu of the difficulty of demonstrating "sub-clinical" anaemia and its high known prevalence. Only VAD warrants supplementation based on the D-M-ARI complex in young children (chronic diarrhea, measles, acute "lower" respiratory infection).

Table 3C looks at each deficiency for in terms of indicators for supplementation. It is the same as 3B, but the indicators and deficiencies are switched.

#### **Conclusions**

Based on the time it took me to sort this out and the overall perspective, the current approach appears complex and confusing and must be modified to improve the efficiency of deliveries and the understanding of the providers/recipients. Its basic problem stems from the imposition of "vertically-oriented" supplementation programs to a single overall focus, without due regard for the provider-client relationships. Apart from the problems in accessing the information and defining/standardizing some of the indicators (e.g. underweight in women; pallor in anaemia; "chronic diarrhea"), there are redundancies and inconsistencies. Also an understanding in terms of cases, proxy measures and probability situations is required<sup>12</sup>.

In addition, these approaches are not conveniently integrated with the provision of other health-related (EPI, ORT, etc) and nutritional (counseling, using GMP and MBHR) services. As indicated by Dr. Aranas, the family-oriented approach would

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<sup>11</sup> Because of this vertical programmatic approach, there is overlap. For example, individuals may be at-risk for the same deficiency for more than one indicator.

<sup>12</sup> See C. Deficiency-related targets presented previously in this section.

be more rational, with a short and longer-term coherent strategy (?contract) by the RHU/client, particularly when repeated "interventions" are required during the life cycles of the clients. Indications for supplementation and other services overlap; indeed, we are dealing with successive cohorts - the pre-pregnant will become pregnant; the pregnant will bear a child and lactate<sup>13</sup>, etc.

*This is extremely relevant to family planning for health/nutrition where prime consideration is given to the link between proper birth spacing and the quality of the mother and child.*

It is not the purpose of this exercise to deal with specifics, but rather to demonstrate approaches which will hopefully clarify the issues. The recent MCH and NSOR studies on activities of the RHM (and RHU) must look at and apply ways in which to support the field perspective. *Changes must consider not only ways to improve performance based on central considerations, but also programmatic approaches which will enhance their work.*

## VII. INTEGRATION

This works at various levels; it is not simply the "piggy-backing" of components of one intervention or program onto others. Dr. Aranas in her presentation at Cavite indicated at least three areas - client based (mother-children, household/family based, community focused); health facility (e.g. for a two way referral system) and programs (e.g. planning, training, IEC, M/E and service delivery). From these standardized "packages" can be developed field-oriented guidelines, check lists for supervision and monitoring.

The NS/DOH should apply these principles in their Plan/implementation, realizing that appropriate input is required from other services and offices. Review and follow-up of the exercises conducted by the ND at Cavite should also be done and further efforts made, particularly at the field level.

The bounds of nutrition have added dimensions with other sectors. Although the NS/DOH is generally not primarily responsible, as efforts might compromise their own work. However, it should be aware of the demographic, social and economic dimensions and more specifically food availability and use, if only to determine the feasibility of food intake messages in the general and local situation; nutritional advocacy for relevant strategies (e.g. home gardens, income activities for women) and appropriate feedback from nutritional monitoring and surveillance. Furthermore, knowledge of services in other sectors would help prevent unnecessary duplications and confusion.

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<sup>13</sup> Women who do not breast feed, especially in the first six months of their child's life seem to be ignored, although they require special attention

Integration involves looking at the total picture. Within the central and field structure of NS/DOH most of the components are in place; their emphasis and timing must be reviewed as a cohesive system and their purposes/linkages clarified. Personnel have responsibility for certain interventions, support services, etc., it is not clear whether there is adequate linkage between NS staff in terms of shared goals, particularly in general activities common to all interventions.

### VIII. NUTRITIONAL CONCERNS WITHIN BASIC RHU/MCH INTERVENTIONS

Nutrition-related topics in the MCH/DOH booklet (Basic Interventions and Desirable Standards, 1990) were identified to present the following exercise, realizing it has contains only the bare essentials, although providing a guide to priorities (Table 4)

The NS should review this with that of MCH for nutrition linkages, content and consistency<sup>14</sup>. Examples include the promotive role of GMP and linkage of this and feeding with morbidity, weight of new born and mothers for maternal nutrition (? part of risk assessment). The growth card and HBMR are the basic records and Growth Monitoring services are linked with the key MCH young child interventions.

**TABLE 4 : Programs of MCH Service - Basic interventions and desirable standards (MCH/DOH 1990)**

<u>Intervention</u>	<u>Nutrition-related topic</u>	<u>Desirable basic standard</u>
EPI	Nil	Nil
CDD	Continue BF and feeding	As topic
ARI	Nil	Nil
BF/weaning	Promotion through IEC	Value of BF Proper maternal nutrition Hazards of bottle feeding Proper weaning practices Regulation of product marketing
GMP (<5's)	Weigh/assess/treat	Weigh monthly HE-BF/weaning Food/VADAG as required
Maternal care: Delivery	Prenatal	HE-diet; food, Iron/folic HE-proper BF
	Post Partum 0-2 weeks 2 wks+	HE-lactation, child care Iron supplementation Family Planning services

<sup>14</sup> The same should be done with FP, where maternal health/nutrition and the family orientation with continuity of care are critical elements

**The recent MCH study on the RHM performance indicated the following recommendations:**

**Technical guidelines - criteria for care, HE, community links, supervision**  
**Training - risks, referral mechanisms**  
**Supervision - coordination, methods, guidelines**  
**Curriculum review**  
**Resolve time constraints re investigations - BP, weight, Hgb, urine albumen, etc.**

*In addition, there appears to be confusion in the interpretation/advice during pregnancy monitoring of weight changes. The concern with pre-eclampsia with increasing weight (due to fluid retention) as an unfavorable sign and the nutritional target to foster weight gain (by improved food intake and control of morbidity) fosters an ambiguity which must be resolved.*

**The NS study on GMP interpretation and counseling by the RHM showed a lack of understanding and/or implementation for nutritional concerns. Even when these were recognized (continued weight loss), counseling was primarily for morbidity/referral rather than improving food intake, etc.**

**The workload for supplementation alone may be quite extensive as shown in the following Table. S.**

**TABLE 5: Estimated workload by municipality for nutritional problems\* : Percent prevalence of problems by group**

Problems	Group				
	Pregnant	Lactating	0-5 mths	6-11 mths	1-5 yrs
Low BW		13%			
U'weight(2/3)	15%		10%	15%	20%
Anaemia	50%	50%		70%	50%
Vit A Def	1%	1%		1%	1%
Goitre	12%	12%			
Hookworm	20%	20%		5%	20%
Roundworm	50%	50%		5%	50%
% of population**	3%	5%	2%	2%	12%
Number	150	250	100	100	600

Problems\* -many individuals have more than one problem, hence totals exceed the number. Population\*\*=5000

Numbers per group (based on percentages in each group)

Problems	Group				
	Pregnant	Lactating	0-5 mths	6-11 mths	1-5 yrs
Low BW		45			
U'weight(2/3)	23		10	15	120
Anaemia	75	125		70	300
Vit A Def	2	3		1	6
Goitre	18	30			
Hookworm	30	50		5	120
Roundworm	75	125		5	300
Number	150	250	100	100	600
Pop=5000					

This exercise is to indicate the broad "nutritional problem" workload of the RHU in a municipality, assuming full coverage and crude prevalence estimates (which will vary). If at-risk criteria were included, the numbers would be much higher, particularly for Vitamin A deficiencies. One also has to take into account the frequency in attending to the problem<sup>15</sup>. For example anaemia supplementation requires monthly "treatments", which further inflates the already high numbers of children under 5 requiring attention (this would be further increased if those aged 5-7 were also included).

The exercise is included to improve the understanding of the workload and resources required. In addition, questions of sustainability arise, particularly in the "long-term" provision of supplements.

<sup>15</sup> Indeed, many of the nutritional indicators are static. For example, PEM (assessed yearly through OPT) as against a dynamic approach with GMP in attending to problems before or as they arise.

## **IX. REQUIREMENTS FOR CSP**

### **A. "Breakthroughs"**

Pressures on achieving relatively short-term goals ("successes or breakthroughs") in separate programs for Child Survival (CSP) focuses more on direct interventions, such as VADAG with the provision of products, notwithstanding their implementation through the PHC system.

Hence the NS has to consider ways in which a "major breakthrough" can be accomplished and at the same time continue the longer term plans to ensure improved food intake by vulnerable groups. Of the current programs, those relating to Vitamin A and iodine deficiencies (VAD, IDD) might be the most appropriate, because of the difficulty in the continuous implementation/assessment of iron deficiency (IDA). In addition, the cost for supplementation is greatest in IDA compared with the others, because of the need for syrups in the very young.

For VAD, a clearer picture of its prevalence throughout the country must be developed as well as the acceptance of its mass distribution in its effect on mortality. The project in Antigua and Los Pinas has demonstrated the beneficial effect on reducing Vitamin A prevalence, although that in Los Pinas was quite low even before the program began<sup>16</sup>. Because of these constraints, the short term plan should be focused in areas of current known high VAD (e.g. based on recent FNRI survey and other results), until the national and provincial situation was resolved.

IDD has several advantages in implementation. Its easy recognition and treatment of cases (no need for "at-risk groups") and focus on limited targets (mothers) within the CSP health system. In specific areas of high prevalence, it may also be possible to show improvements, such as in birth weight and perhaps reduction of stillbirths, using groups of sentinel municipalities as markers.

One further consideration is a more concerted effort to control parasitic diseases, particularly roundworm (for PEM) and hookworm for anaemia). Prevalence rates for these parasites were shown to be high nationwide in the 1982 FNRI survey. The demonstrated beneficial effects of antihelminthics might also contribute to an increased demand for services in general. Regular mass deworming every 6 months or so has also been shown to reduce the rates of re-infestation, due to the overall decrease in faecal transmission.

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<sup>16</sup> The NS with HKI has now developed experience in important areas, such as social marketing in VAD, in which the methods could be applied elsewhere.

## **B. Progress without dramatic "breakthroughs"**

The alternative to "major" breakthroughs are smaller, but significant ones which are expected to decrease morbidity and mortality in the longer term, once fully developed. This has been the basis for "successful" nutrition programs in other countries, such as in Thailand, Tamil Nadu (India) and Tanzania<sup>17</sup>.

These include:

1. An integrated IEC for mass, local and face-to-face using existing technologies relating to improved feeding practices - maternal, breast, bottle control, weaning, feeding during and after illness, such as ARI, CDD, communicable diseases particularly measles.
2. Continue the development of GMP as a strategy to improve the efficiency of MCH services, including nutrition-related inputs.
3. Establishment of a decision-oriented (local and centrally) nutritional surveillance system, for example OPT more efficiently, FHSIS results from GMP and birth weight, other programmatic/survey information where feasible and warranted.
4. Developing appropriate sensitization and performance of DOH field workers in applying basic nutritional concepts.
5. Using supplementation strategies which are integrated and cohesive.

Much of these are medium-long term strategies; in the short term they can be developed accordingly starting with high priority areas/concerns. The choice of priorities involves appropriate dialogue within the NS, between NS/MCH/FP as well as with /between CSP/PHSO and DOH, in all cases, taking into account field capacities and requirements.

*With the continuation of successful interventions (EPI) and upgrading of other health concerns (ORT, ARI), it may be difficult for nutrition to receive necessary attention and with this, feasibility for field implementation.*

A major problem with the recent presentation to CSP at Batangas was the lack of focus, cohesion and clarity of programs to policy, objectives and goals. One reason was that a "shopping list" was prepared for each isolated program within the context of the way the NS views the problems and solutions. A reorientation to policy must occur taking into account that of the DOH and CSP.

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<sup>17</sup> See reports from the International Nutrition Planners Forum, 1989; World Bank (Berg - Malnutrition, What can be done?, 1989)

*Table 6* indicates the total funds requested by the NS/DOH at the CSP meeting, broken down by type of activity and program. Funds from other sources (UNICEF, WHO, etc), primarily for training, IEC, monitoring/evaluation and research are not included, although not substantial compared with the above totals.

**TABLE 6: Budget request to CSP/PHDP from NS/DOH Dec 20 at Balangas  
In Ps Millions**

	TFAP*	Activity				Total
		Vit A	Iron	Iodine	Combined	
Equipment	23.63					23.63
Materials		4.10	<u>50.35</u>	0.97		<u>55.42</u>
Local food	0.70					0.70
Training	0.81				8.20	9.01
IEC		0.20				0.20
Monitor/Eval		0.30				0.30
Research						
<b>Total</b>	<b>25.14</b>	<b>4.60</b>	<b>50.35</b>	<b>0.97</b>	<b>8.20</b>	<b>89.26</b>

% of Total	TFAP*	Activity				Total
		Vit A	Iron	Iodine	Combined	
Equipment	26.5					26.5%
Materials		4.6	<u>56.4</u>	1.1		<u>62.1%</u>
Local food	0.8					0.8%
Training	0.9				9.2	10.1%
IEC		0.2				0.2%
Monitor/Eval		0.3				0.3%
Research						
<b>Total</b>	<b>28.2</b>	<b>5.1</b>	<b>56.4</b>	<b>1.1</b>	<b>9.2</b>	<b>100.0%</b>

TFAP - Does not include 25.2 Million from PL480  
 Equipment - scales (for use with OPT and GMP)  
 Materials - supplements, including freight and handling  
 Training combined - VADAG

At the meeting it appeared that the request for scales received strong support from MCH, in terms of need. However, examination of the budget request indicates that over half was for iron supplements, primarily due to the cost of syrups for young children. Can this be justified in relation to the other priorities? The alternative or complement is a full scale attack on some basic problems - in infants, the problems of absent or inappropriate breast feeding and timely weaning and in 1-5's the presence of parasites (e.g. hookworm) as well as poor feeding practices. In addition, the urgency of the problem is not clear as we do not know the prevalence of more severe lower levels of haemoglobin in these populations.

## **X. RESEARCH**

The NS 1989 Program review indicated research would relate to information, decision-making and program implementation; collaboration with private and other govt. organizations and strengthening of manpower development.

Recent research has appropriately focused on programmatic issues (OR in GMP, weighing in OPT), tolerance to Vit A, fortification vehicles, etc. and ongoing studies on nutrition counseling, community-based nutrition training module in PHC. Further research could focus on key areas of targeting, use of indicators for program progress, coverage (e.g. reasons for the reduction in OPT; status of non-attenders), assessment/feedback and issues of implementation (training, supervision, feasibility, sustainability), .

Alternative strategies such as those relating to decentralization, integration, community participation could be tested as well as exploring the basis purposes of programs (e.g. OPT) and how much they are used.

## **XI. NCP PROJECT ASSISTANCE**

The objective of the " The Community-Based Management of Nutrition and Health Program" (presented Dec 1990, to be reviewed by DOH and USAID) is to model planning and management of nutritional programs at provincial, district, municipal and barangay levels. The Project includes modeling, social preparation, assessment, implementation, monitoring and evaluation. A Pilot Province (District and RHU's) would be selected and the exercise completed with a "Planning and management" manual and report in 4-5 months. After review, an expansion phase would repeat the exercise for one Province for each region. Results of this would form a basis for a National Plan.

The Project commences with a needs analysis for staff. A series of workshops (each of 2-4 weeks) at various levels (Province, District/RHU and Community), -based on hands on and shared experiences?- will be used to develop methodologies and plans.

### **NS/DOH should recognize**

1. NCP have much to offer in terms of technical expertise, especially in training/field experience and the approach is basically sound - incorporating field inputs and responsibilities into action plans.
2. There is urgency in applying this type of exercise in order to clarify CSP requirements for a cohesive policy and plan within the CSP framework. The NCP must

be made aware of the current policies and problems in terms of the benchmarks required in the CSP agreement, so that the project can be appropriately focused.

3. The project accompanies a basic orientation in policy in that Provinces (supported by Central and Regional Offices) would have more control in planning and conducting programs. This is in accordance with CSP objectives. Hence initial meetings must take this into account, using Provincial input (e.g. at least based on the recent Cavite workshop and other sources).

4. The approaches developed should form as a continuing basis for modifying guidelines, training and supervision and generate further collaborative activities of this nature in the future.

#### **NCP should recognize**

1. The project should aim primarily for Provincial-level Plans (coordinated through Region and Centre), which incorporates Municipal/Barangay concerns, focusing on the benchmarks required for CSP. Such Plans should also take into account the different patterns in rural and urban areas and prevalence estimates, not only of direct nutritional concern, but also those related to child survival, such as mortality and morbidity.

2. As the focus is primarily at the Municipal/catchment area/Barangay levels, the planning exercise should begin at this level, taking into account provisional plans (and modifications within the project and elsewhere) already formulated. Hence review of the current NS/MCH/FP plans is a critical preliminary.

3. The "line responsibility chart" is a logical process, but a series of workshops alone will not necessarily achieve the objectives. It requires experiential observations and reviews at the RHU and community levels.

4. The project cannot work in "nutritional isolation". It must take into consideration the DOH components - both centrally and in the field in terms of the nutritional aspects of the CSP, in terms of the current integration initiatives. The nutritional community concerns embrace areas beyond the health sector (food availability and use, income, etc) which should be attended to by other sectors. Ideally, a central representative of CSP and/or MCH should be included.

5. There are two basic elements - the formal nutritional/health services, in this case provided by the NS and DOH to the RHU or municipal level; and the "Community" or Barangay level. In these, responsibilities/activities should be defined making optimal use of interactions between the two, for appropriate coordination. For practical purposes, this objective will have variable results, and in many cases may not be apparent for some time.

6. The framework of project implementation has been presented by NCP, the content has yet to be developed.

**Both NS/DOH and NCP should recognize and resolve**

1. Each of their major concerns for the conduct of this project

NS/DOH in that the project appears to be run by NCP rather than NS/DOH and implies that a completely new plan will evolve (fashioned primarily by NCP) which will not necessarily fully take into account the current operational plan.

NCP in that the NS/DOH is not sufficiently streamlined to respond quickly enough to the project's objectives, citing prior experiences of their collaboration.

It should be noted that many ND's in the NS/DOH have been trained, at least in part by NCP and that problems in communication may be more administrative than technical.

2. The technical aspects of the project first and how they relate to the NS/DOH objectives and modification of current plans. This could first be done by a key person from each agency (? Drs. Baya and Briones) with directions and consultations from their respective seniors and colleagues, together with guidance from a CSP representative and USAID.

## ANNEX - SOME NUTRITIONAL PROBLEMS IN PHILIPPINES

This Annex is a brief review of selected anthropometric, micronutrient and food intake information from major surveys, principally those from FNRI.

### Assessment Sources (Table A1)

For national information, there is almost exclusive reliance on the surveys of FNRI in 1978, 1982, 1987 and 1989. The pattern of the surveys have changed. The most recent, in 1989, has focused on providing more limited information but on a wider scale, so that regions and perhaps provinces can be described (at least for anthropometry and food intake). Also, the reporting has changed (e.g. no full description of underweight-for-age by categories) making it difficult to track the overall progress in mild/ moderate and severe groups. Food intake by vulnerable groups was been reported in the 1987 survey (mean energy intakes for pre-schoolers, pregnant and lactating women being only up to 75% of recommended- See Corpus-PEM in the Philippines: March 1989 - Bulletin of the Nutrition Foundation of the Philippines); although I have not as yet seen the full report. Information on breast feeding and infant feeding patterns is limited; those for anthropometry in adults, particularly in pregnant/lactating women (i.e. for 1982 and 1987) are not presented as distributions, making interpretation difficult.

The National Health Survey of 1987 reported anthropometry and feeding patterns for young children, but the results for the former appear quite inconsistent with those of FNRI and OPT, and those for the latter are incompletely reported for nutritional purposes.

There is a need to standardize analysis and reporting and develop a cohesive plan for tracking progress over time, as well as cross-sectional assessment. Attention should be more focused on maternal intake and anthropometry as well as breast feeding adequacy in early infancy and onset of solid/mushy foods using at least qualitative information.

**Table A1 : Assessment of Problem - Sources of Information**

	<u>Protein-energy malnutrition</u>		<u>Micronutrient Deficiencies</u>		
	<u>Anthropometry</u>	<u>Food Intake</u>	<u>Food Patterns</u>	<u>Vit A</u> (1)	<u>Iodine</u> (2)
7-17 yrs	FNRI	FNRI(87)		FNRI	FNRI
Pregnant	FNRI			FNRI	FNRI
Lactating	FNRI			FNRI	FNRI
Birth	Hospitals				
0-6m	0-11 FNRI		FNRI/NHS		
6-11m			FNRI/NHS	FNRI	FNRI
1-3yr	FNRI(0-71m)/	FNRI		FNRI	FNRI
4-6 yr	OPT (0-83m)	FNRI		FNRI	FNRI

FNRI(87) pending

(1) Last Survey (2) Goiter (3) Anaemia

Results for FNRI described at urban/rural and regional. Sample size increased for young children in 1989 survey, included anthropometry, HH intake, feeding practices. Only OPT provides Municipality information.

## Results (Table A2)

### I. PEM

There has been an impressive reduction in the prevalence of stunting since 1982 (and probably since 1978 - no result for this year available in the report)- *Fig A1*. Stunting is a more stable indicator for human development progress as it is relatively less affected by short-term weight changes, as reflected in wasting (low weight-height). The slight increase in underweight prevalence from 1982 to 1987 was due to an increase in wasting.

The improvements apply to all ages and indicators, with a few exceptions. The 0-1 year old was particularly sensitive to the 1987 increase (and subsequent reduction from 1987-9) in prevalence for underweight [*Figs A2 and A3*], stunting [*Fig A4*] and wasting [*Fig A5*]. One pattern in wasting is of interest: the high prevalence in children aged 1-2 years has not reduced over the past decade. The prevalence for Grade 3 underweight was not reported for the 1987 nor 1989 surveys, hence changes in this group could not be evaluated.

The situation in school-age children is not necessarily inconsistent with that for pre-schoolers as the lack of improvement in stunting from 1987 to 1989 might reflect the situation before 1987.

In the surveys where information was available (1982 and 1987) [*Fig A6*], although the prevalence of underweight reduced in Grade 2 and 3 (moderate and severe), that for milder degrees (75 to 89% of local reference) remained at approximately 50% of the total or even increased for children aged 1-2 years, as shown in *Fig 6b*. This suggests that the major bulk of children are still at risk of developing more severe malnutrition and have not been improved over this time, even allowing for those with Grade 2 and 3 shifting into the grade 1 category.

When reference WHO data are used instead of the local one, the prevalence rate of underweight has been reported as 33% and for stunting as 42%, although that for wasting is relatively low (5%). These figures allow comparisons with other Asian countries (*Table A3*).

The results for adults (*Table A2*) showed some improvement in mean heights and weights from 1978 to 1982 (reporting in this *year* was absent from the 1987 survey). However, results for the ponderal index (weight in Kg divided by height in metres squared) for both women and men suggests a relatively high proportion (?30%+) were thin and probably undernourished, using 18.5 as the cutpoint recommended by Waterlow in 1989. This was perhaps confirmed in 1987, where the prevalence of low weight-height (?reference) was of the order of 55% for 21-30 years and 45% for the 31-40 year old groups. In each group, these prevalences were higher in lactating women as compared to non-lactating, indirectly indicating feeding problems in lactating (and probably pregnant) women.

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The results for adults showed some improvement in mean heights and weights from 1978 to 1982 (reporting in this way was absent from the 1987 survey). However, results for the ponderal index (weight in Kg divided by height in metres squared) for both women and men suggests a relatively high proportion (73%+) were thin and probably undernourished, using 18.5 as the recommended cutpoint (Waterlow, 1989); this was perhaps confirmed in 1987, where the prevalence of low weight-height (reference) was of the order of 55% for 21-30 years and 45% for the 31-40 year old groups. In each group, these prevalences were higher in lactating women as compared to non-lactating, indirectly indicating feeding problems in lactating (and probably pregnant) women.

Bisgrove showed very low intakes in calories (40-60% of RDA) for pregnant and lactating women in both urban and rural areas (Women's diet and reproductive status; manuscript; UNC, 1988 - quoted in McGuire and Popkin - Helping Women Improve Nutrition in the Developing World; World Bank, 1990)

**Age groups at greatest risk**

Figure A7 shows that the prevalence of wasting and underweight peaks at 1-2 years. However, even in the first year of life, problems are apparent. Thus the prevalence of stunting has almost reached its peak. Results also suggest that the extent of undernutrition is far less after three years of age. Hence targeting and monitoring of children under or up to three years of age has priority and the earlier in a child's life this is begun, the better. The high prevalence of low birth weight (18%) and suggestive evidence given earlier, indicate that problem can be most efficiently confronted by enhancing the nutrition of mothers.

## **II. Micronutrient deficiencies (Table A3)**

### **a. Vitamin A**

Results from the FNRI 1987 survey suggest nationally that there is a public health problem (? marginal) of Vitamin A deficiency in at-risk groups. In certain areas of the country the problem seems more apparent (e.g. Antigua and Las Pinas) - see Solon; review of the Five-year directional plan on Vitamin A control - unpublished, 1989?. However, a clearer overall picture is still needed to define the problem.

### **b. Iodine deficiency**

Endemic goiter (prevalences of signs in 7-14 year old children of 6.4% - FNRI 1987 survey) has been recognized for decades. Hyperendemic pockets also occur, although these do not appear to be defined systematically throughout the country.

### **c. Anaemia**

The prevalence of anaemia ranges from 21% adult males to 70% in infants. It is assumed to be primary due to iron/folate deficiency from blood loss in women, inadequate diet, hookworm and malaria.

## **III. Targeting in OPT**

Table A5 and Fig 8 is to illustrate the different order of priorities by prevalence rates according to indicator, in this example by Regions (excluding region 11), from FNRI 1987 survey data.

Thus Region 6 has the highest level of underweight (23.3%), the third highest of stunting (16.9%) and second highest in wasting (15.5%). In most regions however, indicator rankings vary, depending on which one is used. For example Region 5 has the highest prevalence of stunting (20.7%), but relatively low wasting (10.6%), hence underweight has an intermediate position (7th highest).

This exercise is presented to show the limitations of using weight-for-age alone as an indicator (although far better and more objective than other proxies) for separating out long-term developmental aspects of nutrition (represented by stunting) and shorter term aspects such as the influence of recent acute infections.

**Table A<sub>2</sub>**  
**Selected Indicators of Nutritional Status - Philippines**  
**-Prevalence Rates by Survey (FNRI)**

I. PEM		1978	1982	1987	1989
a. Pre-school (0-6)					
	Underweight				
	3rd Deg	1.6	1.6		
	2nd Deg	20.3	15.6		
	Total	21.9	17.2	17.7	14.0
	Stunting		20.6	14.1	11.6
	Wasting	13.8	9.5	12.7	9.0
b. By Age (years)					
	Underweight				
	0-1	17.3	11.3	20.3	10.0
	1-2	37.3	30.3	28.8	25.4
	2-3	26.4	21.1	21.0	20.0
	3-4	22.1	16.2	16.1	12.1
	4-5	13.0	12.9	13.6	8.2
	5-6	15.9	13.2	12.1	10.8
	6-7	22.2	14.4	12.8	11.1
	Stunting				
	0-1		20.0	12.3	9.5
	1-2		23.7	18.8	11.4
	2-3		21.1	14.9	12.0
	3-4		20.2	12.9	12.9
	4-5		18.1	14.2	11.4
	5-6		21.8	11.0	11.1
	6-7		19.3	13.8	13.0
	Wasting				
	0-1	22.6	16.9	21.4	21.6
	1-2	16.7	16.2	19.2	19.6
	2-3	14.6	11.1	13.1	8.4
	3-4	16.0	7.0	11.4	5.2
	4-5	8.1	7.4	9.3	5.8
	5-6	9.8	4.4	7.9	6.8
	6-7	8.7	4.4	9.7	5.0
b. School age (7-10)					
	Underweight		12.4	9.0	5.5
	Stunting		22.4	12.1	14.2
	Wasting				
c*. Women - Height					
	Preg				
	Lact				
	20-29	150.9	151.6		
	30-39	150.6	151.1		
	Weight				
	Preg				
	Lact				
	20-29	46.7	47.5		
	30-39	47.5	49.1		
	Wt/Ht				
	Preg				
	Lact				
	20-29	20.5	20.7		
	30-39	20.9	21.5		

**Table A2 (continued)**  
**Selected Indicators of Nutritional Status - Philippines**  
**-Prevalence Rates by Survey (FNRI)**

I. PEM		1978	1982	1987	1989
d*. Men	-Height				
	20-29	163.0	163.2		
	30-39	161.0	164.3		
	-Weight				
	20-29	54.6	55.3		
	30-39	54.6	56.9		
	(Wt/Ht)				
	20-29	20.6	20.8		
	30-39	21.1	21.1		
e. Low Wt/Ht (<90%)					
	20-30				
	Lact			57.1	
	Non Preg			54.7	
	Men			56.1	
	31-40				
	Lact			49.1	
	Non Preg			43.3	
	Men			44.4	

(c\*,d\* are means)

Table A3

**National Indicators relating to GNP, Health and Nutrition.  
Ordered alphabetically by Countries within Regions**

Country	Year	GNP p.cap 1987	Primary Educ % 1986	Calor-X ies 1986	Low BirthWt 1985	Life Expect.		Infant Mortal. 1987	Fertil Rate 1987	Undernutrition %			Mortality Rates	
						Fem. 1987	Males 1987			Low Wt-age	Low Ht-age	Low Wt-Ht	<5 MR 1988	1-5MR 1988
<b>Asia</b>														
5	Bangladesh	160	60	1927	31	50	51	119	5.5	60	56	8	188	69
2	Bhutan	150	23			47	49	128	5.5				197	69
39	Burma	200		2609	16	62	58	70	4.3	38	50	11	95	25
18	China	290	129	2630	6	71	68	32	2.4				43	11
21	India	300	92	2238	30	58	58	99	4.3	41			149	50
36	Indonesia	450	118	2579	14	62	58	71	3.5	51			119	48
8	Lao PDR	170	94	2391	39	50	47	110	5.7	37	40	11	159	49
7	Nepal	160	79	2052		50	52	128	5.9	70	69	14	197	69
28	Pakistan	350	44	2315	25	54	55	109	6.7	52	46	15	166	57
50	Papua New Guinea	700		2205	25	55	53	62	5.7	35			81	19
46	Philippines	590	106	2372	18	65	62	45	3.9	33	42	5	73	28
33	Sri Lanka	400	103	2401	28	73	68	33	2.7	38	28	13	43	10
55	Thailand	850	99	2331	12	66	63	39	2.8	26	22	6	49	10
42	Viet Nam	..	100	2297	18	68	64	46	4.4	52	60	7	88	42
	Malaysia	1810	101	2730	9	72	68	24	3.8				32	8

Data from World Bank Report for Development Indicators, 1989

Data for anthropometry from Carlson and Wardlaw, UNICEF, 1990

**Table A4: Micronutrient Deficiencies  
-Prevalence Rates by Survey (FNRI)**

	1978	1982	1987
<b>A. Vitamin A</b>			
1. Night-blindness			
6m-6yrs		1.8	0.7
7-14yrs			0.9
2. Bitot's Spots			
2-6yrs		1.4	1.3
3. Low Serum Vit A (<10ug%)			
6m-6yr		2.3	
7-12yr		2.8	
13-19yr		2.8	
Pregnant		1.5	
Lactating		3.4	
Total		2.6	
<b>B. Iodine Deficiency - Females</b>			
1. Goiter (Gr 2/3)			
7-14 yrs			2.8
15-20 yrs		0.7	1.5
2lyrs+		1.3	2.7
Pregnant		1.1	5.6
Lactating		1.6	5.3
Total (M+F)		0.9	1.4
2. Any			
7-14 yrs			6.4
15-20 yrs		4.5	6.2
2lyrs+		7.6	7.1
Pregnant		3.2	13.4
Lactating		7.5	10.2
Total (M+F)		3.1	3.5
<b>C. Anaemia</b>			
6-11 mths		51	70
1-6 yrs	56	32	39
7-12 yrs	60	31	41
13-19 yrs			37
20-59 yrs			
- females	52	27	39
- males	33	14	21
60+ yrs	61	37	47
Pregnant	85	49	45
Lactating	62	20	51
Total		27	37

24

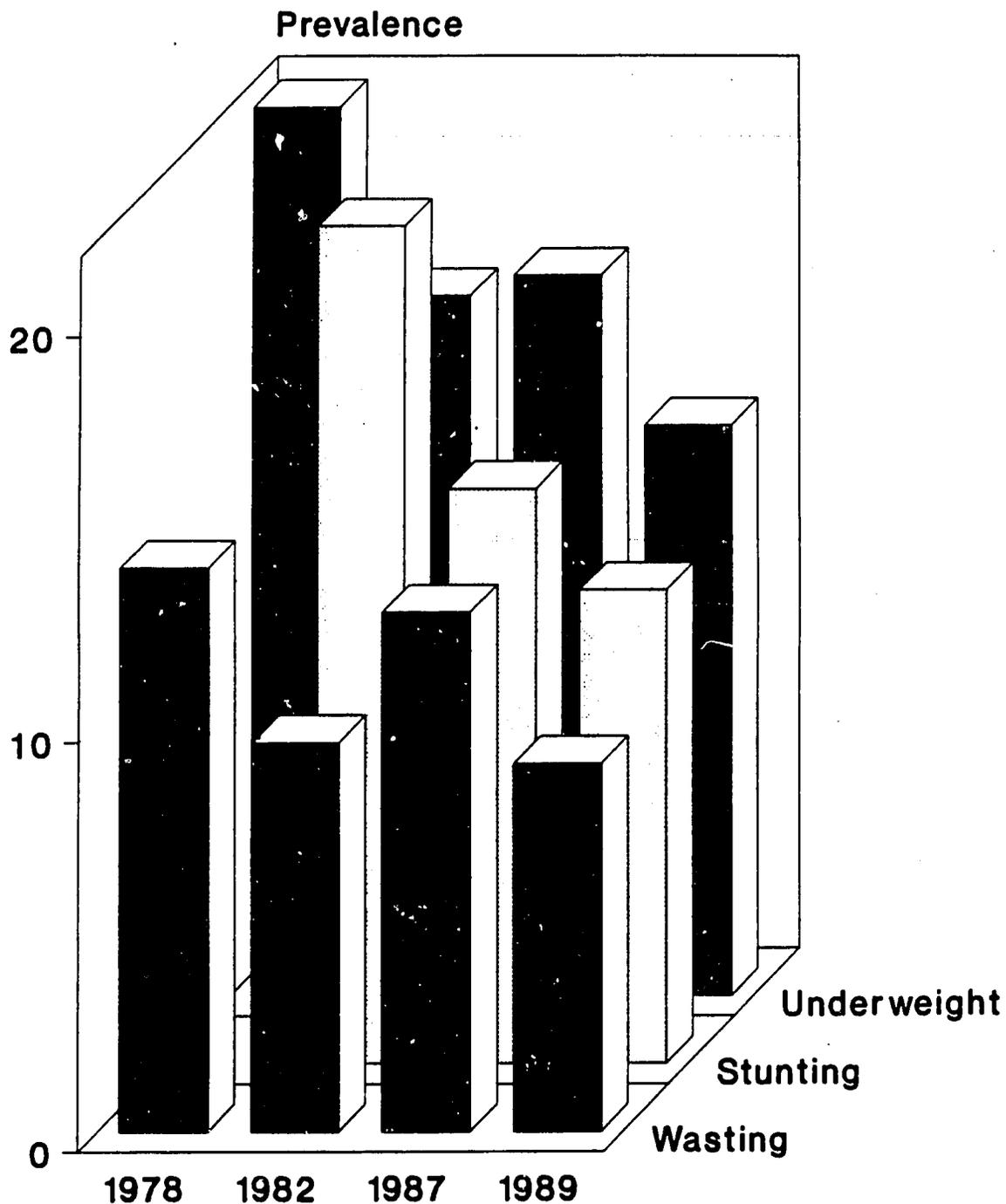
**Table A5: Selected Indicators of Nutritional Status - Philippines  
-Prevalence Rates - 1987 Survey (FNRI) Children 0-6 years**

Prevalences By Region	Under- Weight	Stunted	Wasted	<u>Ranked by Highest-lowest</u>			NCR
				Under- Weight	Stunted	Wasted	
NCR	17.5	12.1	12.6	5	10	6	
1	17.5	13.8	17.8	5	8	1	1
2	16.7	18.5	10.9	9	2	9	2
3	16.9	12.8	12.1	7	9	8	3
4	13.9	9.9	12.9	12	12	5	4
5	16.9	20.7	10.6	7	1	10	5
6	23.3	16.9	15.5	1	3	2	6
7	16.7	15.4	7.7	9	4	12	7
8	19.8	14.3	10.4	4	5	11	8
9	21.4	12.0	14.7	2	11	3	9
10	14.4	14.3	12.6	11	5	6	10
12	20.4	14.0	13.0	3	7	4	12

Hence OPT results require a cautious interpretation and must be complemented by other more regular information, such as anthropometric from GMP, developmental indicators (water, sanitation, education, IMR, etc) and those related to morbidity and food intake.

Figure 1.

## Changes in Nutritional Status - Philippines Children aged 0 to 6 years

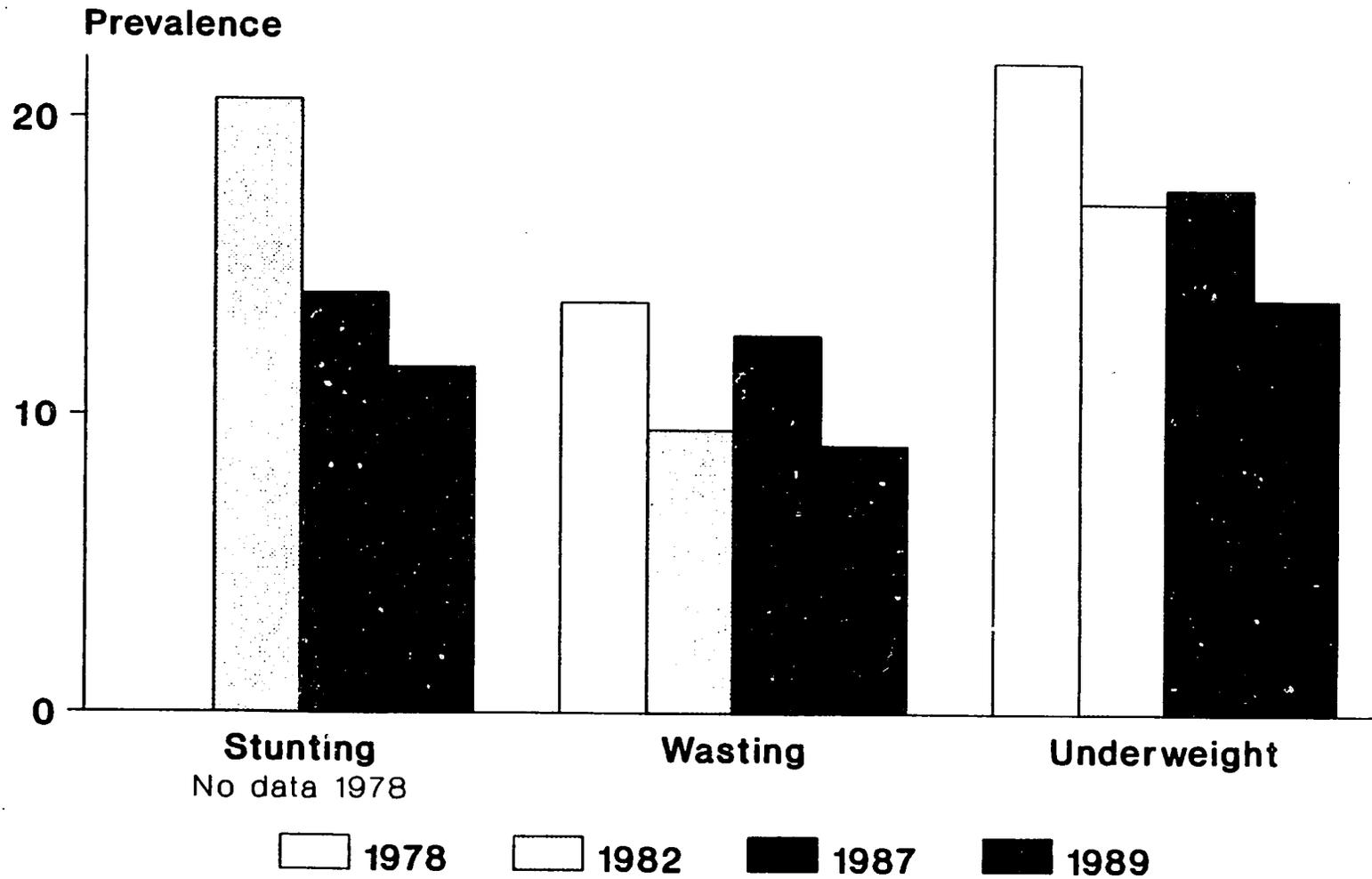


No results for stunting in 1978  
Data from FNRI National Surveys,  
using Reference Philippine source 1971.

*Prevalence has reduced  
especially for stunting*

Figure 1.

## Changes in Nutritional Status - Philippines Children aged 0 to 6 years

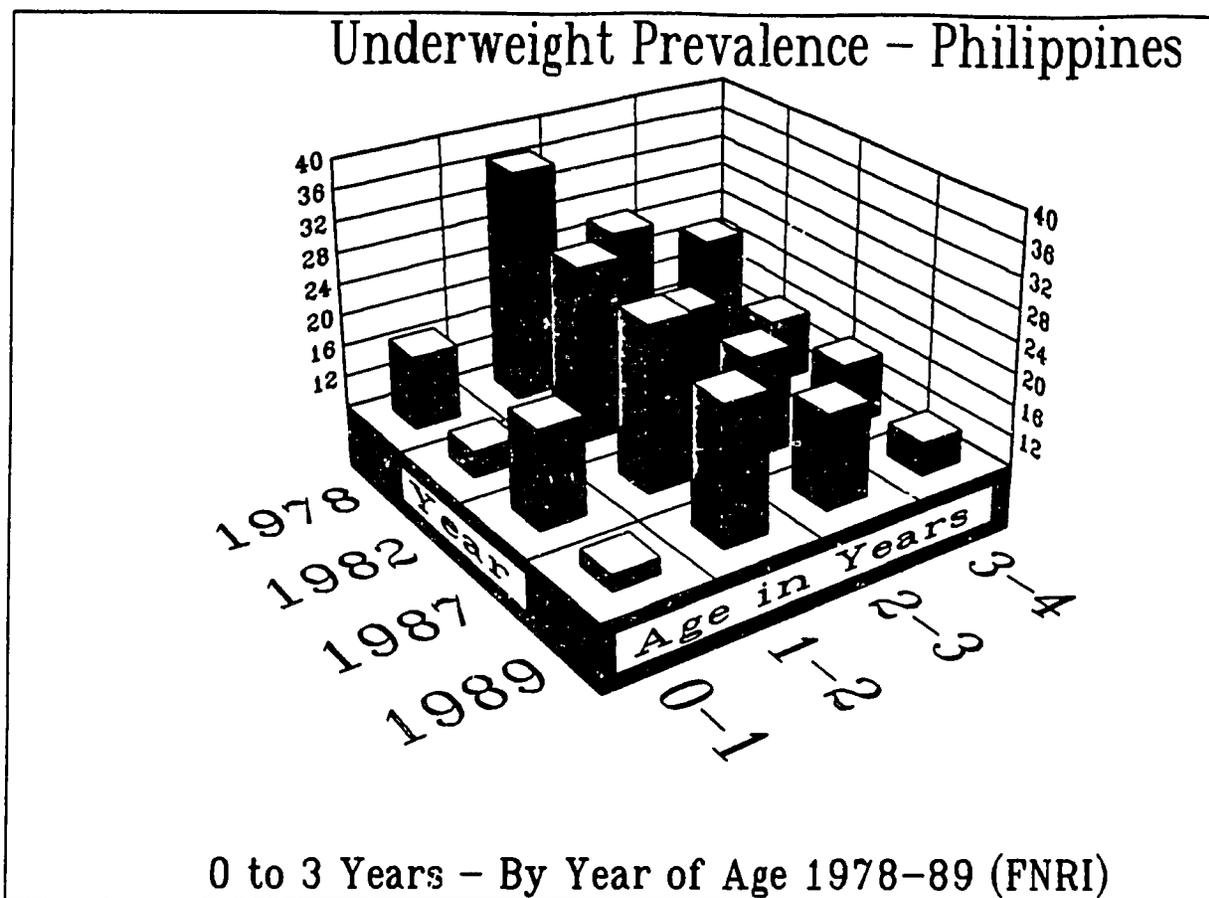


Data from FNRI National Surveys,  
using Reference Philippine source 1971.

*Prevalence has reduced  
especially for stunting*

31

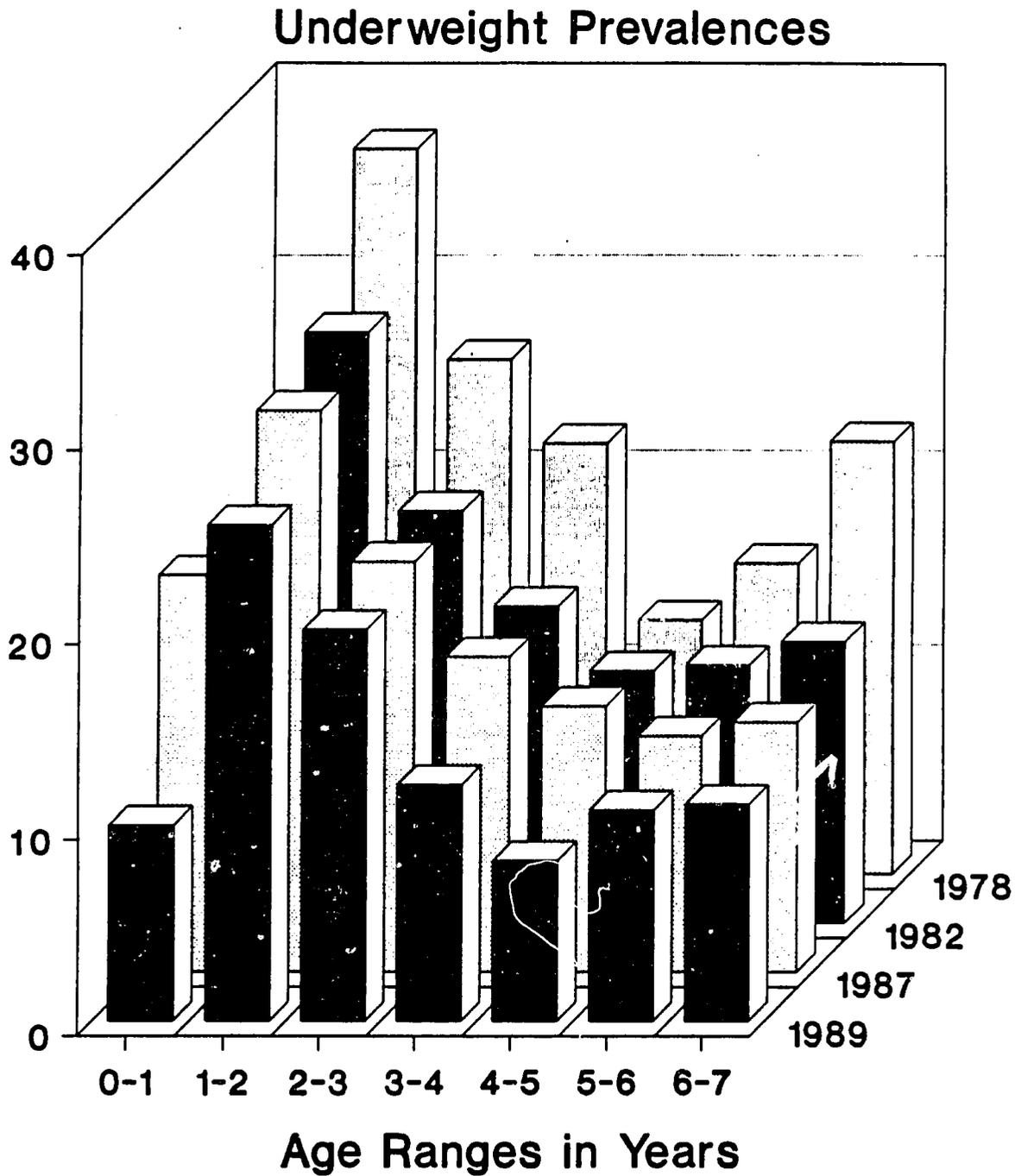
Figure 2.



*NS/DOH-CSP/MSH/AID 1991*

Figure 3

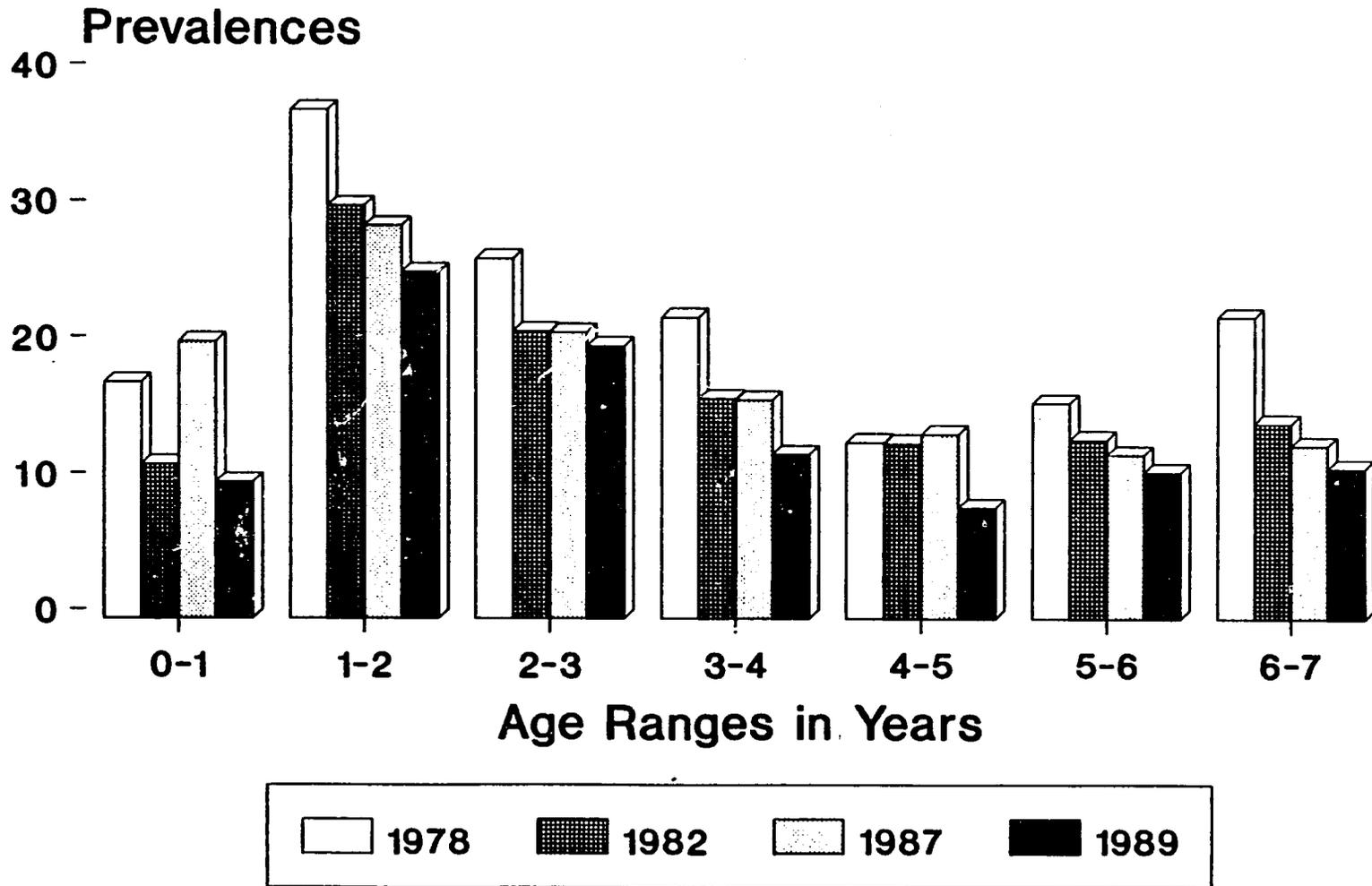
# Prevalence of Underweight by Age Changes 1978 to 1989 - Philippines



Data from FNRI National Surveys

Figure 3

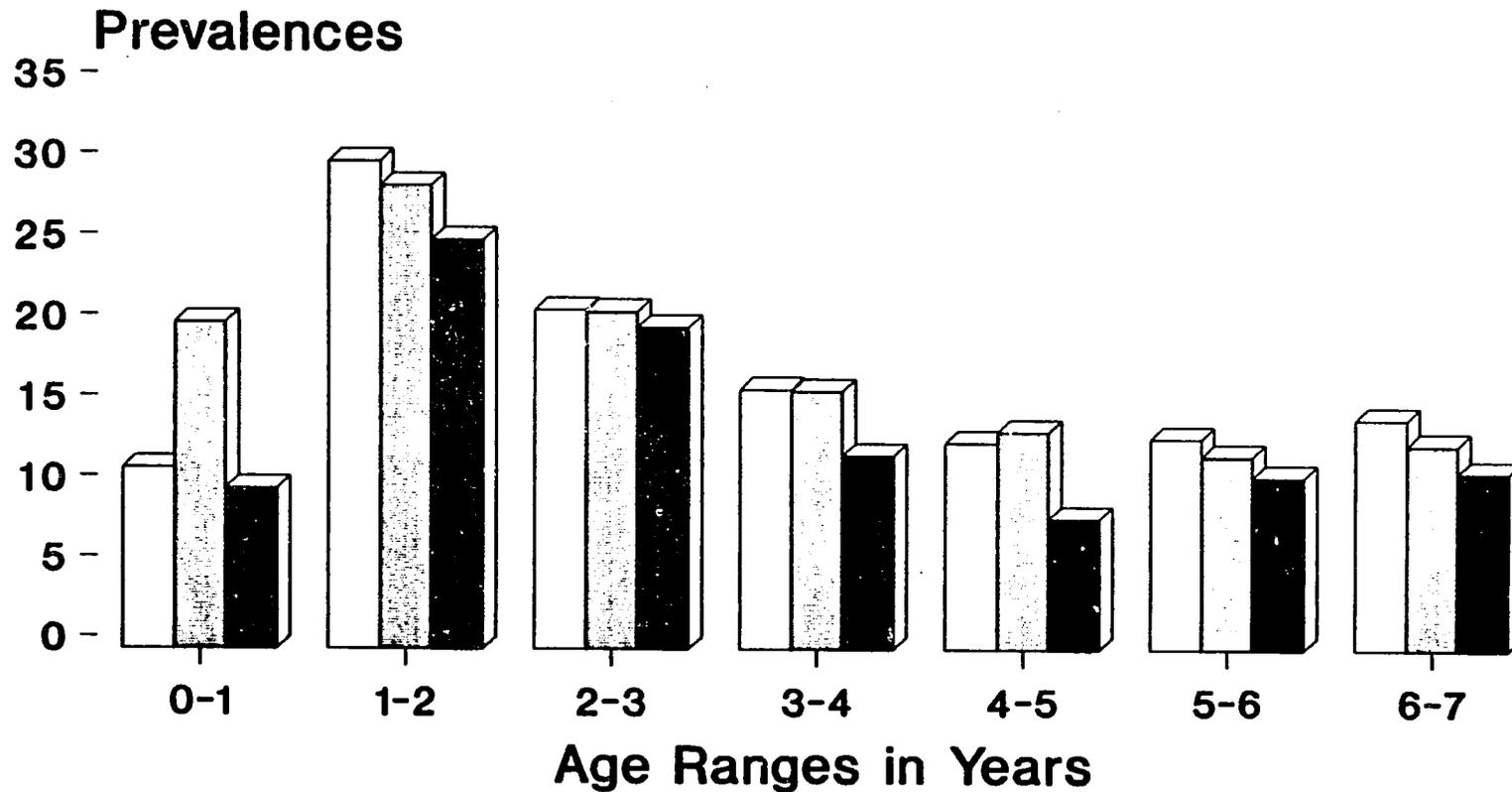
## Prevalence of Underweight By Age Changes 1978 to 1989 - Philippines



Data from FNRI National Surveys

Figure 4.

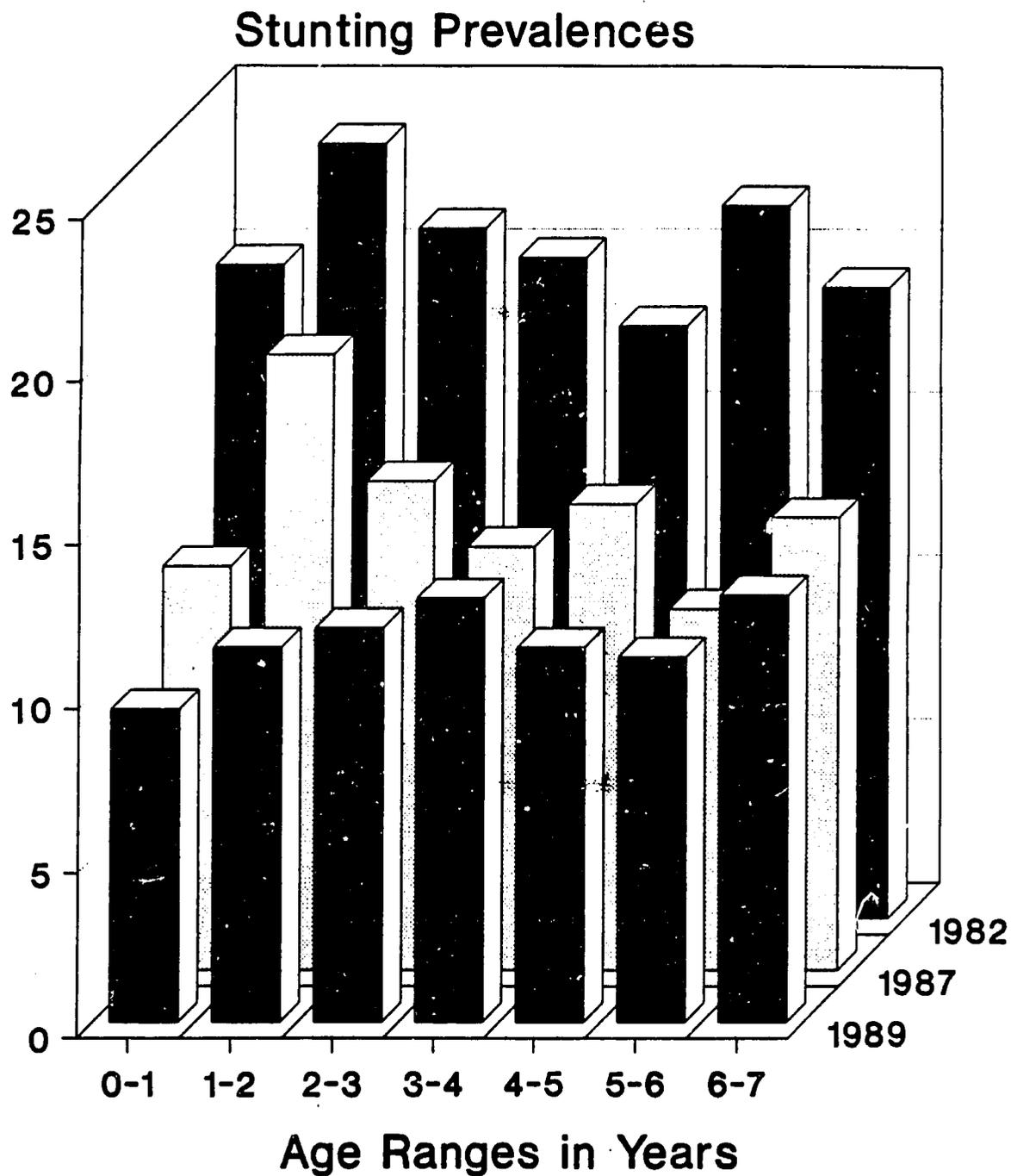
## Prevalence of Stunting By Age Changes 1982 to 1989 - Philippines



Data from FNRI surveys (none for 1978)

Figure 4.

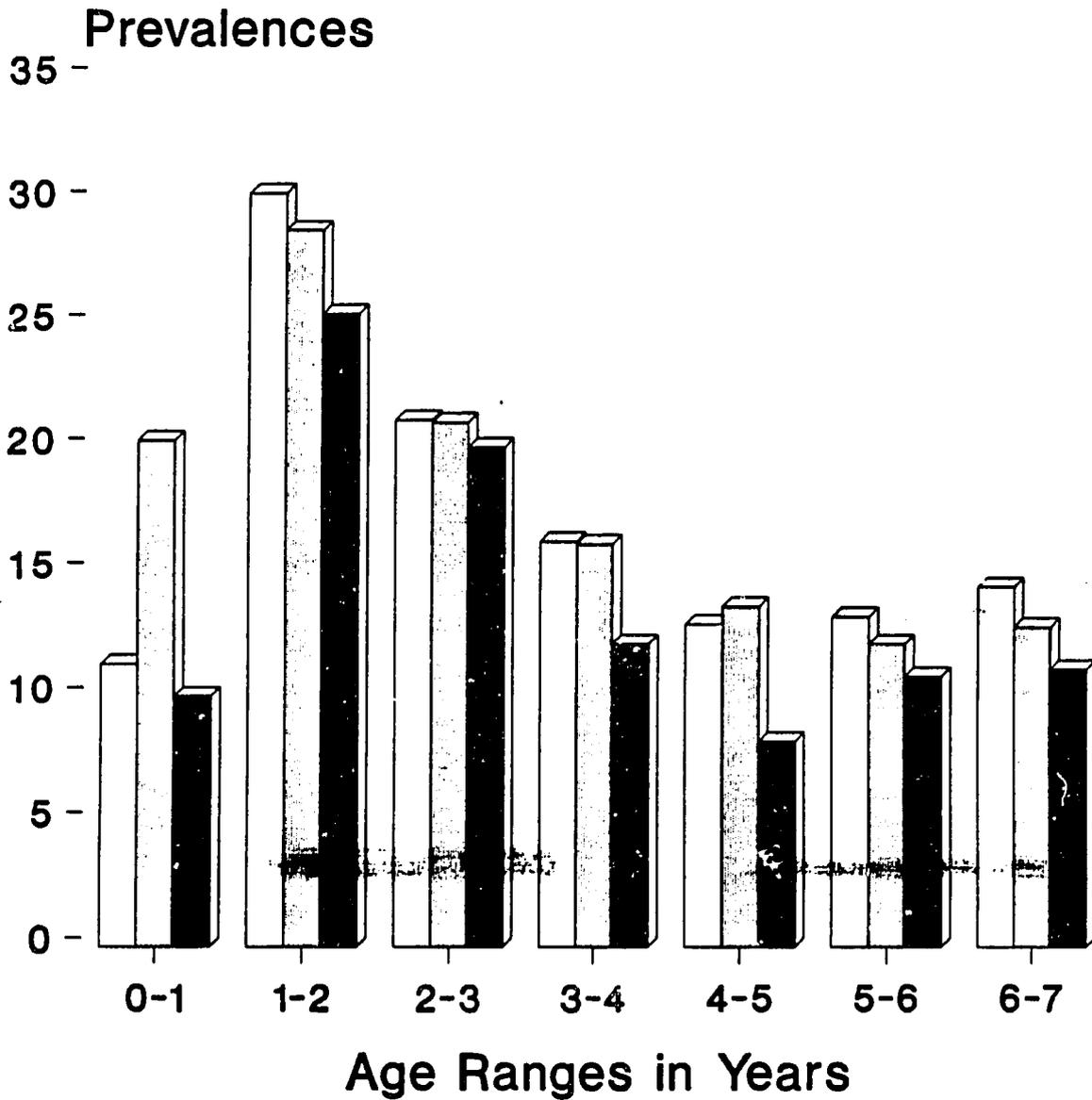
# Prevalence of Stunting by Age Changes 1982 to 1989 - Philippines



From FNRI Surveys (no data for 1978)

Figure 4.

## Prevalence of Stunting By Age Changes 1982 to 1989 - Philippines

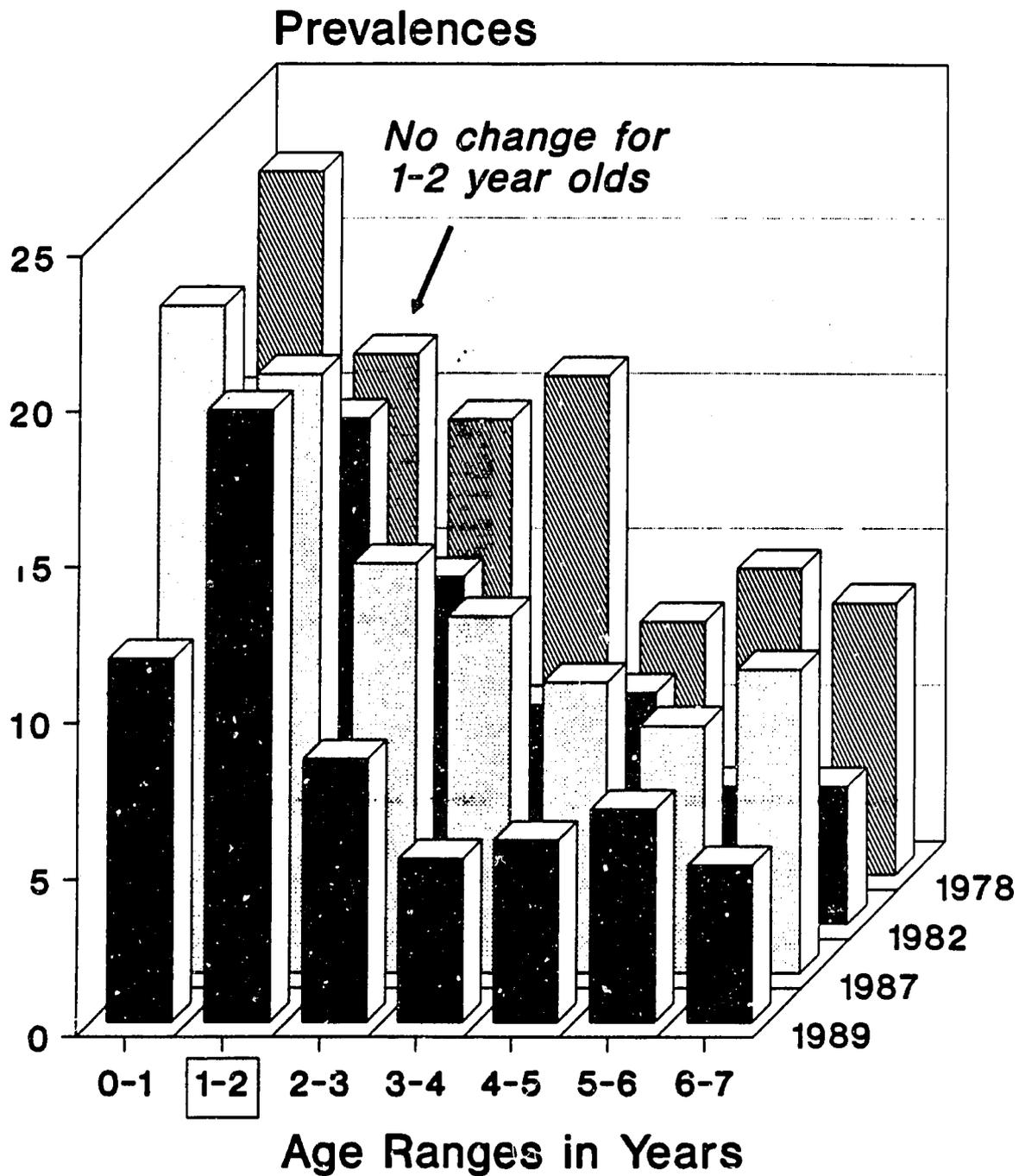


Data from FNRI surveys (none for 1978)

42

Figure 5.

## Prevalence of Wasting By Age Changes 1978 to 1989 - Philippines

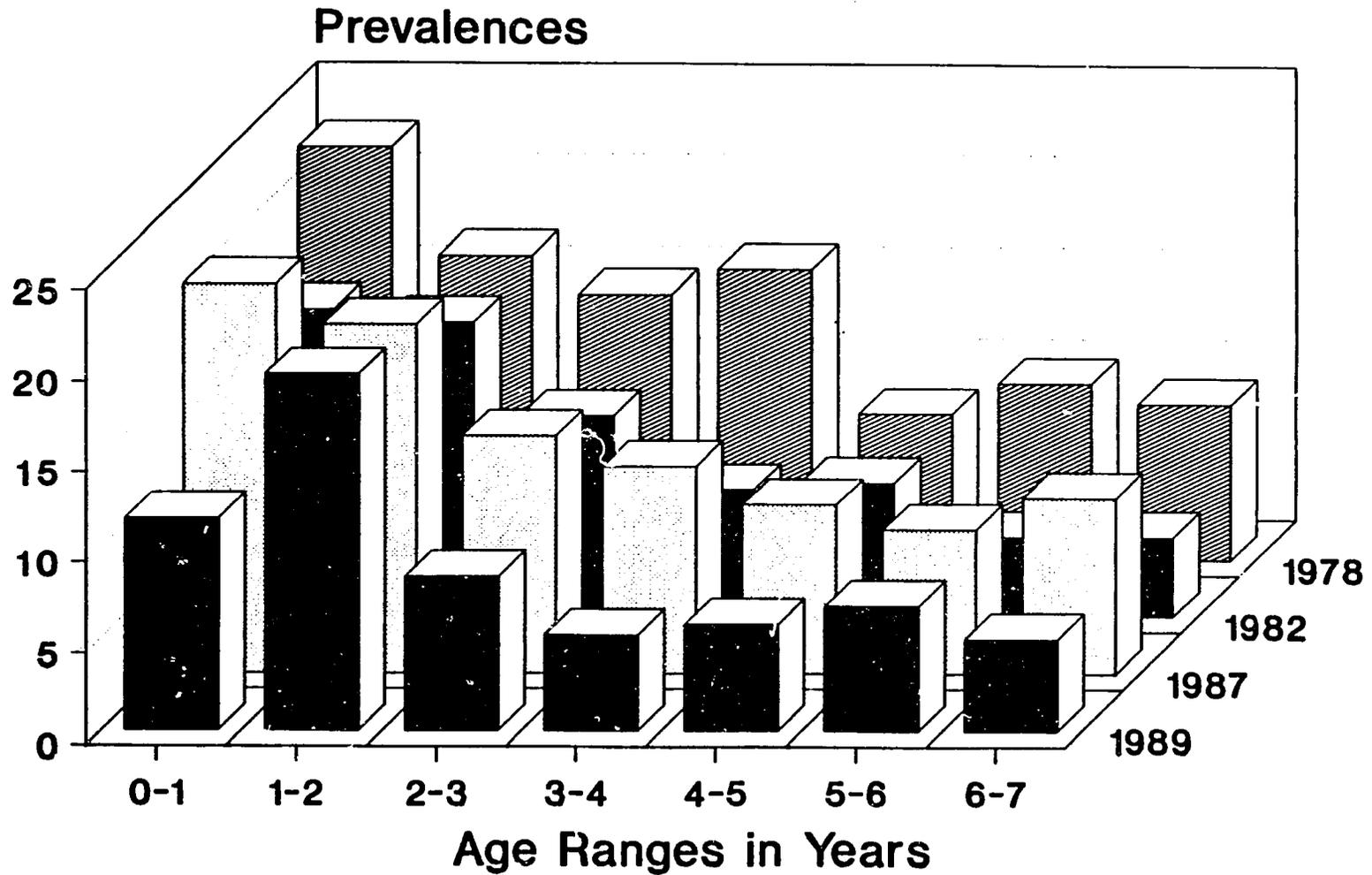


Data from FNRI National Surveys

c 4/1

Figure 5

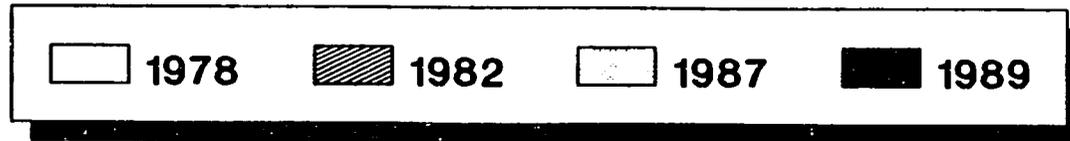
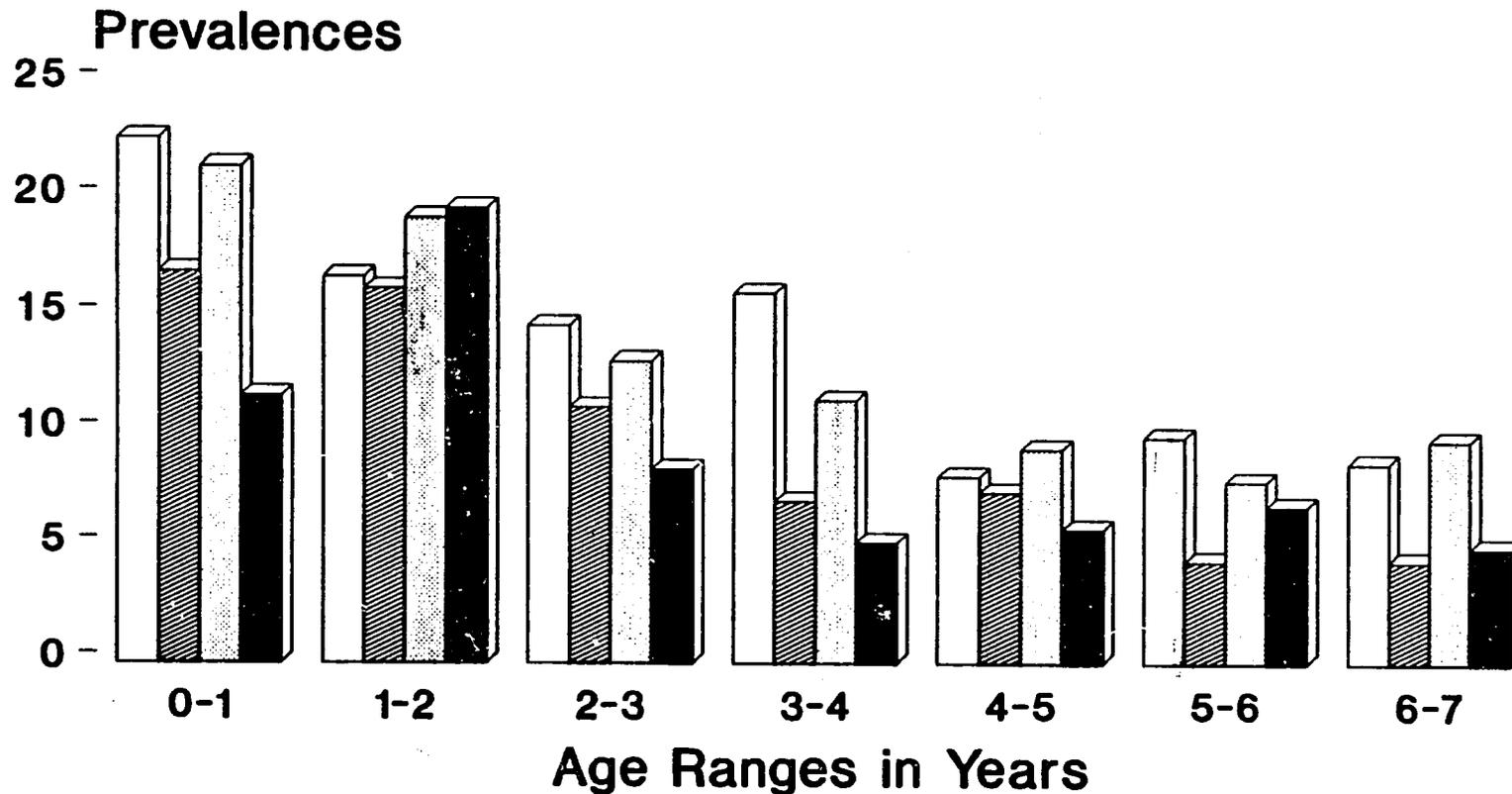
# Prevalence of Wasting By Age Changes 1978 to 1989 - Philippines



Data from FNRI National Surveys

Figure 5.

## Prevalence of Wasting By Age Changes 1978 to 1989 - Philippines

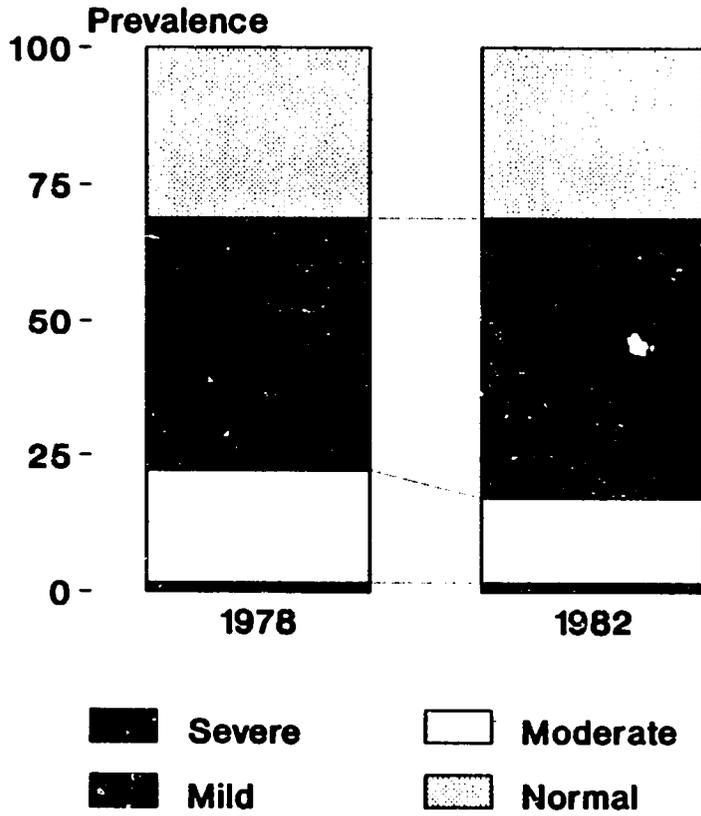


Data from FNRI National Surveys

7/91

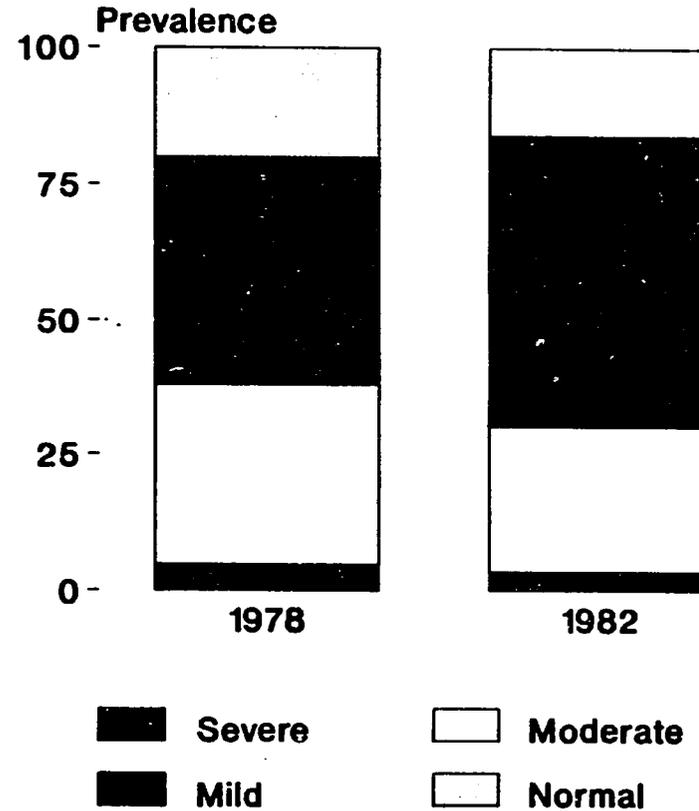
**Figure 6**

**Prevalence Underweight - 1978/1982  
Children 0 to 6 years - Philippines**



Data from FNRI National Surveys

**Prevalence Underweight - 1978/1982  
Children 1 to 2 years - Philippines**

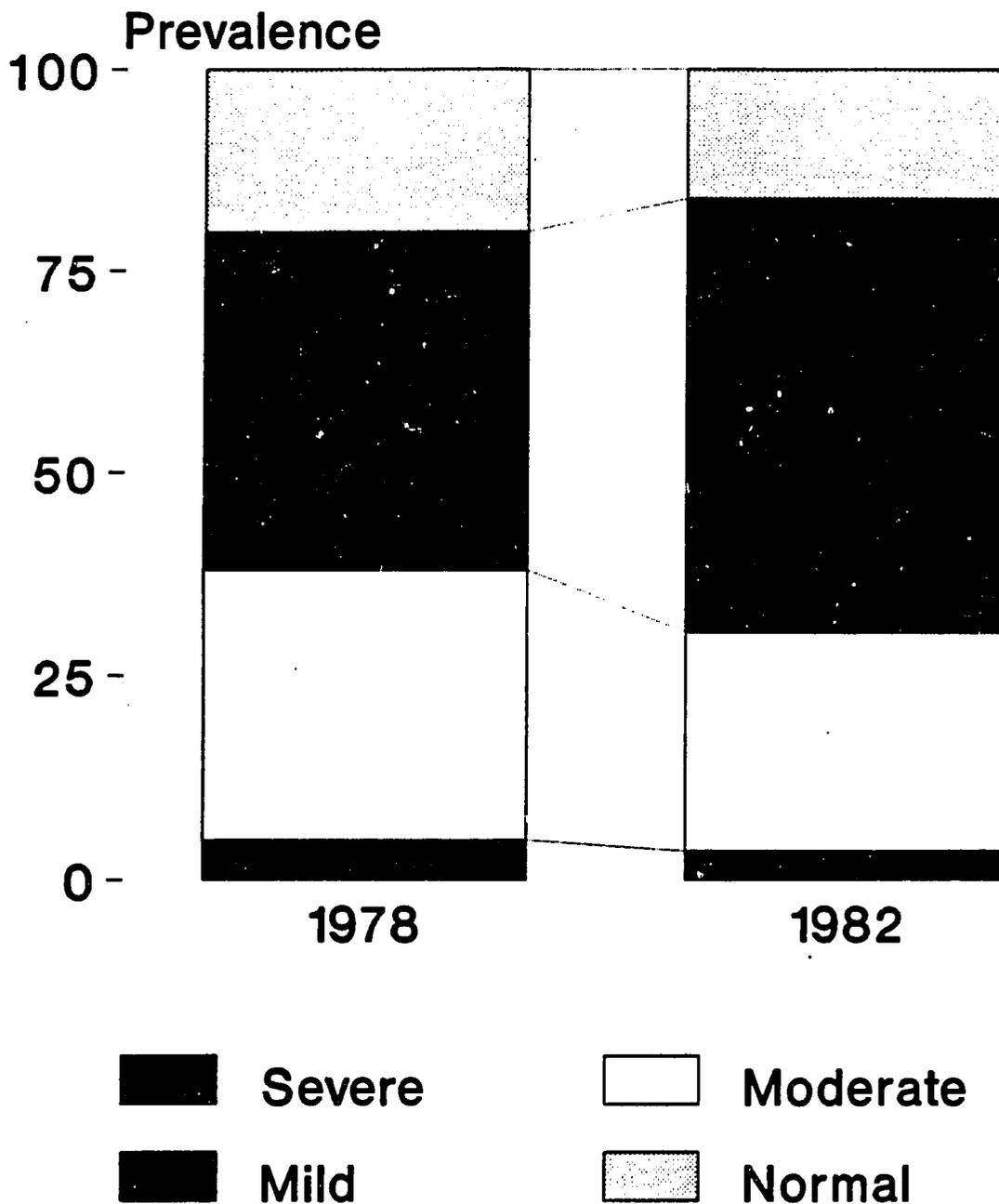


Data from FNRI National Surveys

47

Figure 6.

# Prevalence Underweight - 1978/1982 Children 1 to 2 years - Philippines

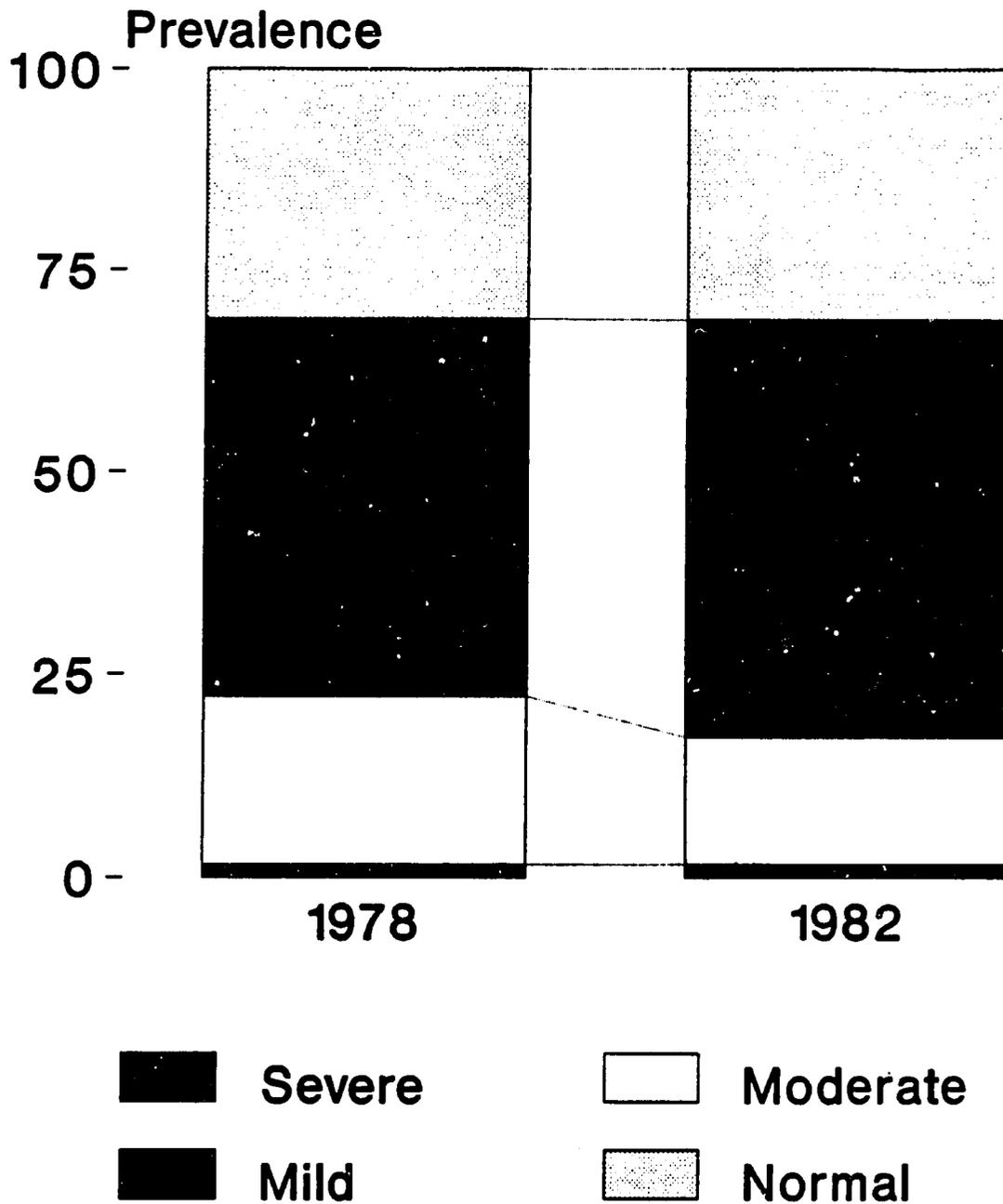


Data from FNRI National Surveys

43

Figure 6.

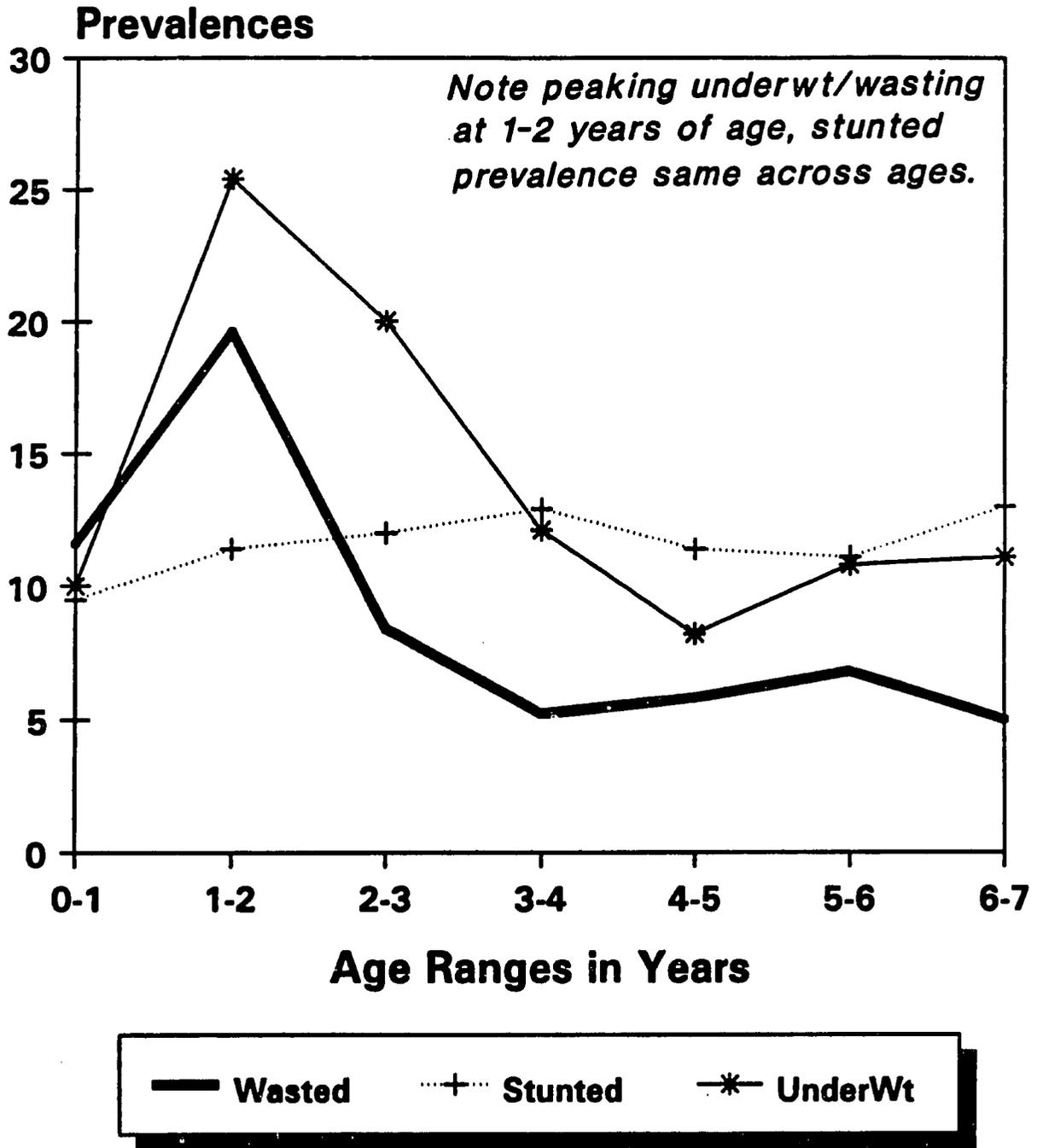
## Prevalence Underweight - 1978/1982 Children 0 to 6 years - Philippines



Data from FNRI National Surveys

Figure 7.

## Prevalence of Undernutrition By Age Children 0-6 years - Philippines

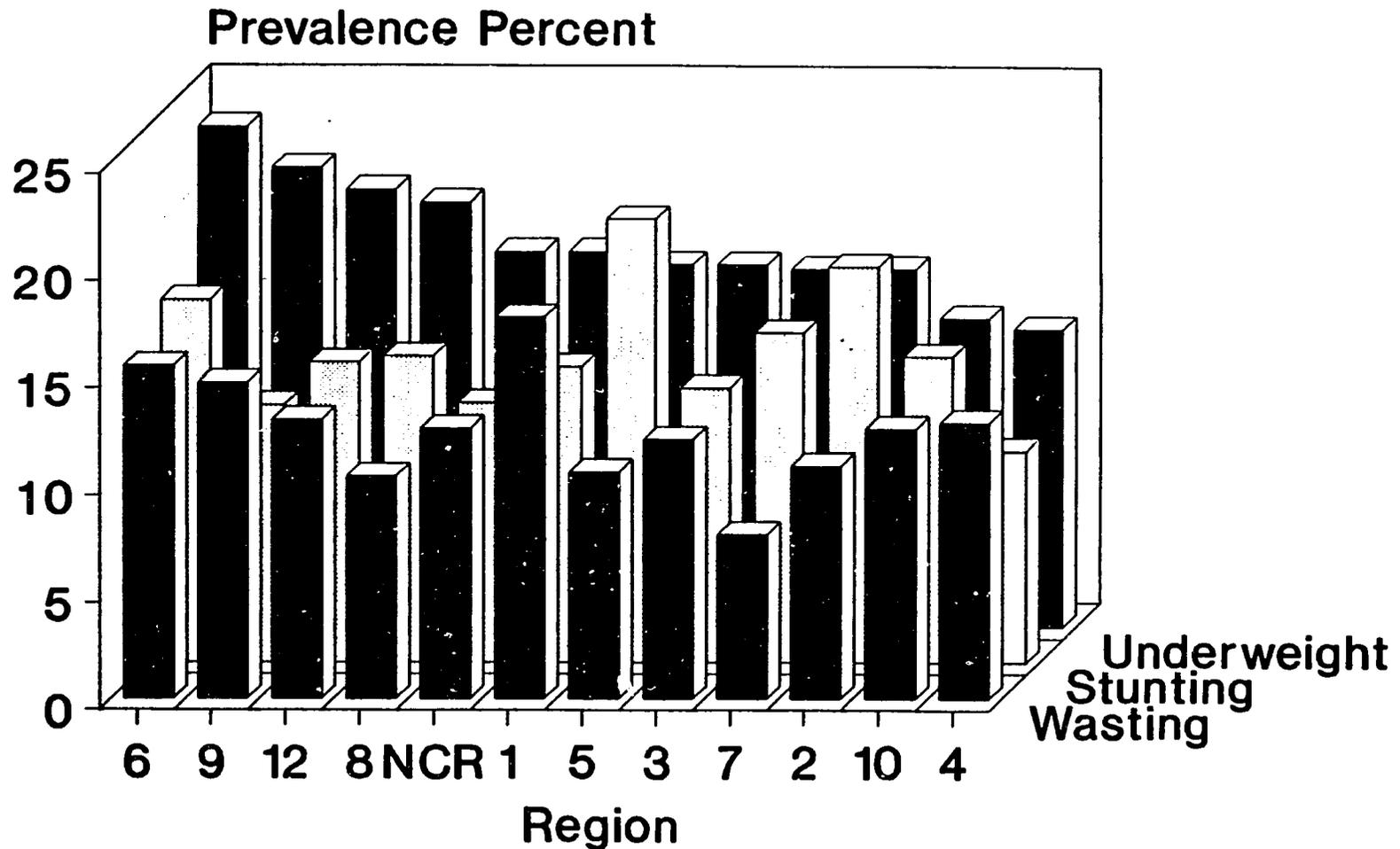


Data from FNRI 1989 National Survey

NS/DOH-CSP/MSH/AID 1991

Figure 8.

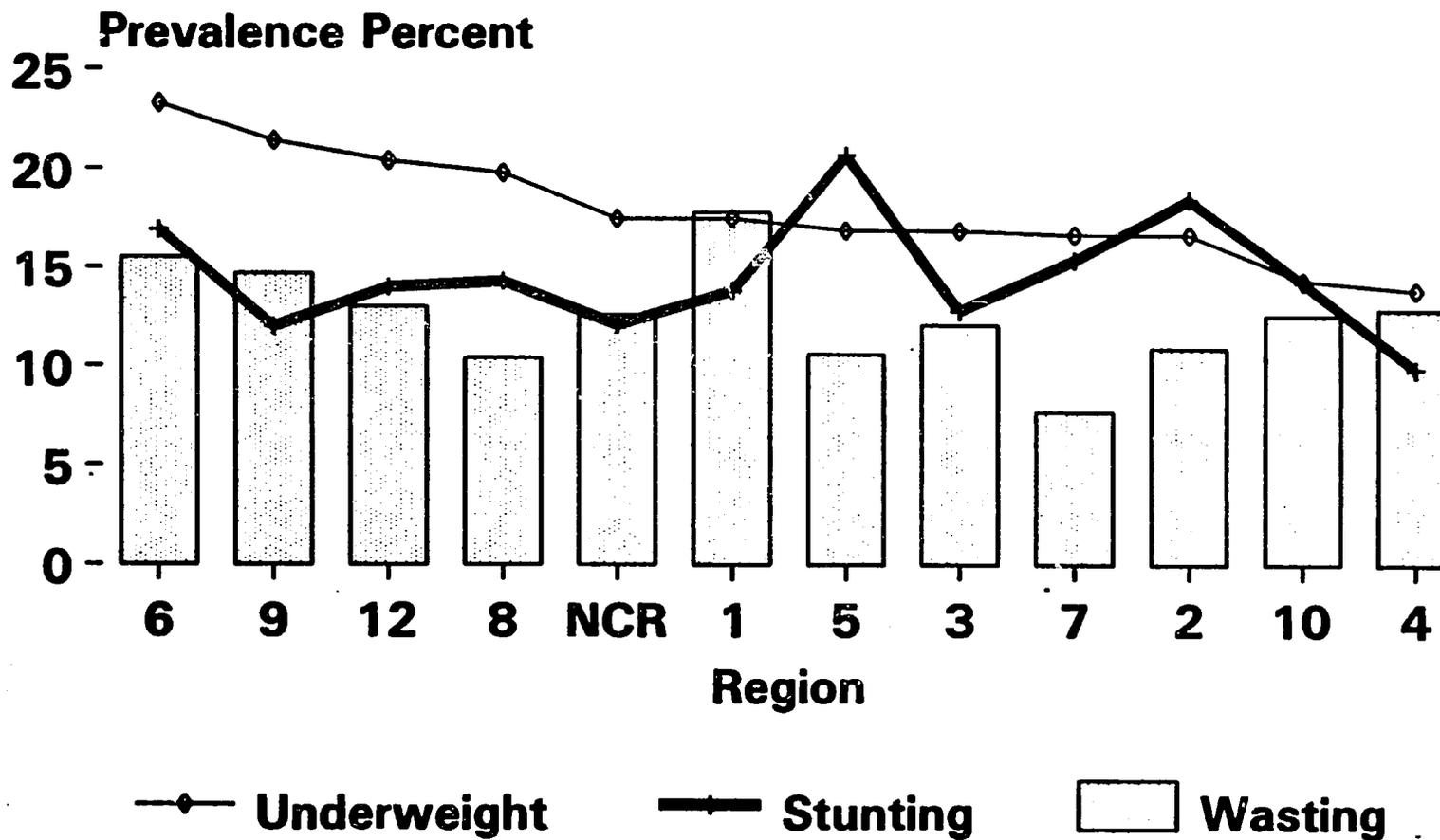
## Nutritional Status by Region-Philippines Comparison of Indicators



Sorted by Underweight Prevalence  
Data from 1987 FNRI Survey (0-6 yrs)

Figure 8 :

## Nutritional Status by Region-Philippines Comparison of Indicators



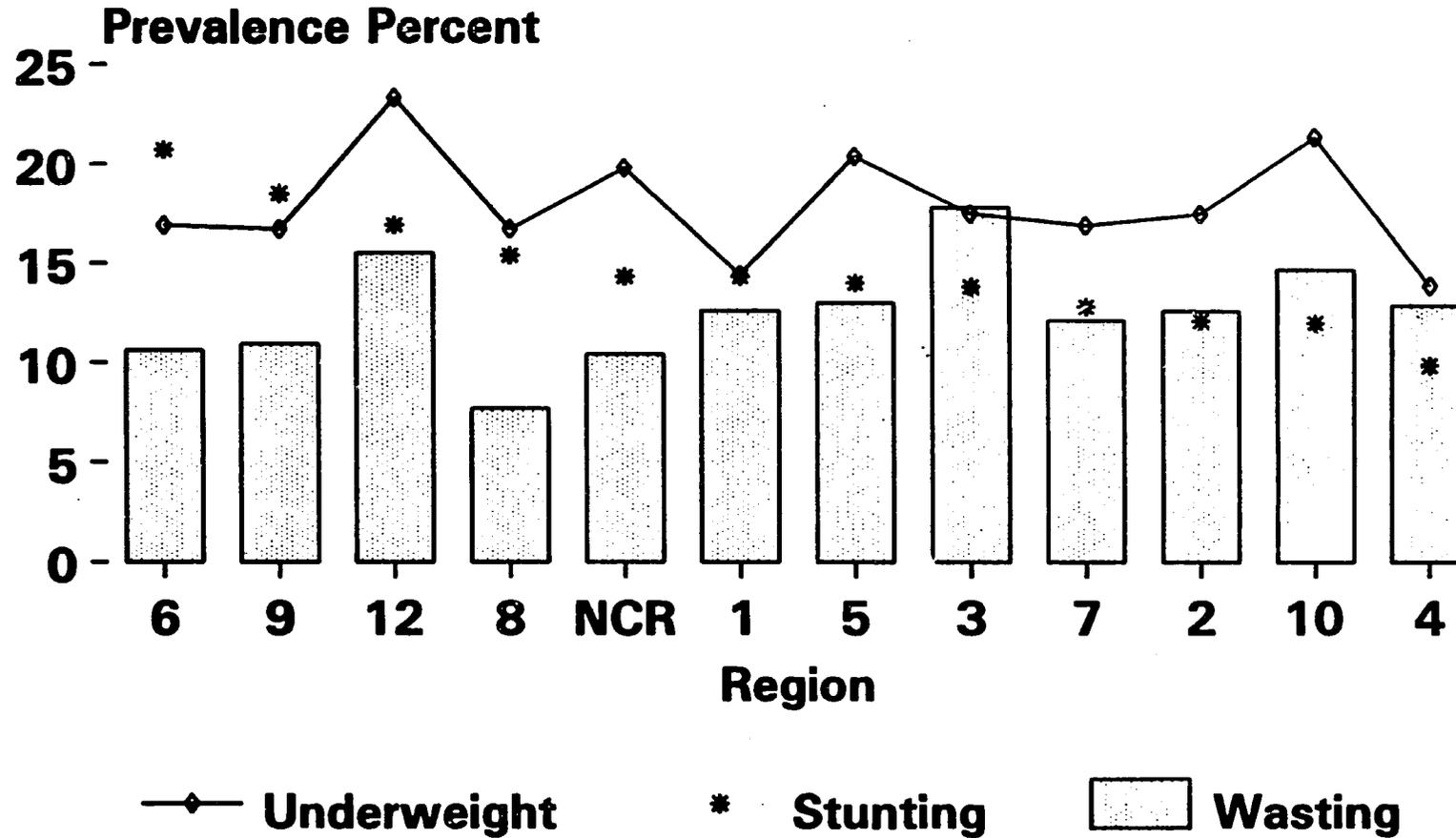
Sorted by Underweight Prevalence  
Data from 1987 FNRI Survey (0-6 yrs)

NS/DOH-CSP/MSH/AID 1991

52

Figure 8

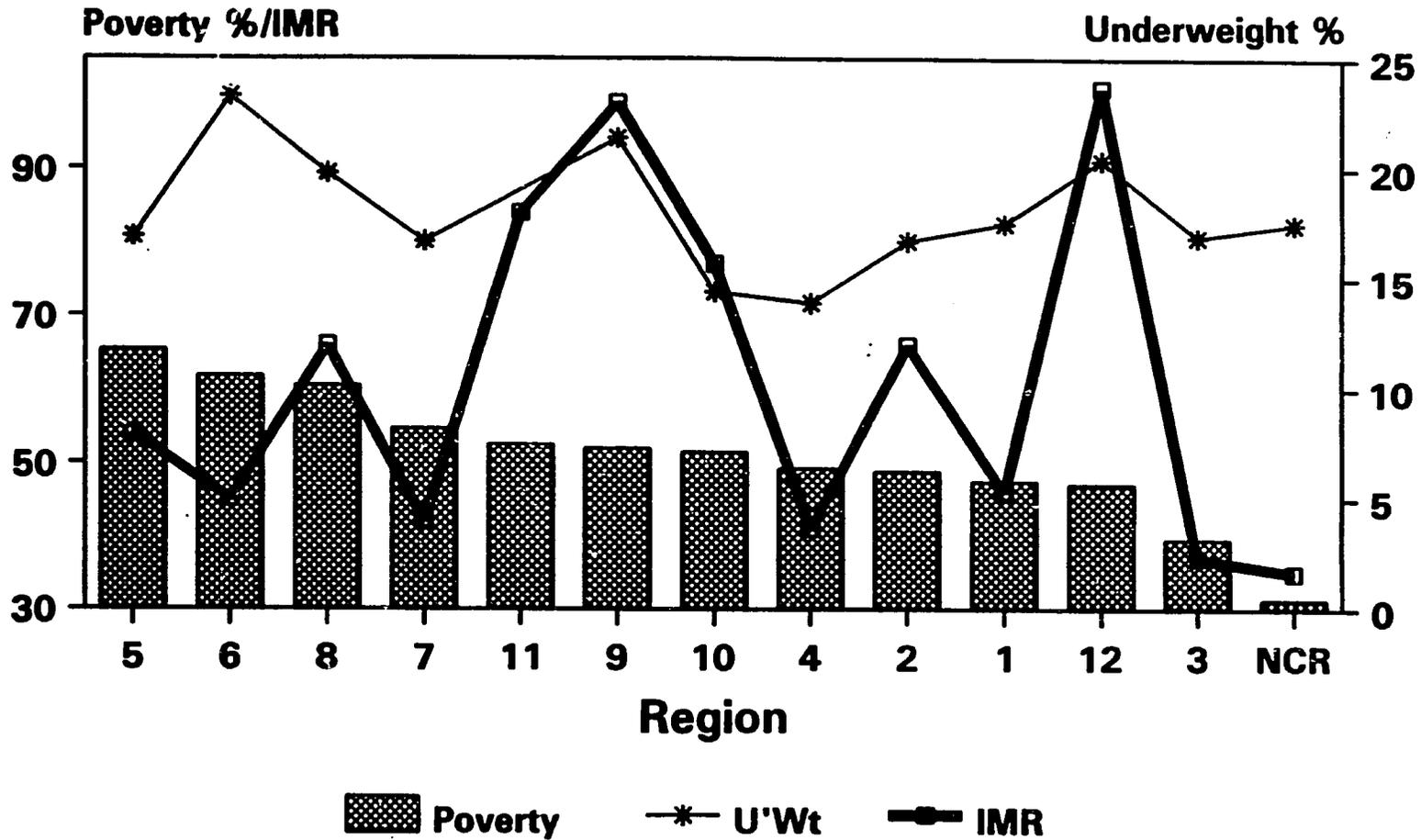
## Nutritional Status by Region-Philippines Comparison of Indicators



Sorted by Stunting Prevalence  
Data from 1987 FNRI Survey (0-6 yrs)

Figure 9.

## Poverty, Undernutrition and IMR Philippines By Region - 1988/9

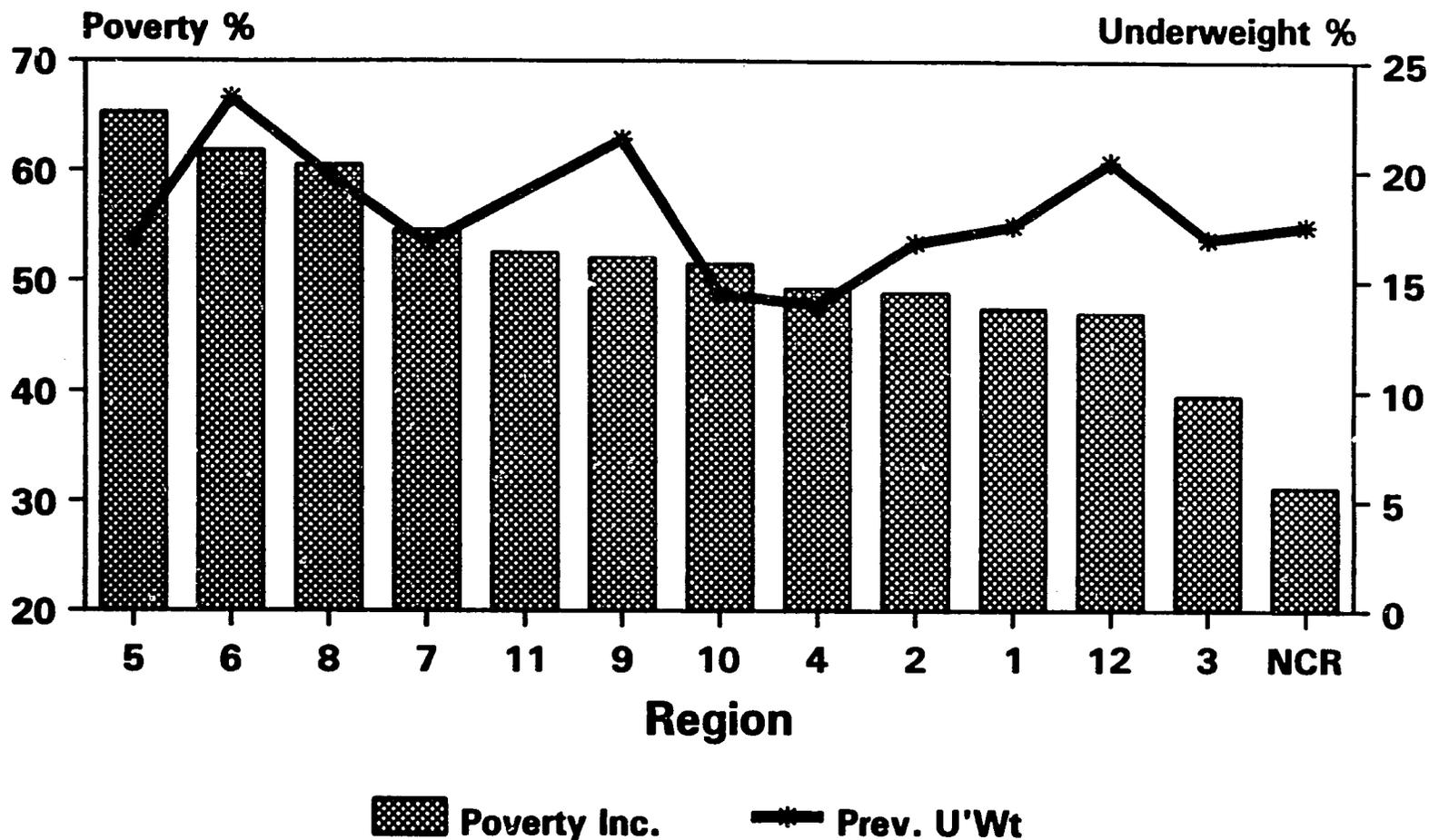


Poverty Prevalence- NSO FIES 1988  
Prevalence 2/3 degree - FNRI 1989

off

Figure 9.

## Poverty and Undernutrition - Philippines By Region - 1988/9



Poverty Prevalence- NSO FIES 1988  
Prevalence 2/3 degree - FNRI 1989

NS/DOH-CSP/MSH/AID 1991

**REPORT ON CONSULTANCY TO DEPARTMENT OF HEALTH,  
NUTRITION SERVICE,  
GOVERNMENT OF PHILIPPINES.**

**A. Zerfas December 21, 1990**

**Appended earlier report to complement that of  
February 3, 1991**

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## Introduction

The Philippine Child Survival Program has been established to support the various Health Services to reduce mortality and morbidity in the Philippines, with special reference to mothers and children under five years, particularly in poorer areas of the country. Its purpose is to support the GOP's updated Development Plan health priorities for 1988-1992: the provision of basic quality health services to the poor (where the highest rates of problems occur), vigorous implementation of promotive and preventive health measures and increased budgetary resources. Included among the objectives are a reduction of IMR from 52.9 in 1988 to 47.8 per 1000 live births by 1992 and a decrease in the percentage of pre-schoolers of mod/severe Protein-energy malnutrition (using local reference weight-for-age) from 18.5 to 14.2 percent.

USAID/Manila recognizes that external funding support is required to help GOP tide over a difficult budgetary period for its health reform programs (e.g. increased allocations to this sector as well as to preventive services) as well as improved efficiency of existing services and increased use of community, commercial and non-profit resources.

The policy agenda of the CSP focuses on changes to:

1. Improve targeting to high risk groups and underserved areas based on epidemiologically-based planning and sustainable preventive delivery systems
2. Increase the demand for services (e.g. through social marketing, information and education)
3. Decentralization to improve resources at local levels, to support IPHO's in direct funding (from the Department of Budget and Management), planning and implementation
4. Integration of strategies and services, with special reference for the CSP to family planning, MCH and Nutrition, using the Assistant Secretary as coordinator of donor assistance.

USAID has contracted the services of Management Sciences for Health (MSH) to provide technical assistance for the CSP in four major areas: health information system development; epidemiologically-based planning; social marketing/IEC; and health care financing. MSH, under guidance from DOH and USAID is and will hire staff (both locally and as required from overseas) and support services for these areas.

GOP and USAID have agreed on specific strategies, policy objectives, performance benchmarks and target dates over the three year course of the project. The current PHC and Healthcom I TA support will be phased into the CSP.

The CSP is inter-linked by the DOH (Department of Health) with the Third Philippine Health Development Project launched in 1989, with funding assistance from the World Bank. This project is to support DOH in policy development and research in health and nutrition; strengthen institutional capacity and programs and focus on priority areas.

### Purpose of this consultancy

In November 1990, it was recognized by GOP and USAID that the Nutrition component in CSP required strengthening. One specific example was the lack of a plan acceptable to the DOH CSP Coordinator and a corresponding absence of suitable benchmarks in nutrition, which could monitor progress in objectives. For this purpose, the use of a local consultant (Dr. Solon, NCP) was first explored. Dr. Solon indicated that he would prefer NCP itself to be used to support the Nutrition Service (meeting with Solons, Mrs Ramos and myself - Dec 13). Hence the project is being developed by NCP with funding from USAID to strengthen community-based nutrition approaches - "Community-based Management of Nutrition and Health Program" (emphasizing assessment and local targeting) in CSP, to be reviewed by DOH. A specific purpose of this project is to help develop a "grass-roots" approach to health-related nutritional planning and implementation.

Within the DOH, a Physician - Dr. Bayugo is being transferred from the Office of Public Health Services to head the Standards Development and Research Division of the Nutrition Service and work with the Director - Mrs. Ramos. As there was still a need for a consultant to work within the Nutrition Service, I was hired on a short term for this purpose.

### Scope of Work<sup>1</sup>

This is phased over two periods - Visit 1 for three weeks in December 1990 and Visit 2 (if requested) for five weeks over January to February 1991<sup>2</sup>.

#### Visit 1.

1. To review, with DOH Nutrition Service (NS) counterparts and local consultants, information regarding nutrition issues, problems and programs in the Philippines, especially as they impact on children under five years and reproductive age women (high-risk groups)<sup>3</sup>.
2. To review, together with Filipino counterparts, available data concerning nutrition epidemiology in the Philippines, especially the most important nutrition-related factors resulting in high levels of preventable morbidity and mortality in high risk groups.
3. To identify those specific nutrition issue/problems which the DOH NS can develop targeted interventions resulting in the greatest possible impact upon morbidity and mortality, given available resources.
4. To select appropriate and feasible parameters and indicators to allow the DOH NS to monitor and achieve program goals and targets, which are quantifiable and make a significant impact on morbidity and mortality.
5. To assist the DOH NS with a Consultative Workshop where consensus can be reached regarding the priority targeted nutrition programs for at risk groups, including appropriate parameters, indicators, goals and targets.

#### Visit 2. (to be confirmed)

1. To develop, with DOH NS counterparts and local consultants, nutrition strategies (based on the consensus in the prior workshop) which if implemented, can have a major impact upon the nutritional status of at-risk groups.
2. To develop, with Filipino counterparts, an operational plan for implementation of the CSP Nutrition Strategy.
3. To assist the DOH NS with a consultative workshop for consensus of the above strategy and plan.

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<sup>1</sup> During the end of my first visit, AID/Manila had indicated that the scope would be modified, because of the potentially enhanced role of the Nutrition Center of the Philippines.

<sup>2</sup> The second visit was postponed until further notice, at least partly due to policy of no consultants allowed to visit during the Persian Gulf War and its aftermath.

<sup>3</sup> The National Perspective (NNC presentation to The President and Cabinet, Sept. 26, 1990) - Two million (20%) of pre-school population are malnourished, 70% of infants are anaemic and Vitamin A deficiency endemic among pre-schoolers; malnutrition responsible for "the lives of thousands of our children" every year. There has been an improvement in the past decade with a more dramatic decrease from 1987-89, but vigilance is now more important than ever because of the country's impending increased economic problems, with 30% of municipalities which are nutritionally depressed.

The NNC recommends a multi-pronged approach to 1992 to reach needy families and municipalities: including DA - Family food production 10,000 Barangays and 600,000 households (Ps50M); DECS TCP program to elementary schools (31,300 cost P235M) to improve nutritional information and practices; DSWD to target 200,000 families with malnourished children; DOST for local food processing; DLE to support especially, women workers, child care centers and use the cost of a nutritionally adequate meal for setting the minimum wage; DTI to benefit nutritionally at-risk areas; DLG to strengthen Nutritional Committees within local government; NEDA to introduce nutritional concerns and support resources for nutrition; DBM for funds. The DOH should implement a nation-wide program to control Vitamin A deficiency, anaemia and goiter by 1992 (P320M).

4. To recommend to DOH how the management of the NS can be integrated and improved (e.g. with other services such as MCH, responsible for breast feeding and growth monitoring)
5. To complete, before leaving the Philippines, a draft report covering both visits.

#### Activities during Visit 1 (Mon Dec 3 - 22)

- Dec 3 - Briefing by Steve Solter, MSH Team Leader
  - Meeting with NCP - Dr. Solon, Henri Briones  
Work of NCP, relationship with DOH, discussion of NCP "Modeling Project with DOH NS" - I was unclear about my role in this.
  - Meeting with DOH NS (Mrs. Ramos, Evora, Dr. Bayugo and Solter) - Discuss terms of reference and schedules; emphasis on the need to develop an appropriate nutrition plan and benchmarks for CSP
- Dec 3 to 6 - Attended Consultative Workshop at Silang, Cavite for Nutritionist-Dietitians of DOH NS on "Integrated Approach : A Key to Effective Nutrition Program Implementation"
  - Also met with Dr. Roxas (Head OPHS), Dr. Aranas and Gregario, Mr. Gamboa (Head, Office for Management Services), Marichi
- Dec 6 - Visited with Romas, Bayugo, Regional and Provincial Nutritionist GMA Rural Health Unit, Cavite. Reviewed local services, problems, data collection and use (e.g. for growth monitoring).
- Dec 7 - Briefing USAID - Dr. Voulgaropolous, Moser, Marichi, Capul, Solter. Clarification of scope of work and terms of reference.
  - Attended PSDN's Convention with Mrs. Ramos on "Research Utilization for a more effective Nutrition Service Delivery"  
Discussed with her the outcome of USAID briefing  
Met with Mrs Florencio and other Nutritionists to discuss nutritional problems and research approaches
  - Attended USAID debriefing for EPI and CDD.
- Dec 8 - Convention with Mrs. Ramos
- Dec 10 - DOH NS - Review of NS functions and work
  - Arrange meetings with MCH, FNRI, CARE, NNC, UP
  - Meeting (with Mrs. Ramos) with FNRI (Assist. Director) [Dr. Florentino was overseas] with CARE (Stanley Dunn and Staff) to discuss FAD and restructuring
- Dec 11 - DOH NS
  - Meeting with Dr. Roxas, with Mrs. Ramos and Dr. Bayugo
- Dec 12 - DOH NS
  - Meeting Solter, Ramos, Zervas of CSP goals, role of MSH, nutrition service plan and benchmarks
- Dec 13 - Meeting NNC - Mrs Ramos, Mrs Bayani
  - NCP - Dr. and Mrs. Solon, H. Briones, Mrs. Ramos  
General areas of coordination activities NCP and DOH NS
  - NCP/Marichi/Zervas  
Discussion of NCP Nutrition/Health Project - to be revised and re-submitted to USAID/DOH
- Dec 14 - Interim debriefing USAID - Solter, Capul, Moser, Marichi
  - Meeting UP-CHE Dr. Florencio with Mrs. Ramos  
Areas of further research
- Dec 17 - MCH - Meeting with program personnel in breast feeding, maternal services, ARI
  - DOH NS
- Dec 18 - DOH NS - Review of Nutrition Plan/policies
  - Meeting - M. Tagiawala, Ramos, Solter
  - Revision of plan
- Dec 19 - Discussion with HKI re Vitamin A directions
- and 20 - Assist in NS plan preparation
  - Visit to Balangas for DOH presentations to CSP Coordinator
- Dec 21 - Debriefing USAID - Capul, Marichi, Solter
  - End of year activities: PHSO, WHO, NS, MCH.
- Dec 22 - Revision of report

#### Background - Nutrition Service

## Background - Nutrition Service

The Nutrition Service of the DOH (NS) is the major GOP agency attending to health-related nutritional problems. It consists of approximately 25 nutritionist-Dietitians (ND's) centrally, as well as one for each of the regional and provincial offices. It also has four medical specialists and two health education officers centrally. There are apparently no nutritionists posted to other services in the DOH.

The central office has a Director, with two division chiefs; one (Linda Evora) for planning (planning, policies, project development/ information, monitoring-evaluation units) and special programs (food assistance/training and education); the other for "standards, development and research". This latter division has recently been headed by Dr. Bayugo and deals with assessment, has a special focus on the micronutrient programs and GMP. There is overlap in functions between the two units.

The Director, Mrs. Ramos, has had long-standing experience in the NS and headed the service in 1988. As well as heading the service functions, she links it within the DOH (e.g. with MCH, Family Planning and support sectors, such as Health Information and Health Education) and outside the DOH with other agencies, such as UP, Care, HKI, PRICOR, SEAMIC, UNICEF and DECS, where there is a direct linkage, as well as indirectly with DA, NEDA and DECS, for example through Food and Nutrition Program, coordinated by the National Nutrition Council.

The Regional and Provincial Nutritionists are supported by their respective health offices as well as being linked to the nutritional policies, plans, guidelines and programs as developed centrally. Most of their support occurs centrally, although some field nutritionists acquire added support and initiatives from their own offices. In addition, there are other nutritionists attached to Medical Centers, Hospitals, City Health Offices and certain District Health Offices.

The NS is one of 10 services responsible to the Undersecretary, OPHS. In terms of the PHDP and CSP further support is being developed through the DCH infrastructure, with the Head, Office of Chief of Staff as coordinator.

The specific responsibilities of the service are linked to four major programs - Malnutrition Rehabilitation (MRP), Vitamin A deficiency (VAD), Iodine deficiency (IDD) and Iron deficiency anaemia (IDA). The MRP is in part the result of a mandate to attend to severely malnourished young children. An outline of a plan presented to the recent workshop in Batangas on PHDP/CSP is included.

The regular budget of the NS is relatively lean and is unlikely to increase much apart from that which could become available through the PHDP and CSP. In 1989, of a total of P 34.55 million, 27.5 came from the Targeted Food Aid Distribution (TFAD), P 6.1 from Micronutrient distribution related activities and the remainder P 0.95 (or 3%) for administration and other activities. It was remarked that none was available for monitoring/evaluation, operations research and IEC, although since then relatively small amounts have become available from UNICEF and WHO principally in relation to micronutrients and training.

## Nutrition/health Strategies

Strategies should consider certain concepts - what are the problems and their basic causes, what can be done, how and by whom; as well as how to monitor progress. The problems have been indicated and form the rationale of the NS programs - PEM, VAD, IDD and IDA. PEM has the greatest need but is the most difficult to control; in milder forms it is not readily recognized; VAD with mass distribution is probably the "easiest" to do, but its rationale (reduction of morbidity and mortality) is not yet supported in this country and the overt consequences - blindness in children, is of unknown extent and apparently unrecognized; IDD is endemic, but relatively difficult to control due to lack of apparent concern, especially in the more remote hyperendemic areas. Its subclinical mental consequences on young children and effect on increasing stillbirths has only recently been recognized by agencies. IDA has the highest prevalence and has effects on physical productivity, but unless severe, it is not clearly recognized as a major health concern. Of the micronutrients, it is the most difficult to "control", requiring daily tablets. In all three micronutrient deficiencies, control by fortification, especially with iodine as the most widely used, should be promoted, if indicated.

2. Inadequate feeding patterns and amounts by at-risk groups. Especially important is the pregnant/lactating woman, appropriate breast feeding in infants and weaning foods based on staples and oil in the young
3. Morbidity and parasites

The DOH should focus its major attention on items 2 and 3, and where indicated, orient the major agencies dealing with 1. to the most needy nutritionally. The concept of promotive, preventive and curative may help to understand the purpose of each program.

To determine the progress of individual children over time, we require at least two measures (separate by some months). As Grade 3 children (especially those under 2-3 years are more likely to die than those with more normal levels, a useful indicator would be the proportion of Gr 3 who improved, as well as the preventive factor—those who did not progress to grade 3. [ Whether these effects are due to the program is an issue, as it is almost impossible to have suitable controls, apart from later born siblings] and from Grade 0/1 to 2, also those improving from Gr 2 to 1 or higher. Such information is best collected during the monitoring phase of the program. An IEC component for improving practices as well as the effect of improving coverage for MCH services could be included (as well as the number of young children and adults dewormed). This is relevant for the phase-over period, where available funds could be used to support home food production.

#### Approach to promotion, prevention and treatment

Condition	Promotive	Preventive		Curative
		Primary (cause)	Secondary	
PEM	IEC	Illness Parasites Food Avail Practices	Screening Census (OPT) GM Survey	Supplemt Gr3
Vit A (Blindness)	IEC	Food intake morbidity	Screening Census (OPT) Surveillance	
(mortality)		F* Mass treat F*	Treat at-risk	Treat case
IDD	IEC	Goitrogens F*	as Vit A	Treat case
IDA	IEC	Morbidity Parasites Food intake F*	as Vit A	Treat case
F* fortify				

The rationale behind Vit A supplementation will depend on whether it is used to prevent blindness or as a more general tool in perhaps reducing mortality. In the former, only those with a risk for xerophthalmia (measles, PEM) need be supplemented, whereas in the latter, a much wider population based would be used. This is illustrated, by the selection of criteria expected to occur frequently (diarrhea, ARI), so that the total numbers given prevention against mortality risk almost amounts to the whole young child population.

With IDD, we treat cases, or use screening/survey techniques to identify those with milder disease. IDD requires a different strategy, because of the often focal nature for the condition.

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With IDA, a major concern might be to detect or prevent severe anaemia in pregnant women particularly, who are at risk of dying from postpartum haemorrhage. Screening techniques could be tested for clinical signs, confirmed by Hgb for this purpose. Iron/folate is an integral part of MCH services, but the NS could assist with IEC and specific deworming, where hookworm (or roundworm) prevalence is high (as shown by the 1987 survey).

### **Comprehensive nutrition package**

This package consists of assessment, analysis and necessary action, together with targeted IEC for a mother and young child(ren) throughout a cycle from one pregnancy to the next.

(Selection to be reviewed- note almost all are components of CSP  
[with acknowledgement to R. Klemm])

Pregnancy-height to assess risk of difficult labor

- check on weight change
- qualitative diet - e.g. eating same or less than before pregnant
- emphasize importance of exclusive breast feeding
- iron and iodine supp when indicated

Birth weight- to determine if at-risk baby

Post-partum- colostrum and exc BF for baby to 4 months

- promote weaning foods by 4-6 months
- Check weight of mother

- GMP - combine where possible with EPI
- continue and use as a marker for child's progress
  - check particularly when illness

4-6 months- BF and added foods

7-12 months- VAC supplement if indicated

- Continue to review feeding and GMP progress
- Feed extra after ARI, measles, diarrhea

1-3 years- Weigh all at OPT for targeting and review

- Deworm mother and child
- Family/child support for those with Grade 3
- Continue GMP 1-3 monthly depending on progress
- Counseling, supplementation as required (clarify)

Next pregnancy - review birth interval to assess risk to mother/ last child

### **Developing a coherent potentially effective plan for the Nutrition Service**

*[[This section focuses more on the "breakthrough" requirements and not enough on the other key issues in NS and DOH, which is covered more fully in my revised report of Feb 5, 1991]]*

In order to satisfy requirements for funding from the PHDP/CSP program a plan must be developed which includes as a key element in at least one area sufficient evidence to show "a breakthrough" by three years. The perceptions and presentations of the Nutrition Service have to be oriented and focused in this direction. The current "involvement" with other agencies (e.g. NNC) has to be viewed in this context, although these could be supportive.

The concerns of OPHS are not inconsistent with this approach, They are broader-based, but should include the CSP requirement. The case for nutrition being "more difficult" at this stage will not carry much weight. For the CSP, funding and resources are available from DOH, providing the plan is suitable. Hence specific budgetary considerations are secondary in the sense that they should not initially constrain the plan. (Obviously, they have to be reasonable and justified).

A major problem with the recent presentation to CSP at Batangas was the lack of focus, cohesion and clarity to specific objectives and goals. One reason was that a "shopping list" was prepared for each program within the

To show "a breakthrough" we have to demonstrate that specific services or materials (e.g. micronutrients) were received by the clients so that:

1. Changes were demonstrated or perhaps less convincing
2. There is sufficient evidence to show that changes would occur

Obviously mortality and nutritional status are the key "impact" indicators, as well as goiter, anaemia and Vit A signs. Other acceptable indicators would include: demonstrated changes in feeding practices of mothers, babies (BF), infants (6-11 months) and young children; at all times or specifically in association with illness. The receipt of nutrition messages or weighing frequency might be supportive, but alone may not carry much weight unless we know the outcomes, especially in terms of practices. The receipt of micronutrients is OK, as long as the risk status is clearly defined (currently that for Vit A is too vague).

For these purposes, we do require at least qualitative information (e.g. for feeding practices) and clarity with the denominators: those in need and those actually to be targeted. (This is different, for example in Grade 2 PEM children, whose families are targeted in MRP).

The information system must be improved. If we rely on FHSIS, we can at least try to improve the coverage and quality of the data for key indicators - birth weight; breast feeding; GM; receipt of services, including micronutrients. Information in addition to FHSIS can come from OPT, focused surveys (best in combination with other sectors for convenience), sentinel sites and special studies. In the plan, efforts should be made to improve the analysis of existing and future survey data, e.g. from FNRI (see this report for some examples). The plan should also consider expanding OPT, so that the census is not just for screening out Gr 2 and 3s but also to include assessment for other problems (if this can be done conveniently and rapidly). For example a local worker (or BNS, if available) could be trained to recognize clinically severe anaemia, Grade 2/3 goiter; enquire about night blindness, etc. If feasible an audit of the growth chart might be considered. This provides much more suitable information than Grade 2/3 identification alone. OPT might also be used for other health concerns; such as to contact women who require TT.

A service delivery component (e.g. iodine and/or Vit A capsule) might be included, perhaps limited to the most needy areas. The roles of the midwife and others would need reviewing; she is definitely required to make sure that the weights are not biased by error or intent (falsely recorded to get food). The efficiency of OPT could be considerably improved if it focused on children up to 59 months rather than 83 months. There is currently no evidence to show that low weight-for-age in children OVER five years of age is specific for undernutrition. Indeed, many of these children are beyond the hope of reversing.

Obviously these considerations (as well as the frequency of OPT, as raised by Dr. Roxas) need reviewing and perhaps testing in a few areas. We need a further look at growth monitoring in terms of its use, e.g. for "counseling" and management for individuals and population groups. The project with NCP may also deal with this aspect. The excellent initial researches by Mrs. Roxas must be publicized and be continued to include use of GMP. I don't think CSP staff appreciate the capabilities in the service.

OPT as well as GMP, etc can contribute to providing information and as a tool for delivery/coverage. However, I am almost convinced that CSP would consider a "breakthrough" when specific services (e.g. micronutrients) were delivered to those who need them, as is the case for EPI, ORT and FP services).

The choice is between Vit A and Iodine (IPA is probably too difficult). That for Vit A not for blindness, but for its mortality role; hence the demand for the latter must be initiated first. If iodine is selected, the eventual goal should be fortification, which is the only practical way to control IDD, if this can be suitably worked out. Deworming is perhaps a useful secondary choice and should be seriously considered with OPT and/or for the first visit for GMP after 12 months of age. Apart from mothers, that for fathers might also be considered. If client satisfaction is obtained (as is likely), then the intervention could be used to improve coverage, particularly those in the more difficult and needy areas.

Lastly, the area of CSP concern - sensitizing the health service personnel to short, focused nutrition messages

difficult and needy areas.

Lastly, the area of CSP concern - sensitizing the health service personnel to short, focused nutrition messages and actions at appropriate periods (e.g. the treatment of ARI is cotrimexazole, fluids and food, to be monitored by expected weight gain) - should be vigorously pursued. This could be monitored by observations at sessions, either through the supervisory process or on special studies. This study might be more appropriate as a joint concern, at least from the Regions and Provinces.

#### **Other concerns**

The MRP "phase down" is probably not a "good" area to focus on at this time, as no breakthrough is likely (at least in CSP terms) in three years and there remains a political question of whether the GOP wants to stop at this stage (given the added costs for local foods). In addition, you have to greatly strengthen your IEC component for improving feeding practices. However, gradual phasing and observation should be continued. You should make more out of the value of TFAD in improving health service coverage - relate attendance to food receipt and observe what happens to the centers when phase out occurs. (or phase in for new areas).

## Nutrition Presentation (Balangas, Dec 1990)

This is the outline prepared by the Nutrition Service for presentation to the CSP coordinator at the Balangas meeting on December 20. This was a preliminary step for the plan related to CSP, with special emphasis on funding requirements. It was concerned with the four major initiatives of the service and funds required for the first year from CSP and PHDP (Philippine Health Development Program, supported by the World Bank). The combined amounts represent the total requirements. The summary table at the end of this section also includes activities with current or potential funding from other agencies.

**References: 1991 Operational Plans of MRP, VAD, IDA & IDD**

**Unit Responsible: Nutrition Service**

**Units Involved: Field Units**

### Program I - Malnutrition Rehabilitation Program (MRP)

#### Basic Strategies:

1. Nutrition Surveillance - OPT & GM of preschoolers (ps)
2. ID - anemic and underweight pregnant and lactating mothers
3. Food supplementation - TFAP
4. Mothercraft Nutrition Classes (MNC)

#### Target for 1991

1. OPT - 10,058,914 children (80%)
2. Supplementation of:
  - 187,974 (100%) 3rd
  - 291,930 (15%) 2nd
  - 133,563 (18%) lactating (anemic and
  - 156,609 (18%) pregnant underweight mothers)
3. 84 MNC in 16 priority provinces

#### Indicators in 1990

1. OPT - 69%
2. Food supplementation - 65%

#### Inputs from PHDP:

1. Center based feeding support - P 658,224
2. Training of 16 new ND - P 73,500

#### Inputs from CSP:

1. 6,076 Salter scales - P 6,076,000
2. 6,076 Detecto scales - P 27,554,660
3. research support for strengthening OPT - P 500,000
4. Team Building Workshop for TWG-NIP - P 149,950
5. KAP survey for needs of field personnel - P 100,000
6. training support for field personnel - P 200,000  
for RHU staff on revised OPT guidelines to  
improve surveillance and service delivery skills - P 465,155

**Program II - Vitamin A Deficiency Prevention & Control Program (VADPCP)**

**Basic strategies:**

1. Detection and management of (VAD) cases
2. Identification of high-risk children
3. Supplementation of HR children and lactating mothers of LBW with VAC

**Target for 1991**

1. 1,791,750 (100%) ps with VAD - treatment
2. All HR children - supplementation
3. Mothers of LBW (18%) - supplementation

**Indicators in 1990**

11.5% for the 1st and 2nd qtr (incomplete)

**Inputs from PHDP:**

- |  |             |
|--|-------------|
| 1. VAD-IDA-IDD manual reproduction       | - P 200,000 |
| 2. IEC materials for nutrition education | - P 200,000 |
| 3. Monitoring/Evaluation                 | - P 128,000 |
| 4. Vitamin A capsules                    | - P 313,589 |

**Inputs from CSP:**

- |   |               |
|---|---------------|
| 1. VAD-IDA-IDD training case detection/management | - P 8,000,000 |
| 2. Prep. of Operational Guidelines                | - P 569,940   |
| 3. Monitoring/evaluation                          | - P 200,000   |
| 4. Vit A capsules                                 | - P 3,285,206 |

**Program III - Iron Deficiency Anemia (IDA)**

**Basic strategies**

1. detection and mgmt. of anemia cases
  - 6-11 mos.
  - pre-schoolers
  - mothers of LBW (18%)

2. Nutrition education
3. Monitoring and evaluation

**Indicator in 1990**

451,675 20 % (1st & 2nd qtr) - incomplete

**Inputs from PHDP:**

- |                       |               |
|-----------------------|---------------|
| 1. Iron supplements   | - P 9,092,979 |
| 2. freight & handling | - P 500,000   |

**Inputs from CSP:**

- |                         |                |
|-------------------------|----------------|
| 1. Iron supplements     | - P 40,763,105 |
| 2. freight and handling | - P 1,000,000  |

**Program III - Iodine Def. Disorders (IDD)**

**Basic strategies:**

1. case detection
2. management of cases
  - 7-17 year olds - 97,974
  - 18-40 year old females - 163,414

3. nutrition education

4. training

**Indicators in 1990 (to complete)**

**Inputs from PHDP: none**

**Inputs from CSP:**

- |             |             |
|-------------|-------------|
| Iodized oil | - P 466,136 |
|-------------|-------------|

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**Nutrition Service Plan 1991 - [ ] Cost in Million Pesos  
Requested from PHDP \*( ) from CSP \*\*( )**

	PEM	Vit A	Iron	Iodine
Supplement- ation	Rehabilitation PL480 [20.7] Local [4.5] Local/PL480 *(0.7)	Capsules * (0.31) **(3.29) (Freight and handling *(0.5)	Tablets * (9.09) **(40.76) ** (1.0 )	Capsules ** (0.47) UNICEF (0.53)
Training	ND (WHO) [0.1] Diet slips [0.1] TWG-NIP Workshop **(0.15) FHW **(0.2) RHW on OPT **(0.46)	FHW's WHO[2.8] ( Manual Reproduction * 0.2 ) ( VAD-IDA-IDD Nationwide Training	With VAD * 0.2 ) ** (8.0)	With VAD ** (8.0)
IEC	Materials (CARE) General Public	To Mothers UNICEF [2.2] Materials *(0.2)	Public (NS)	Public UNICEF [0.1]
Equipment	Scales Salter * (6.08) Clinical **(27.55)	Hb Meters UNICEF [0.2]		
Monitor/ Evaluate	NS MRP Budget [0.2]	Evaluation *(0.1) Evaluation**(0.2)		
Research		Delivery [0.15-WHO]		

**Other Projects and Research - possible funding other than PHDP/CSP**

Topic	Agency	Location
<b>PEM</b>		
Philippine elderly Nutrition classes	WHO [0.3] UNICEF [0.4]	Selected areas Bukidnon (sugar areas)
<b>Vit A</b>		
IEC for Vit A Operational Evaluation Fortification study Food sources of Vit A	UNDP [1.4] WHO/UNICEF [0.2] WHO/UNICEF [0.5]	Four regions distributed all selected areas see above for 1992-4
<b>Iodine Deficiency</b>		
Salt Iodization Plant Lab for Urinary Iodine Analysis foods Validate criteria IDD Integrated delivery Evaluation IDD control Analytical review IDD Mental/Phys development of school agers	CIDA [1.5] ADAB [1.0] UNICEF [0.2] UNICEF [0.2] [0.2] (continuing) UNICEF UNICEF [0.5]	In hyperendemic areas Metro Manila CAR, Ifugao, Covite
<b>Iron deficiency</b>		
IDA Municipality study Iron food fortification	GOP (NS/BRL) UNICEF [0.2]	Fabella Cpd Mandaluyong
<b>General</b>		
BHW activities	IDRC (continuing)	Selected Barangays studied